MANN+HUMMEL

FROM A SMALL FILTER PLANT TO AN INTERNATIONALLY RECOGNIZED FILTRATION SPECIALIST

MANN+HUMMEL is known around the world as a leading development partner and systems supplier to the automotive industry, as a manufacturer of all types of filters for the aftermarket, and as an innovative specialist in the area of industrial filtration. With over 16,000 employees at 60 locations on all five continents, MANN+HUMMEL has long been a global player. Yet after 75 years, it remains a family-led company, in which the principles and values of the founders Adolf Mann and Dr. Erich Hummel still exert influence today – and not only in the company name.

This book chronicles the fascinating history of the Ludwigsburg-based company in words and images – from its improvised, humble beginnings during the Second World War to the anniversary year of 2016. Numerous documents and photos from the vast company archive are combined with interviews with contemporary witnesses and official sources to tell a story that is informative, fascinating, and entertaining in equal measure.

75 YEARS OF MANN+HUMMEL / 1941 – 2016

MANN+
HUMMEL

Table of contents

THOMAS FISCHER
Chairman of the Supervisory Board

75 years is a relatively short period of time from an historical perspective. It's about the same as our average life expectancy. Yet much has changed in the past 75 years. The world is different, our company is different.

When Adolf Mann and Dr. Erich Hummel established Filterwerk Mann + Hummel in Ludwigsburg on January 6, 1941, the Second World War was still raging throughout Europe. Two hundred workers, some of them transferred from a textile plant, produced a number of filter types for vehicle and aircraft engines under improvised conditions.

Today, the majority of Europeans live peacefully together. And at MANN+HUMMEL, a workforce that has increased almost two hundredfold over the years develops, produces, and sells 120,000 different products all over the world. Despite having had to produce sanitary fittings and household goods in order to survive the lean post-war years, MANN+HUMMEL is today a global player and a valued specialist development partner and original equipment supplier to the international automotive and mechanical engineering industries.

This success was made possible by the core values and principles of the company founders, which are a common theme running through the company history and still apply to this day despite the many changes over the years. As such, their sense of responsibility and community driven by a strong humanist ethic continues to define our activities as a family-owned company. As Chairman of the Supervisory Board and a descendent of one of the founding fathers, I know only too well that the most notable achievements of the last 75 years would not have been possible without the dedicated cooperation of our employees around the globe.

A set of clearly formulated corporate values – Focus, Integrity, Leadership, Teamwork, Excellence, and Respect (= FILTER) – define the work that we do and will continue to do so in the future. These values extend their reach across continents and cultures and are crucial to the success of our business.

Other principles of the company founders also continue to endure. For instance, the company has always invested a great deal of effort – and money – in research and development to create new and better products. The result of this innovative capability are solutions that

Foreword

consistently revolutionize filtration technology. Our innovations have played a pivotal role in the transformation of MANN+HUMMEL from a simple filter manufacturer to development partner and systems provider to industry beyond the automotive sector.

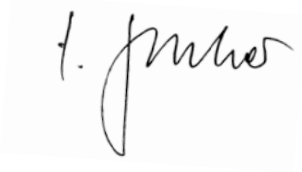
Our company also has a long tradition of internationalization. Soon after the company was founded, the first international offices and licensees were established. By the early 1960s, the company already had its own sales offices and production sites. Today, MANN+HUMMEL has more than 60 locations across all five continents. This international focus is also consistent with one of the key principles of Adolf Mann and Dr. Erich Hummel, which was to be as close to customers as possible. This doesn't just mean short supply routes, but also relates to joint product development and optimum service.

The policy of adhering to traditional corporate principles but updating them when required has been a significant factor in the success of MANN+HUMMEL. Tradition and modernity, continuity and dynamism are principles that will always be close to the hearts of our employees, management, representatives of the Mann and Hummel families, and the Supervisory Board.

Our new technology center at our company headquarters in Ludwigsburg symbolizes our roots while at the same time laying the foundations for our continued success. This is a development of which we are extremely proud and which allows us to look ahead to the future with confidence. We know that the future needs a heritage, and we are ready to face the challenges that lie ahead.

An anniversary is a time to rejoice, to reflect, to look to the future and, of course, to celebrate. Our 75th anniversary is a welcome opportunity for us to express our profound gratitude. We would like to thank all of our employees, our customers and suppliers, and our many long-standing partners who have helped us along the way. We hope that we can continue to work together in the future.

On that note, I would like to send our warmest regards and hope that you will find our company history an interesting, informative, and entertaining read.



The beginning: 1941 – 1945

"We had to overcome obstacles that anyone worried by the current situation would view as simply unsurmountable."

Adolf Mann, in the company bulletin "Der Herold" in November 1941

Company founded during the Second World War

FILTER PRODUCTION. During the war years, two textile manufacturers took the brave step of entering filter production – an area of technology that was as yet still in its infancy – in order to save the jobs of their employees.

In early 1941, as Germany was entering its third year at war, two visionary textile manufacturers signed a license agreement that saw them take over the production of oil and air filters from piston manufacturer Mahle. At this time, the swastika was flying over many parts of Europe and the march of German armed forces seemed unstoppable. The invasion of Russia had not yet begun and total war was still some way off. Nevertheless, the wartime economy was already affecting established businesses such as textile manufacturer Wilh. Bleyle GmbH in Stuttgart, which for the last two years had been run by a former teacher and a lawyer – Adolf Mann and Dr. Erich Hummel.

PLACES THAT DEFINE PEOPLE / Altshausen

Altshausen, situated between Donautal and Lake Constance in the district of Ravensburg, is famous for its castle, in which the descendants of the Dukes of Württemberg still reside today. What few people realize, however, is that in 1883 a pastoral institute named "Martinshaus" opened here. Here, local children received religious instruction and were prepared for confirmation. The parents of Adolf Mann, who was born in Altshausen in 1890, ran Martinshaus – his father was a teacher and organist, while his mother looked after the approximately 20 children who lived in the house. Adolf Mann was himself taught by his father for two years before moving to the Latin school in Saulgau in 1900. Although his education and career path took him elsewhere, Alfred Mann was most certainly influenced by the Protestant work ethic and ethos growing up with his parents in Altshausen – and this influence remained with him throughout his career. Today, the former Martinshaus site sits right next to the Protestant church and is home to a hearing and speech center run by "Die Zieglerschen", a welfare organization.

MANAGEMENT BUYOUT UNDER DIFFICULT CIRCUMSTANCES

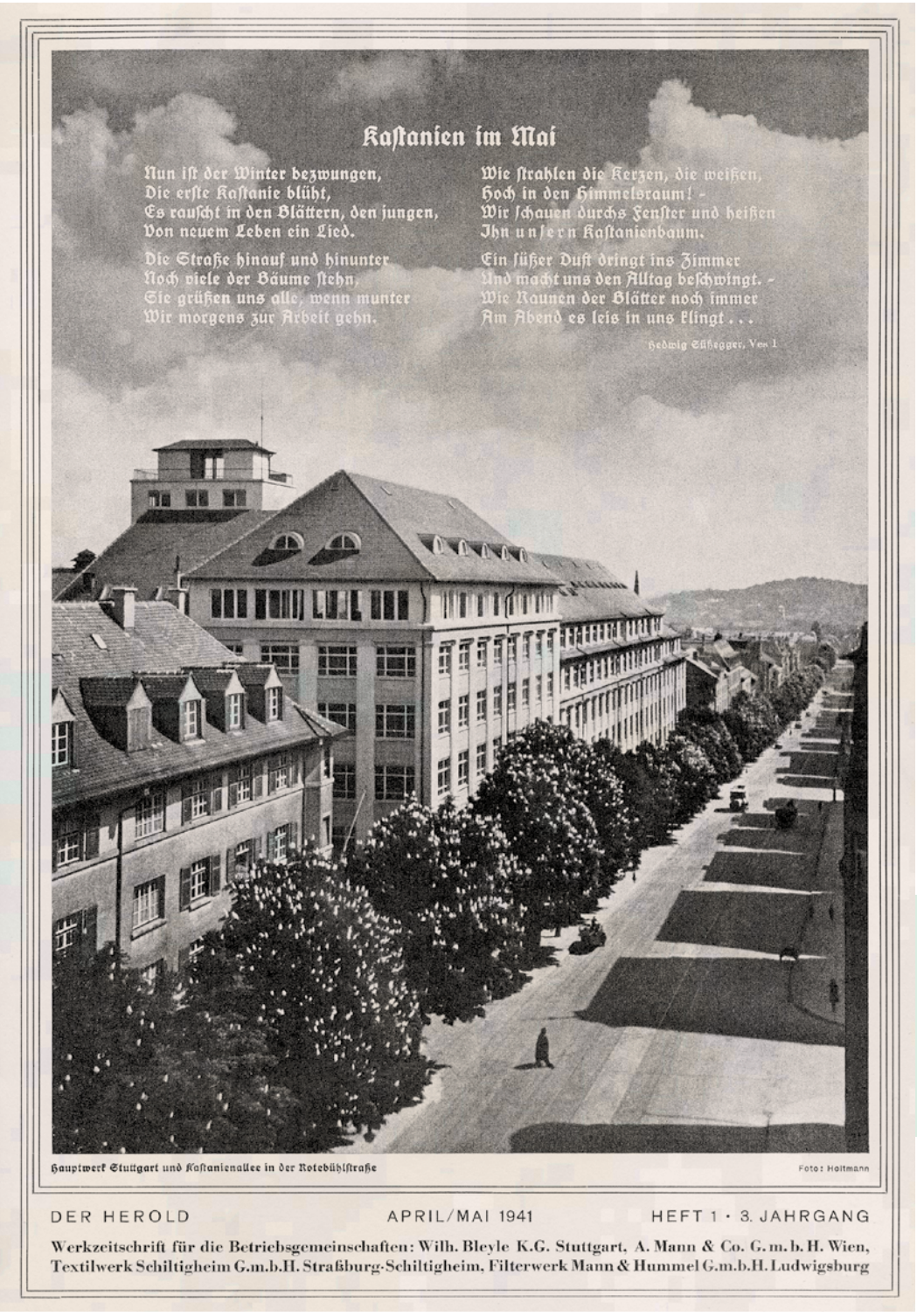
The textile company Wilh. Bleyle GmbH, where both Adolf Mann and Dr. Erich Hummel held key managerial roles and which employed around 6,500 people at locations in Stuttgart, Ludwigsburg, and Brackenheim, found itself faced with a crisis on two fronts in 1938. The long-established company was struggling with declining profitability and increasing losses on the one hand, and had come into conflict with the Nazis on the other. Criminal charges were brought against the directors and members of the owner family on the grounds of treason, currency offenses, and tax evasion. Consequently, the directors had to resign their posts, the owners were imprisoned, and the company was forced to pay penalties and tax arrears. Worse still, the "Deutsche Arbeitsfront" (German Labor Front), supported by influential Nazi functionaries, wanted to incorporate the company into a party-affiliated foundation.

It was in these dramatic circumstances that the Bleyle family turned to long-standing employees Adolf Mann and Dr. Erich Hummel. They were to take over the running of the company, primarily "in the interests of preserving the life's work of the Bleyle family".[1] To inject new capital into the troubled company, the new directors founded Textilwerke Wilh. Bleyle KG in Stuttgart in 1938, to which the Bleyle assets were sold.

The Bleyle company was saved for the time being, but the start of the Second World War on September 1, 1939, brought new challenges. Because Bleyle's textile manufacturing business was classed as not essential to the war effort, much of the workforce was relocated to the front or to armaments factories.

1941 – 1945

Immediately after the takeover of filter production, the existing testing department at Mahle was expanded with the introduction of improved technical facilities and the company's own engine test rigs. Testing at customer sites and practical trials kept up the fast pace of innovation.



Kastanien im Mai

Nun ist der Winter bezwungen,
Die erste Kastanie blüht,
Es rauscht in den Blättern, den jungen,
Von neuem Leben ein Lied.

Die Straße hinauf und hinunter
Noch viele der Bäume stehn,
Sie grüßen uns alle, wenn munter
Wir morgens zur Arbeit gehn.

Wie strahlen die Kerzen, die weißen,
Hoch in den Himmelsraum! –
Wir schauen durchs Fenster und heißen
Ihn unsern Kastanienbaum.

Ein süßer Duft dringt ins Zimmer
Und macht uns den Alltag beschwingt. –
Wie Raunen der Blätter noch immer
Am Abend es leis in uns klingt . . .

Hedwig Süßegger, Ver 1

Hauptwerk Stuttgart und Kastanienallee in der Rotebühlstraße

Foto: Holtmann

DER HEROLD APRIL/MAI 1941 HEFT 1 · 3. JAHRGANG

Werkzeitschrift für die Betriebsgemeinschaften: Wilh. Bleyle K.G. Stuttgart, A. Mann & Co. G. m. b. H. Wien, Textilwerk Schiltigheim G.m.b.H. Straßburg-Schiltigheim, Filterwerk Mann & Hummel G.m.b.H. Ludwigsburg

PLACES THAT DEFINE PEOPLE /
Schwaigern

When Erich Hummel was born in Schwaigern, near Heilbronn, in 1893, his father was the local pastor. In 1898, Christian Friedrich Hummel became the town pastor in Crailsheim, and in 1903 he was made dean of the entire church district. Like his future partner, Adolf Mann, Erich Hummel also had a Protestant upbringing, which would influence his entrepreneurial activities in later years. Dr. Erich Hummel's strong sense of social responsibility, which in the post-war years took the form of numerous sociopolitical initiatives at Mann + Hummel, many of them initiated by Adolf Mann, was deeply rooted in the values that he learned in his early life. His wife Edith also devoted herself to working for the community and in the 1960s she took over the management of a retirement home belonging to the welfare organization of the Anthroposophical Christian community in Stuttgart. The second son of Dr. Erich Hummel, professor of theology Dr. Gert Hummel, dedicated himself to the rebuilding of the Protestant Lutheran Church in Georgia following his retirement, where he established a Diakonisches Werk, a German welfare organization, and was appointed bishop.

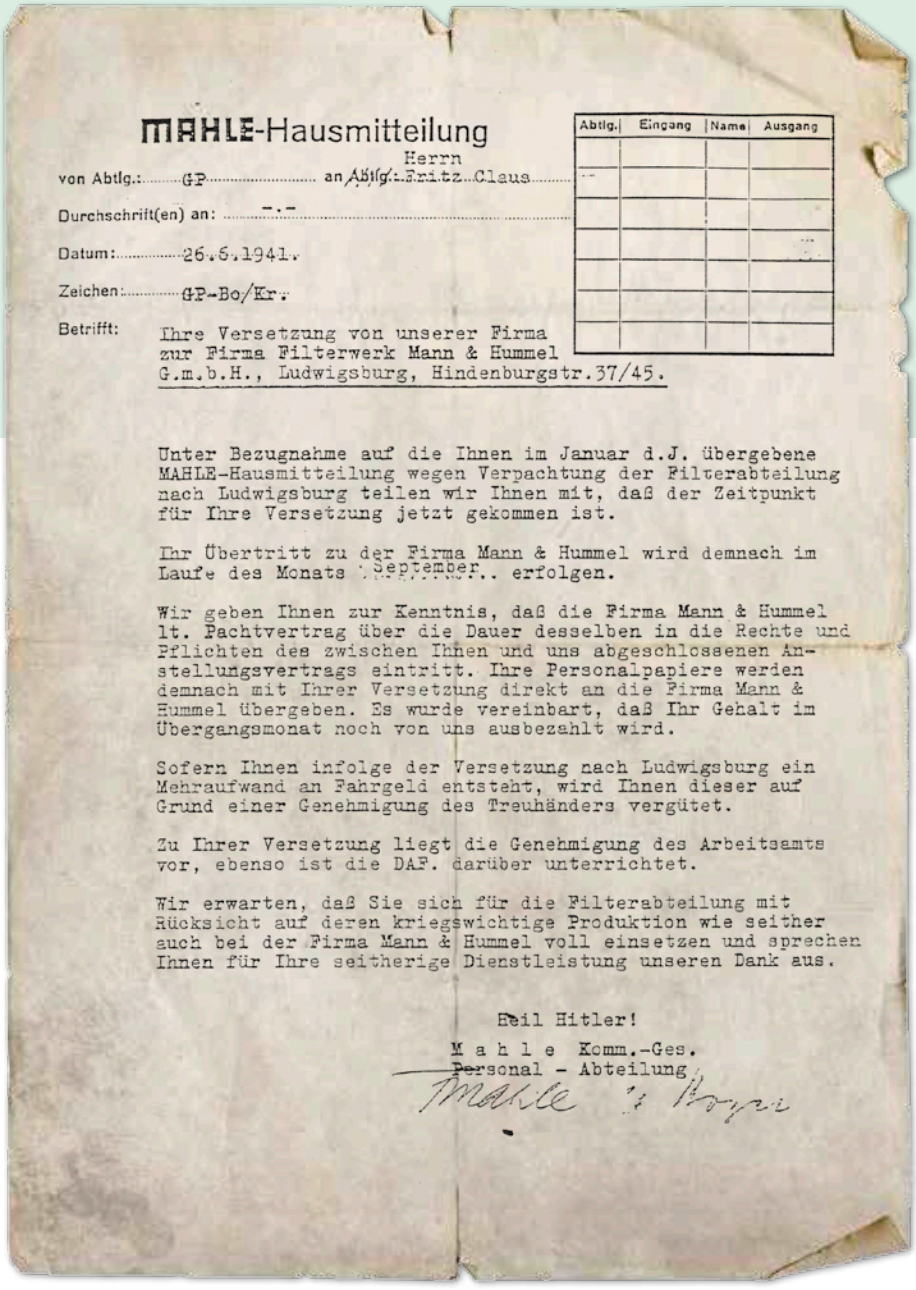
COMPANY BULLETIN / "Der Herold" was originally the company bulletin of Wilh. Bleyle KG, and in 1941 the employees of Filterwerk Mann + Hummel were added to its circulation. The picture shows the main Bleyle plant at Rotebühlstraße in Stuttgart.

1942 – 1945

Development of cyclone air filters for armored vehicles

RAPID DEVELOPMENT / The car industry before the Second World War

The German automotive industry experienced tremendous growth – both technical and financial – in the 1930s. By 1939, the German Reich had 31 main car types, 11 car manufacturers, 12 truck manufacturers, 6 small-truck manufacturers, 14 tractor and trailer manufacturers. This development in turn led to the growth of the supplier industry, which in 1934 reported sales of 386 million reichsmarks. Constant increases in engine power and manufacturer demands for longer maintenance intervals also resulted in increased requirements with respect to oil and air filters. This increased complexity was reflected in key figures for the industry – filter production rose by 170 percent between 1933 and 1936, while sales in the same period increased by 350 percent. Car manufacturing in Germany peaked at 67,561 units in 1940. This was followed by a decline due to the war, which saw production fall to 21,656 units by 1944.



MAHLE-Hausmitteilung

Abtlg.	Eingang	Name	Ausgang

von Abtlg.: GP an Herrn Abtlg.: Fritz Claus

Durchschrift(en) an: -.-

Datum: 26.6.1941.

Zeichen: GP-Bo/Kr.

Betrifft: Ihre Versetzung von unserer Firma zur Firma Filterwerk Mann & Hummel G.m.b.H., Ludwigsburg, Hindenburgstr.37/45.

Unter Bezugnahme auf die Ihnen im Januar d.J. übergebene MAHLE-Hausmitteilung wegen Verpachtung der Filterabteilung nach Ludwigsburg teilen wir Ihnen mit, daß der Zeitpunkt für Ihre Versetzung jetzt gekommen ist.

Ihr Übertritt zu der Firma Mann & Hummel wird demnach im Laufe des Monats September erfolgen.

Wir geben Ihnen zur Kenntnis, daß die Firma Mann & Hummel lt. Pachtvertrag über die Dauer desselben in die Rechte und Pflichten des zwischen Ihnen und uns abgeschlossenen Anstellungsvertrags eintritt. Ihre Personalpapiere werden demnach mit Ihrer Versetzung direkt an die Firma Mann & Hummel übergeben. Es wurde vereinbart, daß Ihr Gehalt im Übergangsmonat noch von uns ausbezahlt wird.

Sofern Ihnen infolge der Versetzung nach Ludwigsburg ein Mehraufwand an Fahrgeld entsteht, wird Ihnen dieser auf Grund einer Genehmigung des Treuhänders vergütet.

Zu Ihrer Versetzung liegt die Genehmigung des Arbeitsamts vor, ebenso ist die DAF. darüber unterrichtet.

Wir erwarten, daß Sie sich für die Filterabteilung mit Rücksicht auf deren kriegswichtige Produktion wie seither auch bei der Firma Mann & Hummel voll einsetzen und sprechen Ihnen für Ihre seitherige Dienstleistung unseren Dank aus.

Heil Hitler!

M a h l e Komm.-Ges.
Personal - Abteilung

Mahle i. V. Boyer

RELOCATION / In June 1941, employees from Mahle were relocated to Filterwerk Mann + Hummel in Ludwigsburg. Their travel expenses were reimbursed.

SYMBOLIC LOGO / When trying to create a memorable word and figurative mark to register with the patent office, Dr. Erich Hummel recalled a type of pastry from his home town of Crailsheim. The M-shaped "Horaff" is based on a Germanic and Celtic symbol representing blessings and fertility. The tips of the Horaff, which originally pointed upwards, were turned downwards to "assimilate the letter 'M' representing the Mann family"[2] and form a heart with the word "filter". The patent registration process initially ended in failure due to an objection from another company, but after a number of modifications was eventually completed in 1966.

Eventually, Adolf Mann and Dr. Erich Hummel, in their capacity as subcontractors, managed to secure orders for essential wartime commodities and thus at least save the jobs of metalworkers and engineers. The idea of producing parachutes in order to have the company classified as a strategic supplier did not come to fruition, however.

Another solution then emerged closer to home. The leading German manufacturer of pistons and filters, Mahle KG, based in Stuttgart-Bad Cannstatt, had reached its limits in terms of capacity and was looking for a partner to which some areas of production could be outsourced. One possibility were the filters for gasoline and diesel engines, which Mahle produced at its plant in Fellbach. It is not clear how the initial contact came about. What is certain, however, is the fact that in the fall of 1939, just as war broke out, the first Bleyle employees began to produce dual gap-type filters for Mahle in a contract manufacturing operation. Little did anyone know at the time just how significant this step would eventually prove to be.

A BRAVE MOVE – FROM TEXTILE FIRM TO FILTER PLANT

The collaboration between Bleyle and Mahle for filter contract manufacturing led to increased contact between Adolf Mann, Dr. Erich Hummel, and Mahle management. At the same time, the demands being placed on Mahle for army and air force production continued to grow. In addition to pistons for vehicle and aircraft engines, the company supplied injection molded magnesium components and aircraft components. However, one area that was neglected over the years was filter production. Faced with the challenge of accelerating the pace of development and supplying ever increasing quantities across all product areas, management at Mahle decided to take the logical step of concentrating solely on piston manufacturing and selling the filter production business, which still employed 450 people.

BY THE WAY / Filterwerk Mann + Hummel ...

… didn't just produce filters in the early years. The company also produced toys for Christmas in 1943 as part of the winter relief drive.

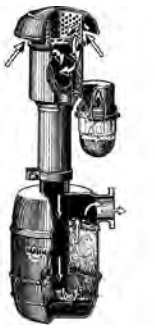
It was with such a proposal that Mahle approached its subcontractor, Wilh. Bleyle KG, in 1940. The company directors, Mann and Hummel, found themselves in a quandary. On the one hand, taking over filter production would give the company the status of strategic supplier that was so badly needed. On the other hand, the company had no experience in this area. Consequently, the two men initially responded to the idea with "major reservations".[3] The considered and cautious approach adopted by Adolf Mann and Dr. Erich Hummel was evident in the fact that preparations for the takeover were not completed until the end of 1940, and filter production then began gradually. On January 7, 1941, they signed a two-year license agreement. The licensee was a company that had been set up specifically for this purpose just the day before – Filterwerk Mann + Hummel GmbH.[4] The purpose of the company was, according to the articles of incorporation, "the production and distribution of metal products of all types, in particular oil and other filters".[5] The new company was entered in the commercial register on January 20, 1941. The capital stock of 500,000 reichsmarks was held equally by Adolf and Elisabeth Mann and Dr. Erich and Edith Hummel. The company founders had, after careful consideration, taken a brave step and in doing so laid the foundations for a global company, although they did not realize this at the time.

Before the new company could commence operations, however, there was still a lot of groundwork to be done. This included deciding where the filters should be produced. The decision was ultimately made in favor of Ludwigsburg. Here, just north of Stuttgart, textile firm Bleyle had two production facilities – one in Wilhelm-Murr-Straße and another in rented premises of the official government uniform supplier in Hindenburgstraße, not far from the imposing Baroque Ludwigsburg Palace, which dates back to the early 18th century. Neither plant was operating at full capacity due to the war. The smaller factory in Hindenburgstraße was particularly at risk of being seized by the armed forces.

Adolf Mann and Dr. Erich Hummel therefore adopted a clever strategy. They concentrated Bleyle textile production at the larger factory in Wilhelm-Murr-Straße and located filter production in Hindenburgstraße. The original Bleyle Plant 2 thus became Mann + Hummel Plant 1 – and remained there for many decades. In June 1941, production of oil and fuel filters as well as air filters and intake silencers began. The around 200-strong workforce was made up of workers taken over from Mahle as well as from Bleyle. The plant was a mixture of machinery leased from Bleyle and Mahle, and the Mahle machines were bought in 1942. On June 30, 1942, the critical step towards a complete breakaway from Mahle was taken with the dissolution of the existing license agreement and the acquisition of the entire filter production business by Filterwerk Mann + Hummel for 1.2 million reichsmarks. The purchase agreement stipulated that Mahle would cease filter production.

1942 – 1945

Development of felt air filters



INNOVATION DELIVERS RAPID GROWTH

Adolf Mann and Dr. Erich Hummel, neither of whom were engineers, entrusted the technical management of the filter plant to Alfred Wacker, a former knitting master of Bleyle, who brought drive and extensive technical knowledge to his new role. The company initially focused its production almost exclusively on commodities essential to the war effort, primarily filters for tanks, armored vehicles, and aircraft. Repairs on aircraft engine units were also carried out. Unsurprisingly, the workforce grew to over 1,000 in just a few years. Adolf Mann described the astonishingly rapid transformation from former textile firm to metal processing company in the Bleyle company bulletin in November 1941: "If you were to visit the filter plant today, either as a professional or as a layperson, you would be astonished at the refurbishment and extension work that has been completed in what used to be (Bleyle) Plant 2 in recent months. The humming sewing machines that could be heard earlier this year as women mass produced boys trousers has largely been replaced by men performing jobs such as turning, milling, welding, working on drawing presses, guillotine shears or in the spray paint shop to produce filters of all kinds […]."[6]

The filter plant achieved rapid sales growth. This was due in no small part to strong demand from the army and the Luftwaffe as well as the company's innovative strength, which was reflected in numerous patent applications. Immediately after the takeover of filter production, the existing testing department at Mahle underwent major expansion and was adapted to meet the increased requirements of engine developers. This involved intensive cooperation between the testing department and the responsible authorities in the Wehrmacht. One of the major challenges they faced was reliable dust filtration during missions around the Mediterranean and in Africa as well as coping with extreme temperatures. Thus, in 1942, Adolf Mann declared that future work at the filter plant would focus on improving product characteristics, further expanding the development department, and rationalizing production. Showing remarkable vision, he also said that these items had a future and belonged to an area where there would be no shortage of activity, whether in times of war or of peace. As an example he cited the as yet untested alloy of wool and iron.[7]

Filterwerk Mann + Hummel was also an innovator in the civilian world, and was involved in the preliminary development of a car for the "Kraft durch Freude" organization, which went on to become the hugely successful Volkswagen Beetle in the post-war era.

As the Second World War came to an end with the unconditional surrender of Germany in May 1945, Filterwerk Mann + Hummel in Ludwigsburg had remained virtually unscathed by the bombings. However, the German economy had collapsed, and the future of the filter company founded just four years earlier looked more uncertain than ever.

PRAGMATIC AGREEMENT WITH THE REGIME / The armament industry

Filterwerk Mann + Hummel was undeniably a "war baby". Had it not been for the demands of arms production, Mahle would never have outsourced its filter production to Mann + Hummel in the first place. The stated goal of the company founders was to ensure utilization of their plants through the production of commodities essential to the war effort. During the denazification process initiated against Adolf Mann and Dr. Erich Hummel after 1945, it was explicitly stated that their motives were entirely honorable. A report concluded: "Management could therefore not avoid production for the war effort. They reached a point where they had to get involved in wartime production in order to retain workers, premises, and machinery and to avoid losses."[8] Furthermore, it was declared that textile company Bleyle had not been involved in arms production before war broke out in 1939. Nevertheless, the role played by management was ambiguous. The continuing war effort made home production necessary, particularly in the Bleyle plants. This strategy had a clear objective, which Adolf Mann described in a leaflet entitled "Rules for wartime home production" in 1944: "Any free operational capacity […] is […] being assigned to arms production. […] Home production is only a partial solution to the greater problem of utilizing the workforce to its full capacity."[9] Regrettably, the efforts to resolve this problem included the use of forced labor. By the end of the war, there were around 200 forced laborers in Ludwigsburg. Mann + Hummel GmbH acknowledged its historical responsibility in this regard in 2000 and 2001 by participating in the German Industry Foundation Initiative established to provide compensation to forced laborers from the Third Reich, and made a significant contribution to the compensation fund. The Federal Government and more than 6,000 companies donated a total of 10 billion deutschmarks to the foundation.

THE FOUNDERS / Adolf Mann

Adolf Mann was born on February 21, 1890 in Altshausen, Baden-Württemberg. He was the fifth of six children. His parents ran a pastoral institute, which provided religious instruction to Protestant children and prepared them for confirmation. After leaving primary school, the gifted student attended the Latin schools in Saulgau and Kirchheim unter Teck, before continuing his education at the Protestant seminaries in Schöntal and Urach and eventually taking his final exams in 1908. Despite the death of his father in 1907, Adolf Mann enjoyed his "precious years at the seminary" and the "diverse and dedicated education, which he valued for the rest of his life as a precious gift".[10]

Adolf Mann

From educator to entrepreneur. His career was by no means predestined. Coming from humble beginnings and of a pietistic nature, he initially worked as a math teacher. Adolf Mann quickly decided to change career and moved into industry, where he evolved into an energetic and visionary entrepreneur with a strong social conscience.

FROM THE TEACHER'S DESK TO THE TRENCHES

After leaving school, the 18-year old entered the "Tübinger Stift" to study mathematics. The origins of this renowned Protestant house of study date back to 1536. Great emphasis is placed on providing a broad education encompassing philosophy, language, and music, with the aim of establishing a spiritual elite educated in accordance with Protestant beliefs. The Tübinger Stift has had many famous students pass through its doors. They include astronomer Johannes Kepler, philosophers Georg Wilhelm Friedrich Hegel and Friedrich Schelling, and theologian and poet Eduard Mörike. In addition to completing his studies in mathematics and teaching, Adolf Mann received a broad education in the humanities and the formation of values in the context of Christian social teaching at the seminary, which had a major influence on him as an entrepreneur. In 1912, he passed his first in-service exam, and after spending a year as a student teacher in Stuttgart and Leonberg, the graduate took up his first teaching post in Heilbronn. By this time, the young Mann had already met and fallen in love with his future wife. In 1910, he met Elisabeth Gaiser, the daughter of a wealthy Stuttgart art dealer, and the pair became engaged in 1913. The upscale, sophisticated home of his fiancée's parents spurred the ambition of the young educator, and in the summer of 1914 he moved to a better paid position as a senior teacher at a private school in Godesberg. However, the storm clouds of the First World War that were gathering over Europe at the time thwarted the plans of Adolf Mann.

1943

Main flow oil centrifuge

1916 / Adolf Mann was promoted to the rank of lieutenant.

In September he was drafted for basic training in Stuttgart, and in December he was transferred to the front line, close to the embattled town of Ypres. In May 1915, having in the meantime been promoted to sergeant, Mann became trapped while fighting on the front line and suffered a total rupture of both eardrums. He used his long period of convalescence as an opportunity to concentrate on personal matters, and in October 1915 he married his fiancée, Elisabeth Gaiser.

LOVE LETTERS BECOME POIGNANT HISTORICAL DOCUMENTS

Back at the front, where he fought in the infamous Battle of the Somme and led a machine gun company, Adolf Mann – now a lieutenant – continued to write letters to his “Daisy”, as he affectionately called his wife, almost every day.

“Daisy” became his pet name for his fiancée and future wife after he was drafted into the army. It was also a symbol of their love for one another. When Adolf Mann found a daisy growing between two bomb craters at the

LETTER FROM THE FRONT LINE / One of 1,396 letters that Adolf Mann wrote to his "Dear Daisy" from the front line between 1914 and 1918.

front, he stuck it into his diary.[11] Adolf Mann composed 1,396 letters in all during the war – correspondence that documented not only his devotion to his wife, but also the true horrors of war.[12] In October 1916, he described how he narrowly escaped death: "[…] and I found it very difficult yesterday to accept that everything in our life, which has been so wonderful up to now, must be so pointlessly left to chance."[13] He often expressed doubts about the purpose of this mechanized war of attrition in his letters. On another occasion he wrote: "The French trenches are just 50 meters away. Yesterday, as a shell exploded opposite our position, I could hear the cries and groans of the wounded. I feel the same sympathy for everyone, whether they are friend or foe, as this murder is simply inhuman."[14]

Adolf Mann found the long periods of separation from his wife extremely difficult. In January 1917, he thus complained: "It pains me that our marriage still seems somehow incomplete, that we have nothing to show for it – such as our own household. […] It is therefore an almost daily source of comfort to me that we do not yet have a child. I simply cannot imagine how I could bear the separation without losing my zest for life."[15]

The unimaginable became a reality for Adolf Mann in July 1918 with the birth of his daughter, Leonore. Despite his urgent pleas, he was denied leave from the front.

FROM THE CLASSROOM TO THE FASHION INDUSTRY

Despite his misfortune, Adolf Mann survived the war and he returned to Stuttgart in November 1918. He joined the teaching staff of the Prag secondary school. Three years later, he reached a crucial turning point in his life. His wife, Elisabeth, was suffering from tuberculosis, and the costs of long-term treatment and stays in sanatoriums far exceeded his teacher's salary. Faced with such a difficult situation, it was a fortunate coincidence that Fritz Bleyle, together with his brother Max, owner of the textile factory of the same name, was looking for someone "who can count, who understands the balance sheet, and in whom he can have complete trust".[16] Adolf Mann fulfilled all of these criteria. What's more, he had fought in the trenches with Fritz Bleyle, and Elisabeth Mann's sister, Hanna, was married to him.

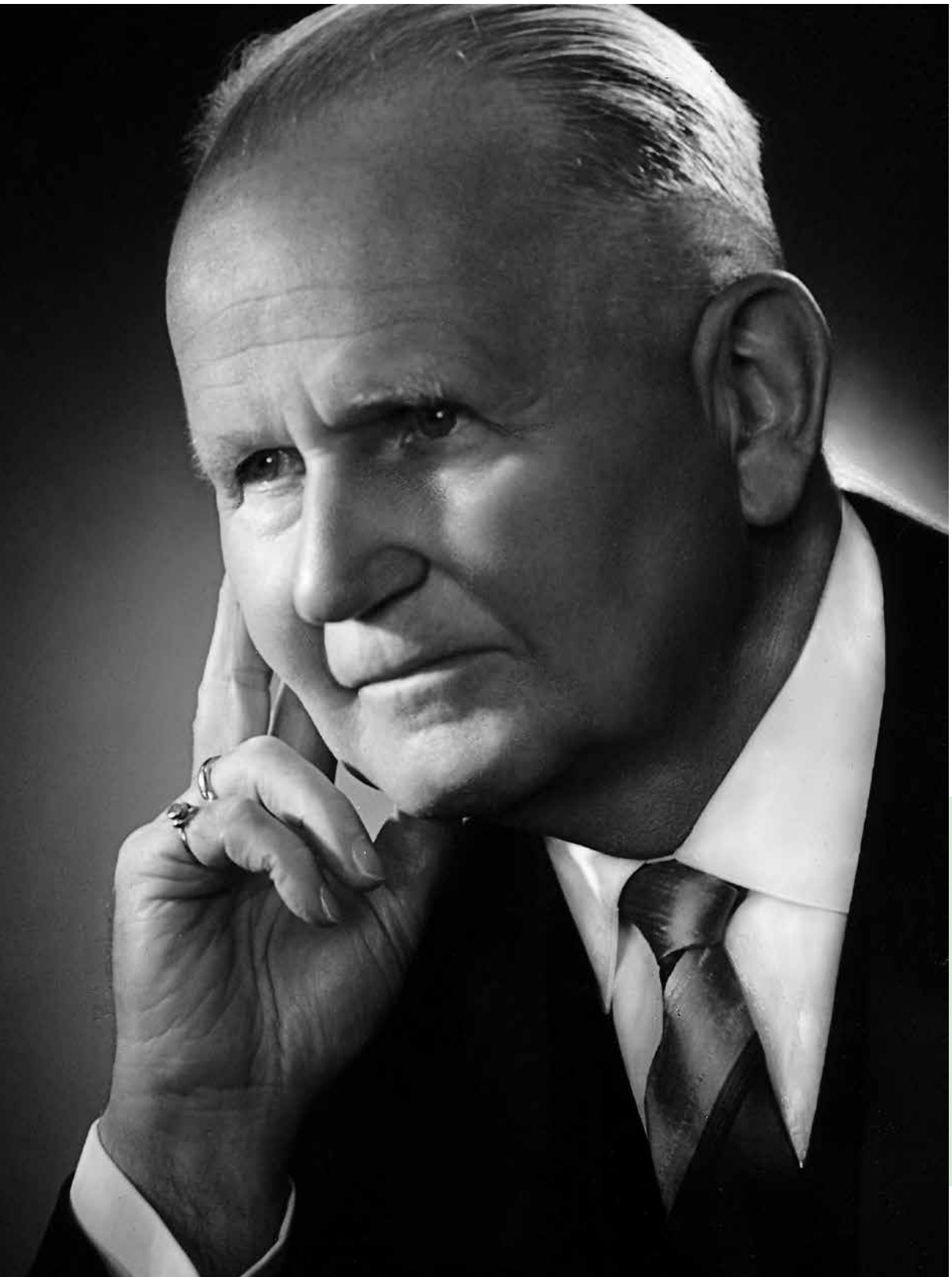
On May 1, 1921, Adolf Mann began working with the long-established Stuttgart company and was quickly promoted in various positions. After just two years he was given individual power of attorney. His professional success also translated into personal prosperity during the "Roaring Twenties". The Manns employed a cook, a maid, and a nanny. By the time his second daughter, Sibylle, was born in 1927, Adolf Mann was well established in the upper echelons of Stuttgart society.

ENTREPRENEUR AND SOCIOPOLITICAL ADVOCATE

Even as an entrepreneur, Adolf Mann remained a humanist committed to education with strong sense of mission. This was evident in even the smallest of details. His secretary recalled the following decades later: "He remained a schoolteacher all his life, correcting all letters and documents using a red pen."[17] On the one hand, he was an extrovert with a healthy dose of self-awareness and tremendous drive. On the other, he took a great interest in philosophical and spiritual matters and was the perfect embodiment of the responsible, fatherly company patriarch. Adolf Mann didn't just confine his thinking to his own company. On lecture tours and in articles with titles such as "The role of man in modern industry" or "Work and leisure. Possibilities for personal development in modern industry", Adolf Mann was actively engaged in discourse about sociopolitical issues in the 1950s.

In his spare time he read Goethe and Shakespeare and – thanks to his musical education – accompanied his wife on the piano as she performed songs by Hugo Wolff during musical evenings at their home. His relationship with religion remained ambivalent. In 1932, Adolf Mann and his wife left the Protestant church and over time developed a fascination with Catholicism. After the Second World War, he even allowed his new bungalow to be blessed by a Catholic priest. His daughter Sibylle believes, however, that he did not subscribe to any particular religion: "He was always a free thinker. He would never allow himself to be bound by restrictive rules or conditions."[18]

This assessment aptly characterizes the fascinating life of Adolf Mann, which came to an end unexpectedly on July 16, 1971. The 81-year old suffered a heart attack and died the same day.



ADOLF MANN / Official portrait of Adolf Mann, probably dating from the 1950s.

Dr. Erich Hummel

The lawyer as an entrepreneur. Before embarking on his legal studies, he would first have to complete a commercial apprenticeship and survive the First World War. After gaining his master's degree with a distinction in law, he failed to secure a job with the state and therefore went into industry instead. Dr. Erich Hummel employed his experience and skill in a wide range of areas and became the ideal partner for someone else who had decided to change careers.

FROM TRAINING TO THE TRENCHES

Not long after completing his apprenticeship, Erich Hummel had to put all further career plans on hold. Like millions of others, he was drafted after the outbreak of the First World War and sent to the Western front. He was wounded four times, decorated numerous times, and eventually became a captain. During this time, he had a life-changing experience that would continue to haunt him many decades later. During combat, he exchanged places with a soldier from Randersacker in Franconia. Seconds later, his comrade was killed by a gun shot to the head. His son Gert recalls how his father "after the war and every evening later on in his life, would drink a glass of 'Randersacker Teufelsmoor' red wine in memory of his fallen comrade".[19]

Erich Hummel was fortunate to survive the war. His officer's pension enabled him to return to his studies. Pursuing what he believed to be his natural "aptitude and talent"[20], he decided to study law in Tübingen. It quickly became clear that he had made the right decision. He passed the first and second state examinations with distinction and in doing so qualified to join the state's judicial service. At the same time, he obtained a doctorate in jurisprudence with the distinction "summa cum laude" in October 1923.

THE FOUNDERS / Erich Hummel

Erich Hummel was born on October 26, 1893 in Schwaigern, in the district of Heilbronn. Like Adolf Mann, he was born into a Protestant family. His father was a respected pastor and later became a dean. As the daughter of a counsel at the University of Tübingen, his mother had high expectations when it came to education – expectations that Erich Hummel fulfilled with ease. At the Latin school in Schwäbisch Hall, he came top of the class in the school leaving examination. However, his father's financial means would only cover studies for two of his four sons. As the third born son, Erich was sent to stay with relatives in Hamburg, where he completed a commercial apprenticeship. This not only provided him with a solid foundation for his entrepreneurial activities in later years, but also took him to Antwerp, where the young trainee acquired his first experience in overseas trade and mastered the French language.

1931 / Dr. Erich Hummel and Edith Heintzeler exchanged vows.

1944

Strainer disc (oil) filters with improved filter fineness compared with gap-type filter design

Despite his qualifications, he did not manage to pursue a career in the judiciary due to the prevailing political environment at the time. Just one month after he completed his studies, massive hyperinflation reached its peak in Germany. Even the most basic of foodstuffs cost millions of marks and vast cash assets were wiped out. Despite subsequent currency reform, the financial situation in the public sector remained precarious; even graduates with honors could not secure a state appointment. Following a brief interlude as a deputy judge in Heilbronn, the newly graduated Dr. jur. Erich Hummel therefore decided to try his luck in industry and joined clothing firm Wilh. Bleyle KG in Stuttgart as the then equivalent of a modern corporate lawyer. It was here that he first became acquainted with a colleague who had joined the company three years earlier after leaving the public service – Adolf Mann.

CAREER IN INDUSTRY

The highly skilled lawyer certainly had his work cut out for him with his new employer. Twenty years later, he wrote in the company bulletin “Der Herold” of a “host of tasks including organizational issues, commercial structures, establishing the Bleyle brand on a solid legal and commercial footing, problems relating to financing and taxation, as well as general administration”.[21] With a combination of diligence, meticulousness, and his outstanding business acumen, Erich Hummel quickly made a name for himself at Bleyle.

In 1931, he married philologist Edith Heintzeler, who came from a wealthy manufacturing family. Their son, Jörg-Dieter, was born in the same year, followed by sons Gert and Rolf in 1933 and 1934 respectively. All three children went on to pursue notable academic careers.

When the Nazis came to power in January 1933, Erich Hummel maintained a quiet distance from them, and never embraced their ideology. Nevertheless, he joined the Nazi Party along with Adolf Mann in 1940. After the Second World War, he confirmed that this was a purely tactical maneuver made in order to protect the company.

Following the takeover of Bleyle and in particular after the formation of Filterwerk Mann + Hummel in 1941, Erich Hummel dealt with issues relating to industrial property rights in Germany and worldwide, the establishment of offices abroad, licensing, and later also the organization of foreign subsidiaries. His legal knowledge and the international commercial experience that he had gained from his apprenticeship was of great benefit to him. Providing a pension system for his workforce was also an important issue for him, and for many years he was chairman of the pension fund.

1944

Development of combi filters
(felt cartridge with Feifel cyclones)

DR. ERICH HUMMEL / Official portrait of Dr. Erich Hummel, probably dating from the 1950s.

A PASSION FOR LAW

Unlike his partner, Adolf Mann, Erich Hummel was an introvert. Despite being somewhat reserved in his interactions with others, he was always extremely courteous and did not think it beneath himself to “hold the door open for a trainee”.[22] Accordingly, most of his achievements were focused within the company. His prudence, thoroughness, and correctness placed the company on a solid financial footing and he handled every issue with the same attention to detail. This made him the ideal partner for Adolf Mann, who tended to think in terms of the overall strategy. Always the lawyer, Erich Hummel approached problems “in a careful and considered manner […] in as many variations as possible right through to their conclusion”.[23] He was what we would today refer to as a workaholic. His secretary of many years recalled that he “sometimes stayed at work until nine o’clock at night”.[24] Even at weekends and on vacation, he “[…] always had a briefcase full of documents with him”.[25]

A man passionate about law, Erich Hummel would happily sit discussing legal matters with his sons. Indeed, it became something of a family tradition, prompting his wife to “ban this practice on Sundays at least”.[26] His interests did, however, extend beyond law. As someone with a keen interest in local history, Erich Hummel was a member of the Württemberg history and antiquity association. He also enjoyed hiking, was a good photographer, and could “quote many Latin phrases”.[27] He and his partner, Adolf Mann, shared a passion for the visual arts.

The Hummel and Mann families spent a lot of time together, despite the fact that the company founders had very different personalities. Their relationship was “always conducted with a certain amount of distance […]”. The “difference between them couldn’t have been any greater,” recalls one employee.[28] The differences in character sometimes led to tensions, but these could generally be resolved on the basis of trust, dependability, and loyalty because “a joint solution always had to be found for the sake of the company”.[29]

This was also true of the joint succession plan, which was a subject very close to Erich Hummel’s heart. When he died in 1984 at the age of 91, he already had plans in place to ensure that the company would continue to be run by the founding families. The founding families were represented at management level by Dr. Hermann Fischer, son-in-law of Adolf Mann, and by Erich Hummel’s son, Dr. Jörg-Dieter-Hummel. The life’s work of Erich Hummel was thus in safe hands.

ANNIVERSARY SPEECH / In 1966, Dr. Erich Hummel gave a speech to mark the 25th anniversary of the filter plant.

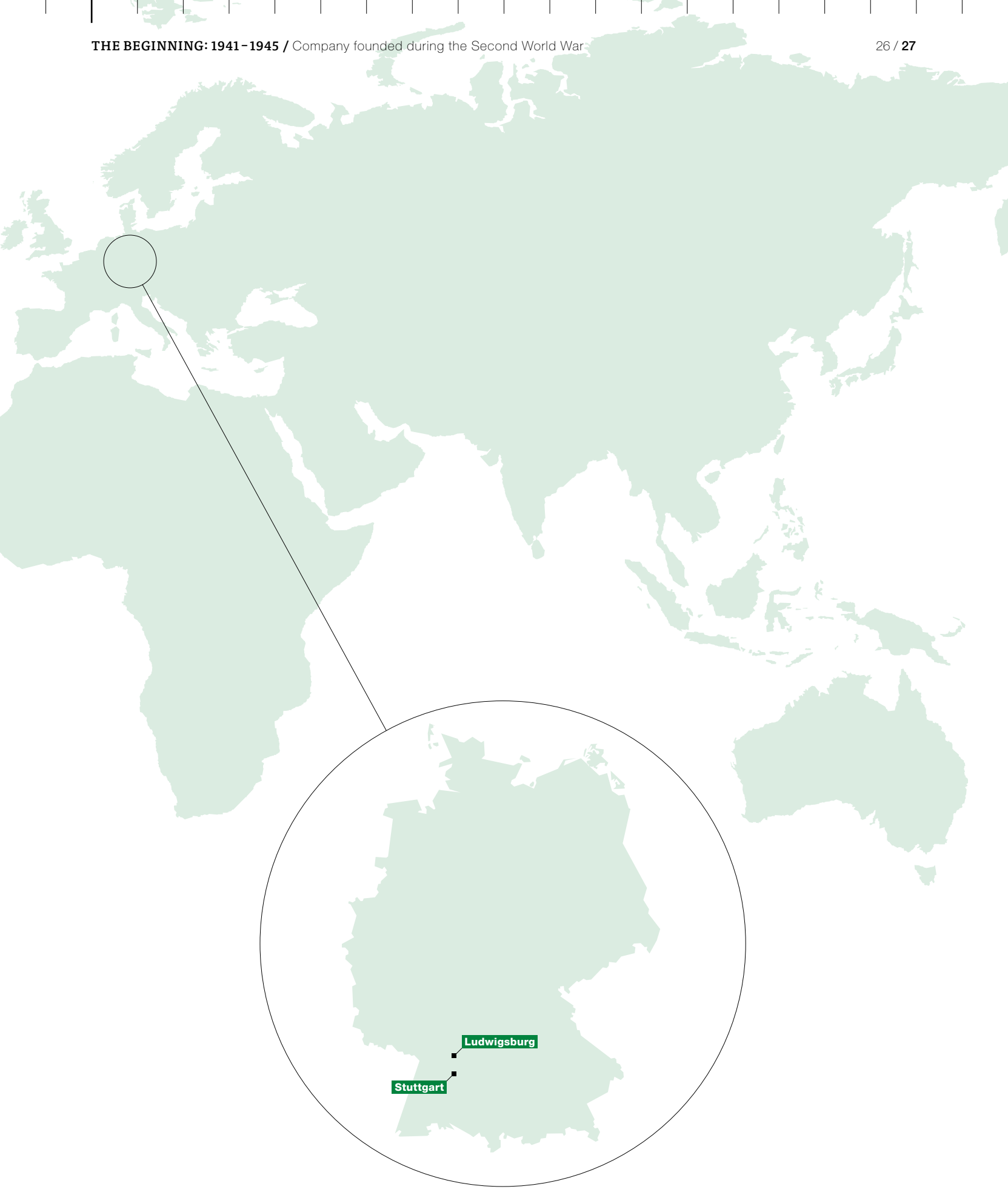
Locations

GERMANY / Stuttgart-Bad Cannstatt In the Stuttgart suburb of Bad Cannstatt, engineer Hellmuth Hirth founded a workshop for the development and construction of two-stroke engines in 1920. In the same year, businessman Hermann Mahle joined the fledgling company, and was joined shortly afterward by his brother, engineer Ernst Mahle. In the search for a profitable product, they came up with the idea of replacing the gray cast iron pistons normally used in engine design with light alloy pistons. The company began trading as Elektronmetall GmbH in 1924 and developed Germany's first controlled-expansion piston. In 1931, the company developed the aluminum ring carrier piston for diesel engines. Series production of oil, fuel, and air filters, which are of critical importance for high-performance engines, began in 1929. It was in Bad Cannstatt that the success story of light alloy pistons began – along with the rise of the technology firm, which had initially begun trading as Mahle KG in 1938, to become one of the top 20 automotive suppliers in the world. Today, Mahle employs over 75,000 employees at 170 locations worldwide. The company's headquarters are still based in Stuttgart-Bad Cannstatt, where the company's history began back in 1920.

STUTTGART-BAD CANNSTATT / Piston manufacturer Mahle had been producing oil, fuel, and air filters at a plant in nearby Fellbach since 1929. Filterwerk Mann + Hummel took over this business in 1941.

LUDWIGSBURG / In Grönerstraße, Ludwigsburg, a plant measuring over 50,000 square meters produces air filters, intake manifolds, fuel and oil filters.

GERMANY / Ludwigsburg In this Baroque town near Stuttgart, the textile firm Bleyle run by Adolf Mann and Dr. Erich Hummel had two production sites. After taking over filter production from Mahle, Filterwerk Mann + Hummel moved to the textile factory in Hindenburgstraße in 1941. This turned out to be a good decision. With Daimler-Benz and Porsche in Stuttgart and NSU – which would later become Audi – in Neckarsulm, the company was surrounded by pioneers in technological and economic development. After 1945, the Central Neckar economic region, with its many innovative small and midsize companies and highly skilled workforce, became a driving force behind the economic miracle that was soon to follow. Although Mann + Hummel is now a global company with more than 60 locations worldwide, it is Ludwigsburg where the heart of the company still beats.


Ludwigsburg
Stuttgart

The post-war years: 1945 – 1949

"The bowl of an oil-bath air filter was transformed into a fully functional cooking pot."

Hermann Dettling, who was Head of Central Order Processing for many years

New beginnings after the fall of the Third Reich

THE ECONOMIC SITUATION IN POST-WAR GERMANY MEANT THAT PEOPLE HAD TO IMPROVISE. So too did Filterwerk Mann + Hummel, whose managing partners also found themselves having to confront the past.

By the end of the Nazi dictatorship and the Second World War, Germany was at rock bottom politically, morally, and economically. Industrial facilities and infrastructure had been largely destroyed, food was rationed, and the exceptionally harsh winter of 1946/47 went down in German post-war history as the "Hungerwinter" (winter of starvation). In addition, millions of displaced persons and refugees from the east had to be integrated. At the same time, the political, social, and economic development of the Western occupation zones took a very different direction to that in the Soviet occupation zone. This development led to the division of Germany – and of the world – with the foundation of the Federal Republic of Germany and the German Democratic Republic in 1949.

Alfred Wacker

Indispensable man of the hour. In 1941, Bleyle knitting master Alfred Wacker took over technical management of the newly founded Filterwerk Mann + Hummel. His diligence, dedication, and expertise quickly made him a driving force in the new company. His passion and unwavering commitment soon earned him the nickname “Filterwilli” among the company’s employees. The name came from the way in which he refused to spend too much time discussing problems, instead asking the workers to focus on the job at hand with the request “Filter will i(ch)” (I want filters). For Adolf Mann and Dr. Erich Hummel, he was simply the “Director” who, as part of the management triumvirate, eventually became General Manager of Mann + Hummel.

1945 – 1949

DEVELOPMENT OF A PROVEN CONCEPT / Due to the difficult conditions and shortages of the first years after the war, the main focus during this period was on economic survival. Nevertheless, existing filter types underwent further development, and diversification was introduced with the development of pneumatic conveyor systems for the milling industry.

MAN OF ACTION WITH A HUMAN TOUCH / Alfred Wacker was an energetic man who was also known for his warmth and compassion.

Born to a working-class family in 1905, the Upper Swabian native never denied his provincial origins. Often described as a likable rough diamond, he would address his employees informally regardless of their position, but he also demanded the best from them – as he did from himself. In the first few years after the war, he worked more or less around the clock and was not above sleeping on a camp bed in his office.

Many witnesses agree that he "was the real creator […]" without whom "the company would never have become what it is today".[1] Although sometimes short-tempered, "he was very much loved, people would have done anything for him".[2] Once, during a strike, he unceremoniously picked up a spray gun and spent the day painting filters. These filters had "the worst paint job ever, yet were the most expensive that we have ever produced". His actions are still remembered to this day.[3]

Along with diligence and determination, Alfred Wacker also possessed the ability to identify, encourage, and champion new talent. Hermann Dettling recalls: "Mr. Wacker was a man who really encouraged young people."[4]

As filter production expanded during the 1950s, Alfred Wacker became increasingly important to the company. He gradually moved up through the hierarchy, first becoming Deputy General Manager, then full General Manager. For Adolf Mann and Dr. Erich Hummel, he was an indispensable adviser and was involved in almost every important decision made in the company. At the beginning of the 1960s, Alfred Wacker was dealt a cruel blow when he lost an eye as a result of a brain tumor. Despite this setback, his work rate and his commitment to the company remained as strong as ever. In the end, however, he was to become a victim of his own personal passion. Throughout his life, he was a keen mountaineer and in 1965, despite his ailing health, he set off on a hike – and fell. Alfred Wacker died a short time later as a result of his injuries at the age of 60, leaving behind a great legacy both as a person and as a businessman. His outstanding contribution to the company means that his spirit still lives on today.

1947

Felt cone filter
Pneumatic conveyor systems

BY THE WAY / All of the household items in this picture …

… came from Filterwerk Mann + Hummel. The "Rutscherle", a deep handcart that was produced at the Bleyle plant in Benningen, proved to be particularly popular. An employee recalls: "Because we didn't want to sit around doing nothing and the hardship was great, we came up with the idea of making a small cart. We suggested to Mr. Wacker that we could start producing something like this. We already had the materials we needed."[5]

UNSCATHED BY BOMBS, YET RUINED

Filterwerk Mann + Hummel in Ludwigsburg emerged from the war miraculously unscathed. Nevertheless, management and employees were left with nothing. Their biggest customer, the armed forces, no longer existed and civilian vehicle production had collapsed. In the Western occupation zones at least, the Allied Control Council permitted the production of 40,000 cars and trucks as well as 14,000 tractors annually. However, this quota was nowhere near enough to keep the filter plant operating at full capacity. Under the leadership of Technical Director, Alfred Wacker, production began again in June 1945. However, within a year the company lost more than half of its workforce.[6] The situation of the parent company, Wilh. Bleyle KG, was even worse. The plant in Brackenheim had been looted, while the Stuttgart plant had been bombed. The Bleyle production facilities in Vienna and in the town of Schiltigheim in Alsace were undamaged. However, they were seized by the Allies and were thus lost by the company (see "Locations", page 46).

DEALING WITH THE PAST

The forfeiture of the Bleyle plants in Vienna and Schiltigheim, which had previously been under Jewish ownership and were taken over by Adolf Mann and Dr. Erich Hummel in 1938 and 1941 respectively, did not mean the end of coming to terms with the Nazi past.

On the one hand, there was Wilh. Bleyle KG. Adolf Mann and Dr. Erich Hummel had taken over the company after the former directors and partners had been forced out of the company during Nazi criminal proceedings. Karl Weinbacher, who had been appointed trustee of the Bleyle Group by the Ludwigsburg Office for Property Administration, successfully took back the company on behalf of the previous owners. After the lease agreement expired in September 1948, the Bleyle plants were returned to Max and Fritz Bleyle and Arthur Weber. However, this process involved a protracted legal dispute, which eventually ended in 1951 with a compromise. Adolf Mann and Dr. Erich Hummel received 450,000 deutschmarks in cash for selling back the company.

Another issue was their Nazi past. Relatives of the former Bleyle management board reported Adolf Mann to the Allied military government as a "suspected Nazi".[7] Furthermore, US military intelligence classified both Adolf Mann and Dr. Erich Hummel as Nazis, not least due to the "Aryanization" of two Jewish textile companies in Vienna

STUTTGART / The center of Stuttgart was almost completely destroyed by Allied bombing raids during the Second World War. A Bleyle plant was one of the buildings affected.

and in the town of Schiltigheim in Alsace. Adolf Mann and Dr. Erich Hummel were arrested on the basis of these allegations, but were released again soon afterward.

In 1948, the two men were tried before a denazification court. The trial lasted three days, and on July 15, 1948, the verdict concluded that Adolf Mann and Dr. Erich Hummel were "fellow travelers". They were helped above all thanks to statements from former forced laborers and Bleyle employees, all of whom declared that the accused were caring employers, who were concerned for the welfare of their workers.[8] A suit filed against Adolf Mann on the instructions of the Württemberg-Baden Ministry for Political Liberation, which attempted to have him classed as "Incriminated", was rejected by the Appeals Chamber in February 1949. If you examine the conduct of Adolf Mann and Dr. Erich Hummel throughout the Nazi era, it is true that they both profited from the political situation. The takeover of Bleyle and two other Jewish companies, their involvement in critical filter production for the armament industry, and the rapid commercial success of their filter plant would have been

hard to imagine under different conditions. However, it is also clear that their membership of the Nazi party was primarily a strategic decision taken to protect their business interests, and that they demonstrated their humanity and Christian values throughout the years of the Nazi dictatorship. They were by no means heroes of the resistance – nor were they inhuman Nazis. Their role was that of followers, whose primary motivation was the good of their companies.

SANITARY FITTINGS / In the post-war years, Filterwerk Mann + Hummel was earning as much from the production of sanitary fittings as it was from filters.

NEW BEGINNINGS WITH HOUSEHOLD GOODS AND FITTINGS

Faced with the loss of a significant portion of filter production due to a lack of customers, management at Filterwerk Mann + Hummel decided to adopt the same strategy as most other German companies in the post-war era and make the best of the situation. There were stocks of materials and unfinished products and the plant was still intact. At the same time, there was significant demand for everyday essentials and household goods, which were in short supply. The bowl of an oil-bath air filter could be turned into a cooking pot relatively easily by attaching two handles. The Ludwigsburg factory halls were soon busy producing skillets, salt and pepper sets, strainers, drinking cups, scourers, and other household items. The company also showed inventiveness by using the experience gained in the textile industry to make a foray into the world of fashion. The white felt that until recently had been used to produce oil filters for tanks was now transformed into ladies' hats, while gray felt was used to make men's hats and pen holders. Other items produced included sewing boxes and tobacco cutters, and a handcart named the "Rutscherle".

LARGE-SCALE PRODUCTION BEGINS / 1949 saw the start of the systematic rationalization of production processes, including the use of progressive dies.


LINEN

1948

Oil-bath air filter “LO” – new design –
and oil-bath air filter “LOZ”

RESUMPTION OF FILTER PRODUCTION / In the first few years after 1945, filters were still produced in a large number of individual steps.

Technically more challenging – and more profitable – were the sanitary fittings that the company began producing in 1945. It is not exactly clear how this came about. The fact that engineer Emil Benkiser, whose fittings business had been shut down, was sent to work for Mann + Hummel was certainly a contributing factor. Benkiser had developed an innovative idea. In faucets that worked according to the “Benkiser system”, the water jet flowed directly from the rotating part of the fitting. Initially, they had to make use of the components available to them, including stopcocks for flame throwers! Soon, however, special manufacturing facilities had to be set up for production of the fittings.

The product range quickly expanded and by 1954 was being sold under the "MANN-ARMATUREN" brand name. It included upright faucets, swivel faucets, and sink faucets as well as dispensing faucets, bathtub filling mixers, shower faucets, pillar faucets, drain valves, and urinal stopcocks. This product area, like all others, applied the core Mann + Hummel values of innovation and quality – as can be seen in a brochure from the year 1950: "Modern plant facilities and manufacturing methods ensure consistently high product quality. For customers, the name MANN-ARMATUREN should be a guarantee of flawless materials and maximum precision in manufacturing – for the outstanding quality that you expect from good fittings."[9]

After Emil Benkiser went back into business for himself, Julius Nonnenmacher took over the management of fittings production. He later recalled: "We began to switch from cast iron to aluminum parts. New models were developed and the entire product range was expanded. [...] The business flourished. Sales of fittings matched those from filter production."[10]

In the area of filter production, the post-war years saw Mann + Hummel begin to develop and produce the first liquid filters for industrial applications. The "Mühlenbau" product range represented the first steps towards the establishment of what would later become the Plant Engineering division and then part of MANN+HUMMEL ProTec GmbH, which was merged with Prove Polymer Processing GmbH in 2012. It all began with the challenge of developing and constructing not just suitable filters for bulk goods, but complete conveyor systems for industrial mills. The company's innovative strength was crucial here, as these pneumatic conveyor systems "in the form of individual devices were very different from our traditional filter series" and "suitable production lines had to be created".[11]

BACK TO THE COMPANY'S ROOTS – LARGE-SCALE INDUSTRIAL PRODUCTION

The fittings business was so successful that it eventually came into conflict with filter production, which was gradually picking up pace again. Immediately after the end of the war, only established filter types such as the centrifugal oil/air separators "LO" and "LOM" were being produced for the spare parts market – including US and French military vehicles. By the time of the currency reform in 1948, however, demand had increased significantly. The VW Beetle, the symbol of the economic miracle, was a major contributor to the rapid growth in production in Ludwigsburg. The company produced felt cone filters for the Beetle for cleaning the intake air. Against the backdrop of these developments, the owners met with the Director of the filter plant, Alfred Wacker, and together they made a landmark decision. With the statement "We are first and foremost a filter plant," Mann + Hummel declared its intention to concentrate more on its core business again. Expectations for higher earnings made the task of reaching this decision a lot easier for the company's management.

THE START OF THE ECONOMIC MIRACLE / The deutschmark

The hesitant start to the German post-war economy was not just due to the devastation left behind after the war. It was also the result of a lack of a forward-looking economic policy – and confidence in the reichsmark. Many goods were rationed and could only be obtained with coupons. The black market flourished as a result. The authorities in the Western occupation zones were adamant that the only way to bring about economic recovery was through currency reform. Plans for the introduction of the new currency were drawn up in top secret in the "Rothwesten conclave". Among the eight members of the conclave was economist Hans Möller, who later went on to become President of the Supervisory Board of Mann + Hummel and who was the son-in-law of Adolf Mann. The currency reform came into effect on June 20, 1948, when the newly founded "Bank Deutscher Länder" issued ten billion freshly printed deutschmark banknotes. Every German citizen received 40 deutschmarks, followed by another 20 deutschmarks later that year. Bank deposits in reichsmarks were devalued at a ratio of 10 to 1. ›››

MOVE INTO PLANT ENGINEERING / Pneumatic conveyor systems for mills, in which large filters were used, represented a new business area for the company.

IMPORTANT SALES DRIVER / Between 1945 and 1949, the company produced mainly centrifugal oil/air separators of types "LO" and "LOM".

However, the expansion of filter production required significant investment, which could not be tied up in fittings production. By the end of the 1940s, demand for some filter types was so strong that more efficient production was needed. The then Head of Sales, Fritz Claus, described this challenge in his journals: "This was the task facing our equipment designers. […] The first progressive dies were developed so that we could perform more operations per machine cycle at the punch and drawing presses and thus reduce production times."[12] Fittings production was scaled back in parallel with the upturn in the filter business until it was eventually stopped completely in 1956, and the machinery not required for filter production was sold.

CORPORATE RESPONSIBILITY AND CUSTOMER PROXIMITY

The difficult years after the Second World War brought more than just a transition to efficient large-scale production. Two key characteristics of the Mann + Hummel organization that still apply to the company today contributed to its success – the responsible attitude of the owners towards their business and a strong customer focus. Adolf Mann and Dr. Erich Hummel contributed a portion of their earnings to the filter plant in order to minimize the bank borrowings needed for investment. The current company strategy of customer proximity was also adopted at this time. An increase in the amount of export activity presented the company with a set of new, completely unknown technical challenges. Technical Director Alfred Wacker therefore came up with the idea of obtaining information through close dialog with customers – while at the same time applying knowledge gained in a constructive manner. This win-win strategy was successful right from the very outset, and is still pursued by Mann + Hummel to this day. Paul Gerlach, who was Head of the Field Sales Force at the time, recalls that it "greatly strengthened the position of the filter plant with respect to its customers […]" and allowed "rapid intervention to clarify any misunderstanding regarding the filters".[13] As one of the most terrible decades in human history drew to a close in 1950, Filterwerk Mann + Hummel had, thanks to far-sighted strategic decisions, managed to lay the foundations for its future role in the German economic miracle – an achievement that nobody would have thought possible just a few years earlier.

>>> While this change was extremely hard for the owners of financial assets, it fulfilled its objective from an economic perspective. Goods that had been hoarded were offered for sale, the free market economy quickly gathered momentum, and the black market came to a standstill. However, the introduction of the deutschmark also put paid to any ideas regarding the development of Germany as an entire country. The Soviets had left the Allied Control Council under protest shortly beforehand. The new currency soon came to represent not only the amazing recovery in the West, but also the decades of separation from East Germany.

STORAGE IN THE POST-WAR ERA /
This undated photo shows pallets of oil-bath air filters and illustrates the rapid growth of the filter plant towards the end of the 1940s.

PIONEERING / An early form of the intake silencer, installed here in a Mercedes 170 from 1936.

A BRIEF HISTORY OF FILTERS /
Clean air and clean oil for greater efficiency and a longer service life

As increasingly powerful engines were developed in the 1920s, a new problem emerged in the form of contaminants in the air and in the engine oil, which led to increased wear. At the same time, simple filtration solutions had a negative impact on performance. This was the problem that occurred with the high-performance aircraft engines developed by the company Elektronmetall, which was founded by Hellmuth Hirth and Hermann Mahle. The development of high-performance air and oil filters was therefore a priority for the test workshop in Bad Cannstatt.

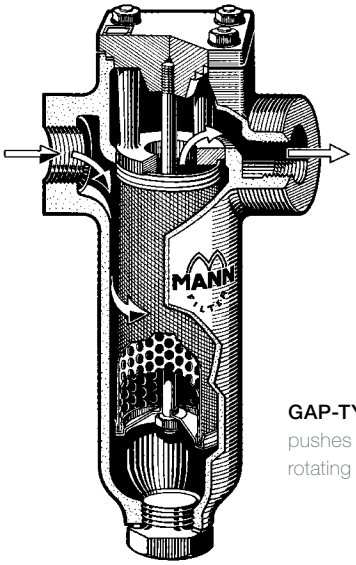
AIR FILTERS

Oil-wet air cleaners, which offered significantly improved filter efficiency due to the wetting of the filter packing with oil, began to be used from 1925. Demand for longer maintenance intervals led to the development of oil-bath air filters such as the centrifugal oil/air separator. The tangential air inflow into the oil bath generated a swirling movement, the filter packing was continuously wet with oil and cleaned by the return oil flow. This principle is still used today in solutions for specific applications. Oil-bath air filters were available in a shallow and a deep version. They were used primarily in heavy machinery and later also in military vehicles. The demands of the military for longer maintenance intervals despite high levels of dust formation then led to the development of combi filters. These air filters had a preliminary stage consisting of cyclones, i. e. centrifuges, for the preseparation of large particles and a downstream fine filter stage made from felt cartridges.

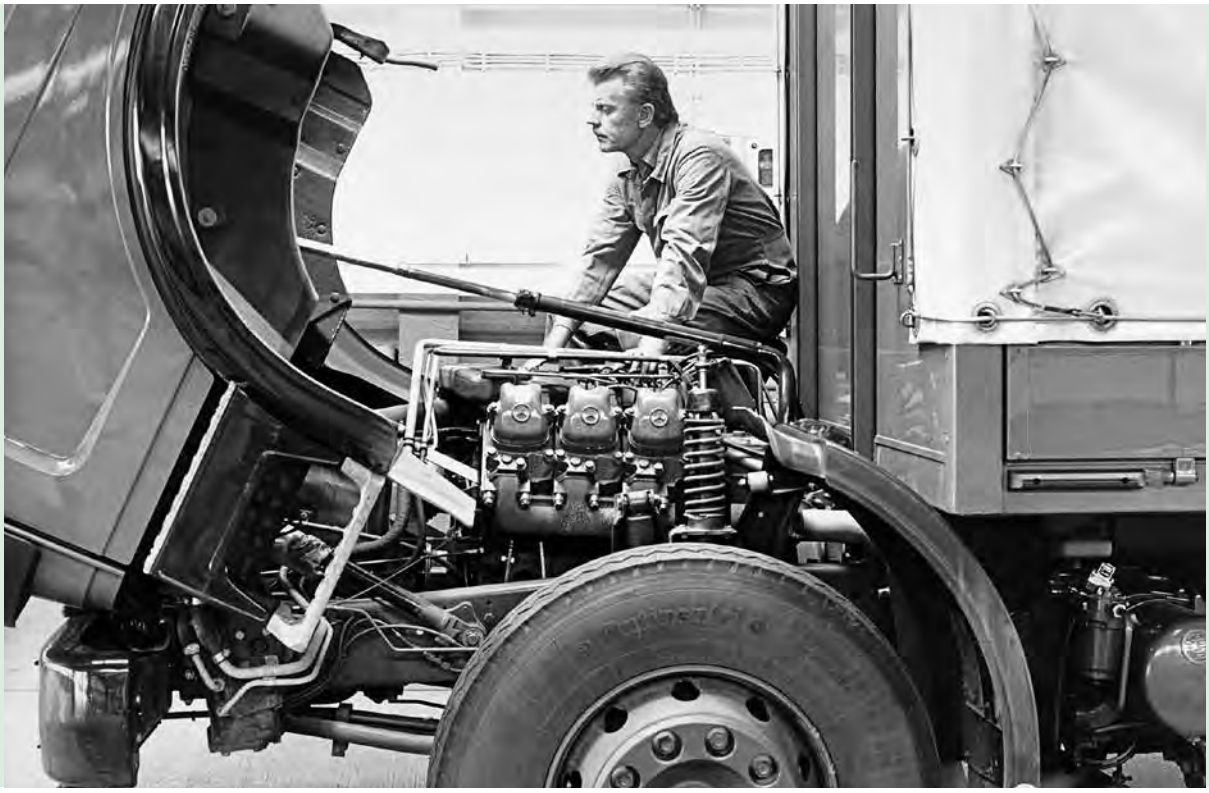
From the mid-1930s, the requirements of the automotive industry with respect to engine air intake noise insulation became stricter. The solution was to design the entire intake area of the air filter as an absorber element. This example illustrates how the company went way beyond the development and production of individual components and began creating complex systems tailored to the respective engine.

OIL FILTERS

While improvements were being made in the area of air filters, oil filter development was also ongoing. Here, the challenge was to combine improved filter performance with longer maintenance intervals. The tube oil filters introduced after 1924 went some way towards achieving this objective. With these types of filters, only a small amount of the oil – between 5 and 10 percent – was cleaned in a bypass flow. A solution came in 1934 in the form of main flow filters, where all of the oil was guided through a plate gap filter. The main flow filters eventually became widely used, while bypass filters were only used additionally to filter very fine particles out of the oil.



GAP-TYPE FILTER / A stationary comb pushes the dirt from small gaps between the rotating strainer discs into a sludge chamber.



TESTING WITH A RUNNING ENGINE / Intensive research and customer-oriented development – in this case with a combi filter – characterized Filterwerk Mann + Hummel right from the very start.

FUEL FILTERS

From the very early days in the history of the engine, fuel pumps and nozzles had proven to be susceptible to contaminants. Accordingly, various solutions were employed, the most popular being plate gap filters, strainer filters, and felt filters. Diesel engines presented specific requirements with respect to filter quality on account of the high injection pressures.

By the time Adolf Mann and Dr. Erich Hummel took over filter production from Mahle in 1941, filters were important components and largely tailored to the respective engine. The multitude of solutions required, particularly in armaments production, presented the new owners with enormous challenges and motivated the development of two key principles that are still valid today. One was intensive research and development activity, and the other was close cooperation with the customer from the very early stages of a new development.

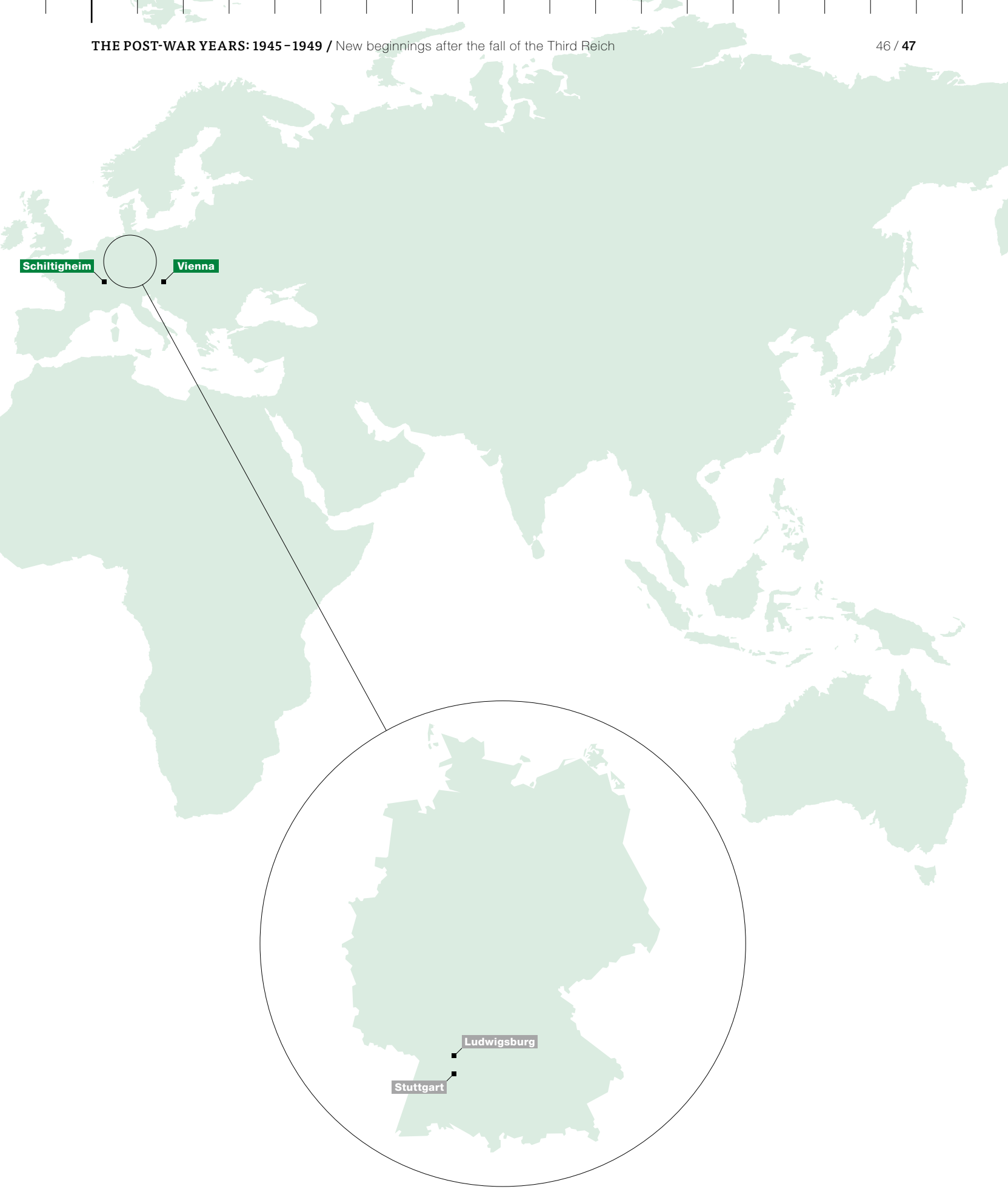
Locations

AUSTRIA / Vienna The story of Vienna is without doubt one of the darker sides of the company's history. The Bleyle Group run by Adolf Mann and Dr. Erich Hummel benefited, like many other companies, from the injustice of expropriating firms owned by Jews and then offering them for sale to "Aryans" – often at very low prices. Following the annexation of Austria in 1938, this is precisely what happened to two Vienna textile firms – "Wirkwarenfabrik Franz Bartels Nachf. Julius Otte und Bruder" and "Strick- und Wirkwarenfabrik Otto Engelhard" – which were to be sold as part of the so-called process of "Aryanization". Adolf Mann and Dr. Erich Hummel took up the offer in order gain an advantage over their competitors. A. Mann & Co. GmbH in Vienna quickly established itself as a manufacturer of jersey clothing and employed around 600 people. The fact that Adolf Mann wished to conduct purchase negotiations with the previous Jewish owners "on amicable terms" and paid a sum of 300,000 reichsmarks – "the highest Aryanization price ever paid in Vienna"[14] – is testament to his decency, but it did not make the situation any less unpleasant.

CATHOLIC CHURCH / Sainte Famille in Schiltigheim.

FRANCE / Schiltigheim Textilfabrik Gentzburger in Schiltigheim, a suburb of Strasbourg, was also originally under Jewish ownership. At the suggestion of the Reich Trustee of Labor at the Reich Ministry of Labor, Ministerial Director Dr. Kimmich, a specially formed company – Textilwerk Schiltigheim GmbH – leased the premises, which now belonged to the German Reich, in 1940, and the machinery was bought from Gentzburger. The partners were Adolf Mann and Dr. Erich Hummel, and later also their wives. Textilwerk Schiltigheim GmbH first took on contract work for Bleyle, but was then made into a garment manufacturing plant for women's and children's clothing. As in Vienna, the workforce quickly grew to around 600 people. However, after 1942 the majority were sent to a plant for Junkers aircraft engine maintenance. The rest of the workers later also performed general work for Filterwerk Mann + Hummel, including the assembly of lamellae for gap-type filter inserts and the machining of filter heads. Due to a labor shortage, female prisoners were drafted into the workforce, while the working week rose from 48 to 72 hours.[15] According to Adolf Mann, however, the company's experience of working with the people of Alsace was "very good", with no incidences of "sabotage or insubordination".[16]

The injustice of the appropriation of these former Jewish companies in Vienna and Schiltigheim was recognized immediately after the end of the Nazi dictatorship. Both businesses were seized in accordance with Article I of Law #52 passed by the Allies and played no further role in the history of Mann + Hummel.


Schiltigheim
Vienna
Ludwigsburg
Stuttgart

The fifties

"Work without a discernible level of responsibility, and employers who make no effort to delegate or recognize acceptance of responsibility are inhuman and degrading."

Adolf Mann in "Aus der Praxis einer Ertragsbeteiligung" (Experiences of profit sharing)

Economic miracle and social milestones

IN THE 1950S, THE FOUNDATIONS WERE LAID FOR THE FUTURE DEVELOPMENT OF FILTERWERK MANN + HUMMEL. Production was adapted to the needs of a market environment characterized by concentration through rationalization. New technical developments revolutionized filter technology. Adolf Mann acted as a role model, implementing pioneering social ideas. By the end of the decade, the company had taken its first steps towards internationalization.

Following the currency reform of 1948, the founding of the Federal Republic of Germany in 1949, and thanks to the provision of massive start-up financing under the Marshall Plan, the new “social market economy” grew rapidly. The country experienced a period of vigorous modernization that brought increased prosperity and full employment. It soon became necessary to recruit migrant workers from abroad – not least to satisfy growing international demand. Little was said about our unfortunate past. The German people discovered a new zest for life. It was the age of kidney-shaped tables, petticoats, and the economic miracle.

1946 Regulation on extra vacation leave not covered by collective agreements

1949 Pension fund (predecessor of company pension scheme)

RATIONALIZATION LEADS TO LARGE-SCALE PRODUCTION

One of the biggest beneficiaries of this rapid growth was the automotive industry. As the decade progressed, the automotive industry became the driving force behind economic development not just in Germany, but also across Europe and in the United States. Increased engine power and a wider range of vehicles presented Filterwerk Mann + Hummel with new challenges from both a quantitative and a qualitative perspective. Individual filter design became more important. A new innovation from the United States – micro oil filters made from paper – entered the world of filter technology. Mann + Hummel was quick to respond to this trend and began producing its first filters with replaceable paper elements in Ludwigsburg in 1950.

However, the growing number of series production orders created a new problem. Production in Ludwigsburg was still largely manual and could not keep pace with development in terms of quantity or cost. The Head of Sales at the time later said: "For as long as I can remember, the different parts were supplied to the workstations in shipping crates and mesh containers. The entire department looked more like a mountain of containers than a well-organized assembly line."[1] US car manufacturer Ford, one of the company's biggest customers at the time, pushed for change and advised the company "[to] consider new production methods immediately and [to] rationalize all processes that can be replaced".[2]

Once again, it was energetic Technical Director Alfred Wacker who took on the challenge with his characteristic determination. At the end of 1951, he introduced "a constant stream of rationalization processes in all areas of production" in the department that produced oil-bath air filters.[3] Just nine months later, following extensive preparations, the first production assembly line was up and running. The new system was used to manufacture the product with the highest volume – air filters for the VW Beetle. In component manufacturing, entire operations were eliminated through the use of combined tools. The task of reorganizing another air filter department, in which many different types of filters were produced, proved to be much more difficult. By the beginning of 1954, however, the new, more efficient production technology had been commissioned.

The company's efforts paid off. Sales increased from 1.9 million deutschmarks in 1948/49 to an impressive 15 million deutschmarks in 1954. Unsurprisingly, the business soon outgrew its premises in Ludwigsburger Straße. That same year, a new fabrication shop was established in Schwieberdinger Straße (now Grönerstraße) – thus providing the nucleus for Plant 2, which is still located there today.

BY THE WAY /
MANN pneumatic installations …

… were also used by breweries, malting plants, and distilleries. The division later became the Plant Engineering Division, which mainly designed and produced systems for the plastics processing industry, and was subsequently hived off into the legally independent entity MANN+HUMMEL ProTec GmbH. The business operations of this company were sold in 2012, as they were not part of the core business of the MANN+HUMMEL Group.

1949 / 1950

Should be on one line
Housing loans

PNEUMATOR / This was the brand name under which the pneumatic granulate transport systems based on the "System MANN" were sold in the early 1950s.

FILTER TECHNOLOGY BEYOND THE CAR

Beyond the automotive industry, development in other areas was strong. Before the period known as "Mühlensterben" at the end of the 1950s, which saw a large number of mill closures, Mann + Hummel had acquired valuable experience in pneumatics and plant engineering through its involvement in mill construction. Pneumatic installations from Ludwigsburg quickly found plenty of other customers, including chemical companies, the pulp and cement industries, as well as bakeries, chocolate factories, oil mills, and the rubber industry. This led to the development of the Plant Engineering Division, which was later merged with MANN+HUMMEL ProTec GmbH. ProTec GmbH, which since 2012 is no longer part of the MANN+HUMMEL Group, is still involved in pneumatics and the construction of large plants for the plastics and food industries.

1950

Start of separate filter element production to manufacture the first filters with replaceable fine filter elements

ENGINE OF THE ECONOMIC MIRACLE / The automotive industry

is synonymous with the rapid economic development of the 1950s. In the years 1953 to 1955 alone, the number of new car registrations in Germany rose from 227,458 to 489,528 annually, representing an increase of 115 percent. The Volkswagen plant produced almost a third of all new vehicles and in 1955 the one-millionth Beetle – which, of course, included filters from Mann + Hummel – came off the assembly line. Along with manufacturers, the accessories and aftermarket sector also experienced a boom. Between 1955 and 1960, sales increased from 1.4 to 2.8 billion deutschmarks, and the number of employees rose from just under 60,000 to over 91,000 in the same period. Another rapidly growing trend was concentration on a small number of large manufacturers. In 1932, there were 25 manufacturers of cars and trucks in Germany. By 1950, the big four – Volkswagen, Opel, Daimler-Benz, and Ford – accounted for 92.4 percent of total production.[4]

Along with plant engineering, the industrial filtration business also underwent expansion. A key area of activity were liquid filter plants, which were used in mechanical engineering and in wastewater treatment. 1958 represented a significant milestone on the road to becoming an international systems supplier with the winning of a major contract for the pumped storage plant in Vianden. Located in Belgium, the plant was the biggest of its kind at the time and operated using cooling water, which was taken from the Sauer river bordering Germany and Luxembourg and then filtered. The success of this project led to further contracts, including a large filtration plant in Tanganyika in Central Africa and many other plants in Europe and overseas.

The growth of the plant engineering and industrial filtration business segments necessitated a restructuring of the sales organization. Because automotive and industrial filtration had up to now still not been separated, it was not possible to provide smaller industrial customers with the same level of support as large customers from the automotive industry. In 1956, an independent sales division offering a separate range of industrial filters and filter systems for conventional industrial filters and automotive suppliers was therefore spun off from the sales organization.

CONSISTENT EXPORT STRATEGY AND EARLY INTERNATIONALIZATION

1956 also saw the establishment of an export division named “VX” for the international automotive filter business. This division was responsible for commercial operations as well as support for OEM customers and sales to general industry customers worldwide. The importance of international markets was underscored by the appointment of the former assistant to Director Alfred Wacker, Ottmar Schneiderhan, to the newly created position of Head of Exports in 1957, having recently been granted power of attorney. Fritz Claus continued in his role as Head of Domestic Sales.

Internationalization progressed rapidly. By the end of 1956, Mann + Hummel was represented in Finland, Sweden, Norway, Denmark, Netherlands, Belgium, Luxembourg, France, Switzerland, Italy, and Austria. Spare parts were also sold to countries in the former British Empire, the United States, Greece, Spain, Portugal, and a number of Latin American countries via the company Europarts. A key principle that was implemented from the very outset was working closely with customers on site. For employees like Paul Gerlach, who worked in the testing department in the 1950s, this meant traveling all over the world. He recalls his experiences: “I started going on long trips at an early stage. In 1958, I spent three months in South Africa. There were no telephones or faxes there at the time. Nothing at all. We were alone, far away from home.”[5] The first and most frequent traveler of his generation kept an account of his many business trips. He spent 2,758 nights away from home working on behalf of the company.

Free jet centrifuge under license from Glacier, oil-wet air cleaner with starting disk and piston shape, oil-wet air cleaner generally formed as intake silencer, oil-bath air filter LOZ + cyclone (design 31 + 48), air filter LO (oil-bath filter, flat design, commercial vehicle and industrial applications, e.g. compressors), gap-type filter, fuel filter with felt and paper elements

Mann + Hummel was pursuing a clearly defined strategy in its international activities. With the development of the automotive industry, the company wanted to be close to its customers, who were expanding their international presence. In addition to establishing a network of distributors, the company initially met customer demand for high-quality products through the granting of licenses in countries including Egypt, Chile, Hungary, India, Mexico, South Africa, and Yugoslavia, as well as in Iran and Turkey. Two licensees – TIDEM S.L.R. in Argentina and Naumann Gepp in Brazil – went on to become subsidiaries, taking the Ludwigsburg-based filter plant on its first steps towards becoming a global enterprise (see “Locations”, page 71).

Despite this level of international activity, outside of the Swabian city of Ludwigsburg the company was just one of many small manufacturers operating in the global market. This was to change in 1958, when management at Opel in Rüsselsheim decided to use a newly developed oil-wet air cleaner with coconut fibers. Instead of manufacturing the filters themselves as they had done in the past, Opel awarded Mann + Hummel a major series production order for oil-wet air cleaners for the Opel Rekord. This order proved to be a crucial turning point for the company as an OEM, as it paved the way for many other orders and provided a significant boost for large-scale production.

IAA EXHIBITION STAND 1953 / The IAA exhibition stand in 1953 reflected the spirit of the time and the strong brand awareness of Mann + Hummel. The company has been represented at every IAA International Motor Show. 1951 was the first time this important trade fair was held after the Second World War.

circa 1950 / 1951

Development and start of filter production with replaceable paper fine filter elements for air and oil, initially as auxiliary flow, then as main flow filters

SPORTY / A women's gymnastics group was one of the many activities on offer.

SOCIAL INNOVATION / The corporate health insurance company founded in 1952 was ahead of its time – even though payment transactions were still handled with cash.

1951

Felt cone filters for the VW Beetle, star-pleated strainer filters; star-shaped paper filters, initially as auxiliary flow filters

BOOM IN THE AFTERMARKET BUSINESS

As the number of vehicles grew, so too did demand for replacement filters. The development of paper air filters and increased use of replaceable filter elements triggered a boom, which led to the company finding itself faced with "ongoing delivery problems due to the rapid and constant growth in demand for replacement cartridges and spin-on filters […]".[6] Around 1953, an independent sales division for the domestic retail aftermarket, which sold exclusively to specific aftermarket distributors, was established under Head of Sales Fritz Claus. In its first year, the aftermarket sales division recorded sales of around 440,000 deutschmarks.

When West Germany founded the Federal Armed Forces in 1955 as part of the process of integration with the West, Filterwerk Mann + Hummel returned to an area of business that had previously attracted criticism – the armaments industry. Some employees expressed concern, asking the question: "Is this really happening again so soon?"[7] Nevertheless, production of what were known as "special filters" – oil, air, and fuel filters, including filters for the Marder armored personnel carrier and the Leopard battle tank – began in 1958. Modern filter systems were also supplied for American military vehicles used by the Federal Armed Forces. The company's involvement in the armaments industry was viewed critically by some – yet it accounted for just a small share of total sales. With the introduction of mandatory military service in 1957, the fact that Mann + Hummel employees continued to receive their share of the company's profits during their time in the military is just a small example of the social responsibility and pioneering initiatives of the filter plant owners that evolved in the 1950s.

PIONEERS IN SOCIAL RESPONSIBILITY

The employee benefits that Adolf Mann and Dr. Erich Hummel introduced in their company after 1950 were certainly pioneering, and preempted relevant legislation. It is true that some of these initiatives also benefited the company. However, it would be unfair to say that the owners were acting solely or primarily out of self-interest. On the contrary, the two men saw an opportunity – now that the constraints of the Nazi regime and the challenges in the immediate aftermath of the war were consigned to the past – to make their own personal visions a reality. For Adolf Mann and Dr. Erich Hummel, who were influenced by both Christian and humanist values, this was no mere tactical measure. Indeed, Adolf Mann developed a comprehensive sociopolitical philosophy, which he did not promote publicly, but instead used as a benchmark for the business activities of himself and his partner (see "Education for ownership", page 55).

EDUCATION FOR OWNERSHIP /
The sociopolitical, humanist, and philosophical ideas of Adolf Mann ...

..., which were largely shared by Dr. Erich Hummel, found ideal expression in the motto "Education for ownership". This wasn't the title of one of the books that he published in the 1950s, but an article that appeared in renowned weekly newspaper DIE ZEIT in 1953 and attracted nationwide attention.[8] The article was prompted by a question that was the subject of public debate at the time: Should employees be small shareholders in their companies and thus share in its success? Adolf Mann flatly rejected this approach. He firmly believed that "entrepreneurial attitude and performance […] [can] only be expected from an employee if he is allowed a defined share of the company's earnings".[9] However, the majority of employees would not be suitable for co-ownership, "because such tendencies merely perpetuate the situation that must be eliminated as the source of social ill – increasing ownership rights and claims to leadership".[10] In his opinion, leadership and decision making in a company were not related to co-ownership, but rather a question of finding the right personality. Adolf Mann was equally skeptical about the opinion that is widely held today, whereby you can realize your personal potential through work. He believed that personal development and self-fulfillment should take place during the ever increasing amount of free time that employees had. For him, free time should not just be a time of idleness or amusement, and he warned against the "automatism of free time, whether it be lifestyle, fashion, sport, cars, travel, movies, radio, TV, and so on […]".[11] >>>

1950 – 1959

TECHNOLOGICAL REVOLUTION MADE FROM PAPER / The development of paper filter elements, in which Mann + Hummel played an instrumental role, brought with it numerous advantages. Different degrees of filter fineness could be produced with the same high product quality. The star-shaped pleat made it possible to create space-saving designs – and large-scale production was efficient and therefore cost-effective. The same applied to replaceable spin-on oil filters, which were also becoming increasingly popular.

A rule dating from February 1951 was a prelude to a series of sociopolitical initiatives. Although the workforce was continuing to grow, overtime had become a regular occurrence on account of the booming filter business. With the new rule, workers could now enjoy additional leave depending on the amount of overtime worked. This was followed one year later by a much more complex and far-reaching step in terms of its sociopolitical importance with the formation of a corporate health insurance company.

ACTIVE RESPONSIBILITY: FORMATION OF THE CORPORATE HEALTH INSURANCE COMPANY

The legal framework was provided by the new Self-Governance Act, which allowed companies to set up their own health insurance companies. In February 1952, Adolf Mann presented his ideas to the Central Works Council. They had come about due to his dissatisfaction with the local health insurance funds, "whose members came mainly from low income groups", and moreover had a host of other obligations to deal

>>> Ever the humanist and educator, he asked himself the question: "What do we have to do […] to make freedom a correlate of work, which enables workers to fulfill their purpose in life or integrate their human existence."[12] His answer? Through education for ownership, which presented employers with the twofold task of "making our workers capable of enjoying their free time while at the same time willing to take on ownership".[13]

In this context, Adolf Mann did not mean ownership in terms of material possessions, but something "associated with the level of education and good judgment, lifestyle habits, and standard of living of the new owners and thus ultimately possible. On home ground".[14] What was significant in the case of Adolf Mann and Dr. Erich Hummel was the fact that they did not stop with their findings or claims, but put a lot of energy into the practical implementation of their social philosophy. The 15 rental apartments for employees constructed in 1949 were just a stopgap measure due to the housing shortage. In a detailed presentation of their housing development project, the managing partners said: "This approach was not satisfactory."[15] The ZEIT article summarizes the reasons why: Adolf Mann and Dr. Erich Hummel were of the opinion that "the experience of control, that exhilarating feeling of being in a unique position, and the singularity that allows you to break free from the masses" is only bestowed upon the homeowner – unlike the employee as co-owner of the company, who lacks "almost every value of an education for responsibility".[16]

VALUE-ORIENTED RULES / The plant regulations introduced in 1956 contained basic principles as well as many detailed regulations. One such principle viewed the company as a "social community", which was only possible through "genuine cooperation […] where individual performance contributes to an integrated whole".

1952

Corporate health insurance company

1953

Profit sharing

with such as “the plight of refugees, housing shortages, disabled war veterans, etc.”.[17] Another benefit that he cited was the ability to provide better and more personal support for members and their families. The corporate health insurance company was to be an autonomous legal entity under the sole control of the district insurance office, while the staffing and administrative costs would be borne by the company. However, because these costs would be lower than those of the local health insurance funds, both the company and the insured persons were able to benefit from lower incidental wage costs.[18]

Even back then, the issue of data protection posed a problem. The Works Councils were worried that due to their close proximity, employees would be able to gain access to their medical and insurance records. The positive reports from employees in other companies with their own health insurance funds allayed these fears, and the Works Council eventually agree to the proposal. Three months later, in May 1952, the workforce was informed of the plan at an extraordinary company meeting. A secret ballot was held in the canteen the very next day. The result was clear – with an overwhelming 81.5 percent voting in favor of establishing the corporate health insurance company. The company had taken the precaution of filing the permit application with the district insurance office in March, and the permit was granted in August. The big day finally came on October 1, 1952, and the corporate health insurance company of Filterwerk Mann + Hummel started operation. Shortly afterwards, Wilhelm Henzler, Rudolf Duttenhofer, and Alfred Wacker were appointed as management representatives on

COMPANY DOCTOR SINCE 1951 / A nurse also provided medical care for employees.

1954 / 1955

Paper air filter for passenger car engines, some with silencer intake manifold ("snorkel") for air intake noise insulation

THE HOUSING DEVELOPMENT PROGRAM / The ambitious plan ...

... to establish a housing development program was first presented to the workforce at the Christmas party in 1949. The idea sounded simple: "Any employee interested in acquiring their own home and prepared to make sacrifices in order to do so should be given the help they need to achieve this objective."[19] Implementation of the plan proved to be more complex, however. Various organizational and financial issues needed to be clarified, whereby the initiators were aware "that the best and most sustainable way of achieving such ambitious material and non-material goals was to pursue them on the basis of real joint effort […]".[20] The company, those wanting to build, and the remaining employees were to dedicate themselves to this community effort. For Adolf Mann, one aspect was particularly important: "When completed, the homes become the unrestricted personal property of the builder without the need for a commitment to the company."[21] Irrespective of this legal position, "trust and therefore an intentional and in no way inconvenient attachment to the plant was established and encouraged" among subsequent owners. The program fulfilled Adolf Mann's "hopes and expectations".[22]

In a survey, around 15 per cent of employees expressed an interest in acquiring their own home. Based on these results, it was concluded that 20 to 24 housing units needed to be constructed annually over a period of four to six years. Given the scale of the challenge, it was decided to assign execution of the project to a not-for-profit housing association. The project was assigned to "Württ. Heimstätte G.m.b.H.".

>>>

the Board of Directors and in the Representatives Meeting. It quickly became clear that the corporate health insurance company had been very well received by the workforce. For many decades, it insured more than 90 percent of Mann + Hummel employees. Much later, when the corporate health insurance company was opened to the general public after the turn of the millennium, the number of people insured rose from around 11,000 to over 400,000 in just a few years thanks to good benefits and low premiums.

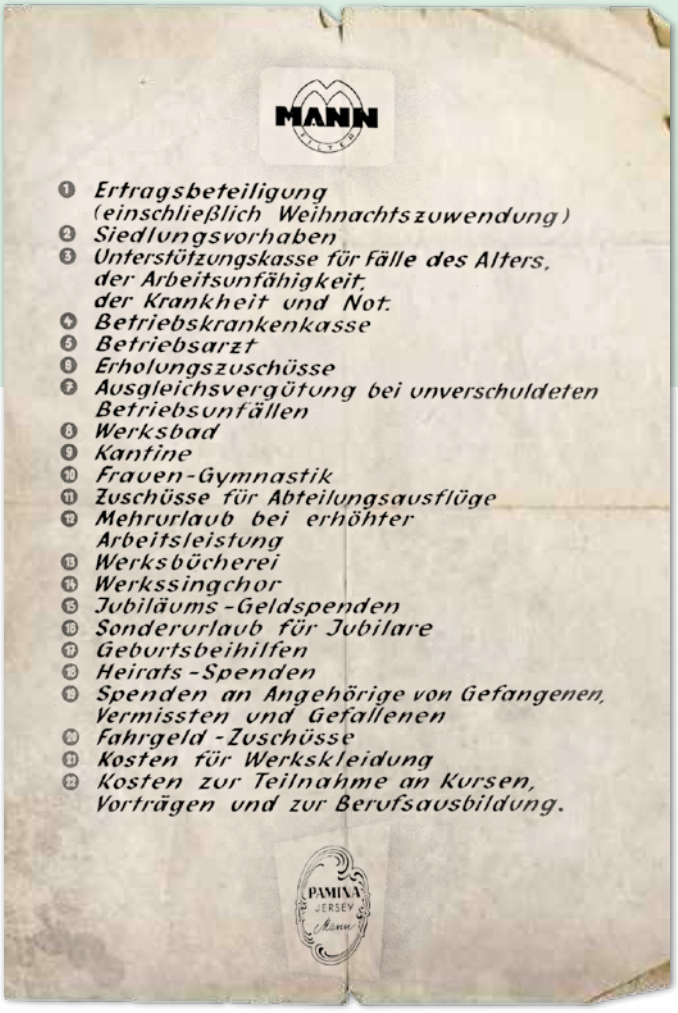
SOCIOPOLITICAL MILESTONES: PROFIT SHARING, HOUSING DEVELOPMENT PROGRAM, AND PENSION FUND

At more or less the same time, on November 14, 1952, a new law – the Works Constitution Act – came into force. Under this new legislation, the plant's workforce, which had by now grown to 750 employees, was granted the right to appoint an employee representative to the Supervisory Board. They elected Erwin Greiner, who had been Chairman of the Works Council for many years.

While this move was the result of a legal requirement, the company regulation regarding employee profit sharing that followed was neither prescribed nor conventional. In previous years, employees had been given Christmas bonuses – once even with the addition of a pair of slippers during the difficult post-war years. However, these special bonuses were voluntary and were not performance-related. There was no automatic entitlement to them. The groundbreaking new ideas of Adolf Mann and Dr. Hummel were way ahead of their time. Every employee was to receive a share of the company's annual profits commensurate with his contribution to overall performance. Despite some initial skepticism from the Works Council, they were quickly persuaded by the assurance that they would have a say in individual employee assessments. The fact that profit sharing was to be an entitlement rather than a "gift" without obligation from the company convinced the Works Council to agree.[23] The first profit sharing payment was made as planned at Christmas 1953. To this day, it remains one of the most notable achievements of the fledgling company Filterwerk Mann + Hummel in the 1950s.

Equally successful was the housing development program introduced in 1949, which helped employees to achieve low-cost home ownership with assistance from the company. The story of the housing development program is an outstanding example of the sociopolitical ideas of Adolf Mann (see "The housing development program", page 58). By the time the decade came to a close, the housing development program had already become history. The reduction of the working week by one hour to 44 hours per week in 1959 further consolidated the reputation of Filterwerk Mann + Hummel as an extremely attractive employer.

Paid sick leave, special allowances such as travel allowances based on public transport fares, birthday leave, marriage allowances, and childbirth allowances

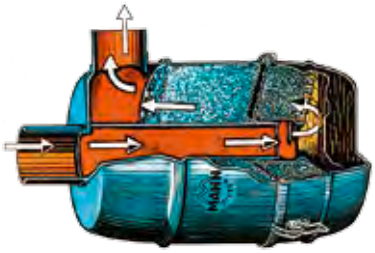


EMPLOYER BRANDING IN 1952 / A poster lists the many employee benefits and leisure opportunities.

Particularly noteworthy in this context is the pension fund, which was set up in the 1940s. The fund was a subject very close to the heart of Dr. Erich Hummel, who served as its Chairman for many decades, and marked the first step towards establishing a company pension scheme. Although the pension fund was changed to a direct pension commitment by the company to its members in 1977, for retired and currently active employees the pension fund remains the most important employee benefit provided by Mann + Hummel.

>>> In addition to carrying out the extensive groundwork, the company had to provide a permanent construction team, take over local site management with the plant architects, set up the construction sites and – where possible – purchase materials. In return, those wanting to build were obliged to contribute their own capital and be actively involved in the construction process – not just for their "own home, but also on the other construction sites until everyone in the group has achieved their goal".[24] A savings plan was set up to build up capital. On the one hand, the future homeowners had to save – weekly or monthly savings contributions were therefore deducted directly from their wage or salary and transferred to an account in the name of "Württ. Heimstätte G.m.b.H.". On the other hand, the entire workforce, including employees who had no plans to build, was called on to participate in a general savings campaign for the benefit of the housing development program. The savings contributions earned interest and those wanting to build received low-interest loans from this fund. From 1950 to 1958, employees saved around 1 million deutschmarks in this way and made it available to the housing development program. >>>

VIEW OF THE ELECTROPLATING SHOP / Fittings production still played an important role in the 1950s.



1956

MANN Pico filter elements with PVC cover plates

Oil filters with star-shaped filter elements

>>> Before the ground could be broken, there was one more difficult job to be done – choosing the builders. A complex points system was developed, which weighed up personal, financial, social, and operational aspects and involved the Works Council. This process went surprisingly smoothly, and in the summer of 1950 the excavators started work. By 1958, a total of 79 housing units – most of them two-family houses, plus 16 homes in a high-rise – were constructed on the "Krabbenloch" and "Schlösslesfeld" sites. The costs of 70,000 to 80,000 deutschmarks per home were significantly below the market average. The owners were extremely grateful. In the Christmas of 1951, a group of six residents wrote personally to Adolf Mann "that we are doing very well in the [Schlösslesfeld development], are very happy, and feel right at home. We are very much aware that we owe our good fortune in a large part to the community, without whom the realization of your social development plan would not have been possible".[25] In typical fashion, Adolf Mann wrote a detailed reply to this letter (between Christmas and New Year), in which he reaffirmed his belief, "that housing […] is one of the few options that we have to help people become themselves, to achieve social balance, and to make them happy".[26]

In 1958, the housing development program was discontinued "after the housing market began to normalize, particularly because owner-occupied housing construction had become much more difficult due to the development of the real estate and construction market", as Adolf Mann later explained.[27] Nevertheless, the program left a lasting impression, and not just on the fortunate homeowners. This extremely successful social project is an excellent example of "Education for ownership" in practice, and continues to have an effect to this day.

OWNER-OCCUPIED HOMES IN THE OPEN COUNTRYSIDE / Construction work began on the first phase of the Schlösslesfeld development, 1950.

CULTURAL AWARENESS / The company choir formed in 1950 at the initiative of Adolf Mann and Erwin Greiner made five records.

Hans Mauser

Determined technical revolutionary. As Head of Development, engineer Hans Mauser was the driving force behind a great many innovations in the 1950s. Paper filter technology in particular revolutionized filter production.

Unlike the company owners or Head of Production Alfred Wacker, engineers, and passionate technicians, Hans Mauser was "a thoroughbred engineer".[28] Originally employed by Bleyle, he had been a key employee since the formation of the company. A typical Swabian inventor, Hans Mauser was never satisfied with the first solution and would keep trying until he found the best. He was a forceful individual, who would do whatever was necessary to put his ideas and concepts into practice. This made him quite a controversial figure. His employee Paul Gerlach recalls his often short-tempered outbursts: "He sometimes became very angry," but he was "a highly qualified man."[29]

In the boom years of the 1950s, his developments and patents made Filterwerk Mann + Hummel a recognized supplier to almost all automotive manufacturers. The use of special high-quality paper for filter elements played a key role in this success. Thanks to the paper filter technology developed by Hans Mauser, the increasingly complex requirements of the automotive industry could be met in all respects – even in cramped and difficult installation spaces. And that's to say nothing of the improved filter performance and lower production costs. Spin-on oil filters with paper filter elements were faster and cheaper to maintain and were replaceable, and therefore boosted the aftermarket business.

Despite the fact that Hans Mauser's proposed development of a hydrocyclone for the cleaning of liquids, which could be used for wastewater treatment in foundries, for example, was not pursued due to cost reasons, his groundbreaking innovations in the area of vehicle filters contributed to the rapid economic growth and innovative capability of Filterwerk Mann + Hummel. When the role of Head of Development changed hands in 1965, the chief engineer was assigned special duties. "His" department continued to benefit from his exceptional talent for many years, during which he acted in an advisory capacity.

1958

Main flow (oil) spin-on filters, small housing covers for paper silencer air cleaners, air filters with paper fine filter inserts

Erwin Greiner

Tireless worker for social cooperation. Immediately after the end of the war, Erwin Greiner was elected to the newly formed Works Council. For more than three decades, he represented the company's employees with his outstanding commitment, pragmatism, and social engagement. He also contributed to the development of a working environment based on partnership, which still exists at Mann + Hummel to this day.

Born in 1915 and having trained as a plumber, he began his working life with Mahle at the age of 19. When Filterwerk Mann + Hummel took over filter production in 1941, he and his entire department moved to the new company. In 1945, he was elected to the Works Council for the first time. Four years later, he became Chairman of the employee representative body at the Ludwigsburg plant. Tough on the serious issues, but with a realistic sense of what was achievable, he quickly became a reliable partner for both company management and employees. His subsequent election as Chairman of the Central and Group Works Council underscored the confidence placed in him. Shortly before the introduction of parity codetermination he was a member of the Supervisory Board, and much later its Vice Chairman. He was also on the board of the corporate health insurance company and pension fund.

1958 / 1959

Oil spin-on filters with paper filter elements for main and auxiliary flow begin to replace traditional housing filters, whose inserts had to be cleaned for maintenance.

END OF AN ERA / A celebration was held to bid Erwin Greiner (second from left) farewell on his retirement.

In his many decades with the company, Erwin Greiner worked tirelessly not only in relation to issues such as wages, salaries, and employee benefits, but also in the area of occupational safety and accident prevention. As Chairman of the relevant committees of the professional organization for the metalworking industry in Southern Germany, he rendered outstanding services in the area of occupational safety far beyond the bounds of the company.

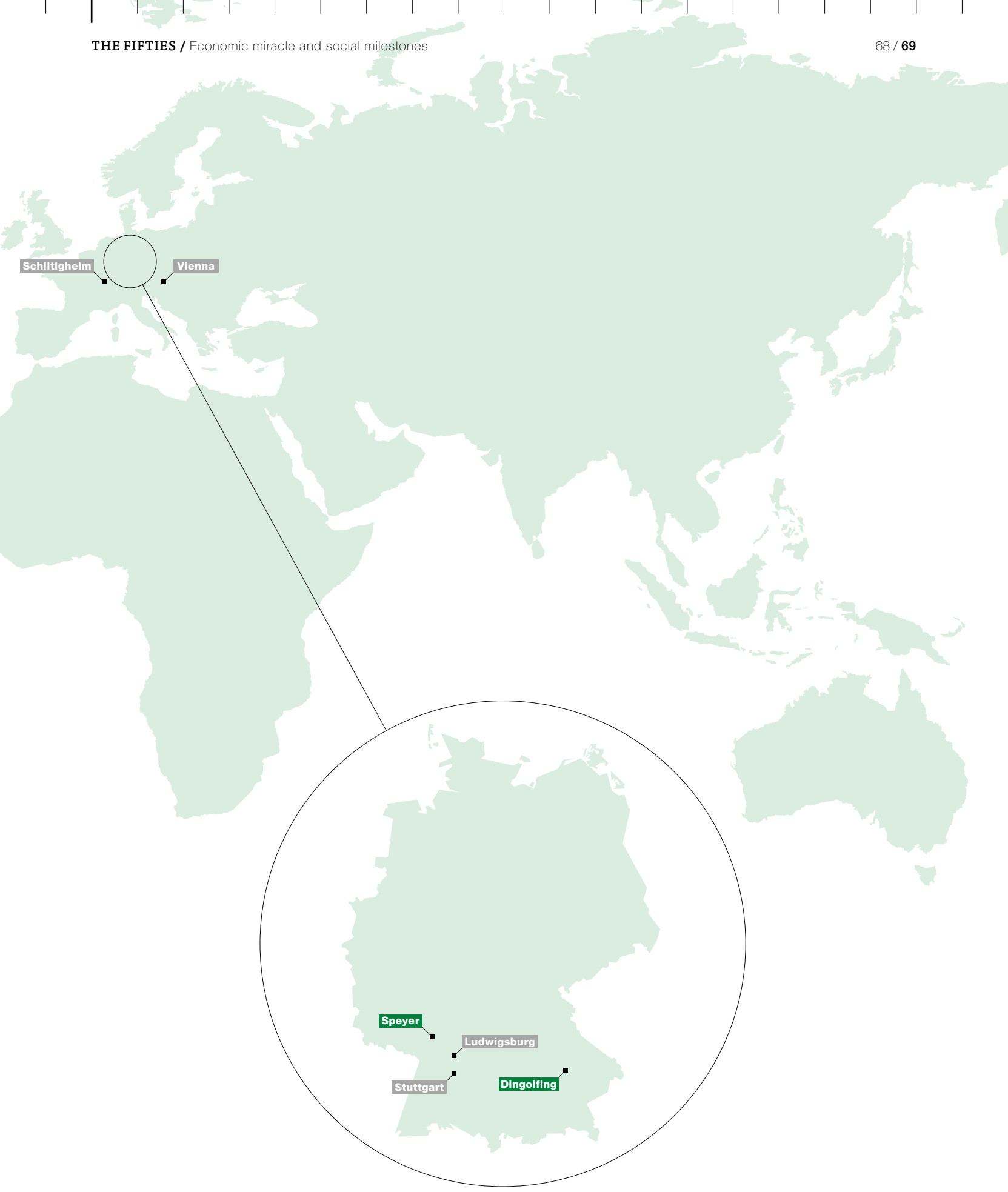
Erwin Greiner's greatest achievement, however, was his contribution to the working environment which, thanks to his efforts, was characterized by open and honest partnership between employer and employees. When Erwin Greiner retired in 1979 as the "last member of the original team", the company bulletin summarized his achievements over the years: "The filter plant as we know it today, and in particular the relationship between management and workers that has developed over many decades, is to a large extent the result of his efforts."[30] And those efforts continue to have an effect to this day.

REPURPOSED / Textiles and filters were initially produced under one roof in the historic buildings of Warth Castle.

Locations

MANN+HUMMEL PLANT IN SPEYER / From post-war material supplier to 88,000 square meter production location for specialized filters.

GERMANY / Speyer Filter- und Apparate-Gesellschaft – or "FILAP" for short – moved to the old imperial city in 1951. Two former Bleyle employees had founded the company in the Westphalian town of Bösperde in 1945, primarily to procure raw materials in the British occupation zone for the parent company in Ludwigsburg. Following the relocation to Speyer, the company initially supplied the main plant, and was later fully integrated into the group. In 1992, the plant in Speyer became the headquarters of the Industrial Filters Business Unit. Today, the plant produces mainly filters for agricultural and construction machines and employs over 400 people.


Schiltigheim
Vienna
Speyer
Ludwigsburg
Stuttgart
Dingolfing

Locations

WARTH CASTLE NEAR DINGOLFING / The nucleus of production in the Vils Valley.

GERMANY / Warth Castle, Lower Bavaria In 1941, Adolf Mann purchased Warth Castle near Dingolfing with a view to converting it into a conference venue or a recreation center for employees. Although neither of these plans came to fruition, the castle was used to produce women's clothing for Mann Textilien after 1949, and in 1953, production of oil filter elements for the filter plant began in the castle and the barn. The rapid increase in production in the years that followed meant that these venerable premises were soon no longer suitable. The company's search for an alternative in the early 1960s led to nearby Marklkofen. Today, Warth Castle is home to a number of businesses including an advertising agency and a ceramics workshop.

BRAZIL / São Paulo In 1959, the company – which had been founded as Naumann Gepp in São Paulo five years earlier – became a Mann + Hummel licensee. Soon, however, license fees and machine deliveries were at risk due to political chaos, inflation, and a lack of foreign currency, prompting Mann + Hummel to acquire a 25 percent stake in the company. In 1964, there was a complete takeover of the company. In 1966, it was renamed Filtros Mann S.A., and in 2002, it was renamed MANN+HUMMEL Brasil Ltda.

1979 saw the construction of a modern filter plant in Indaiatuba, 170 kilometers from São Paulo, which today employs more than 1,200 people. Together with their colleagues at the locations in Manaus and Betím, they covered the entire range of filters for passenger and commercial vehicles.

FILTROS MANN S.A. / Filtros Mann S.A. in São Paolo was initially housed in modest premises.

ARGENTINA / Buenos Aires The company TIDEM S.L.R., founded in 1949 by Rodolfo Mainzer, was originally a licensee of Filterwerk Mann + Hummel and rapidly became an important pillar of the company's operations in South America. After TIDEM became a stock corporation, Mann + Hummel acquired a minority holding in 1963 and in 1971 – after the death of Rodolfo Mainzer – became the majority stockholder. Since 1985, the former TIDEM has been a wholly-owned subsidiary and now trades under the name MANN+HUMMEL Argentina S.A. At locations in Buenos Aires and Ferreyra, the company's workforce of almost 300 employees produces air filters, air filter elements, spin-on oil filters, and fuel filters.

HUMBLE BEGINNINGS / In the 1950s, TIDEM was a small family business that mainly manufactured centrifuges.

MANN+HUMMEL ARGENTINA S.A. / MANN+HUMMEL Argentina S.A. in Buenos Aires today produces air filters, air filter elements, spin-on oil filters, and fuel filters in a three-shift operation.

The sixties

"If you take a cold, hard look at the relationship between performance and earnings in the economy, you will see just how little performance matters, and how much is owed to fortune and circumstance."

Adolf Mann, at the anniversary celebration of Filterwerk Mann + Hummel in June 1966

Rapid growth, upheaval, and crisis

THE ECONOMIC BOOM CONTINUED UNABATED AT FIRST. More and more migrant workers therefore came to Ludwigsburg, and in Lower Bavaria, the foundations for the largest filter plant in the world were laid. However, 25 years after the formation of the company came the first economic downturn of the new era. Although the crisis was soon over, and Mann + Hummel posted record figures shortly thereafter, the end of the economic miracle was in sight.

The 1960s were in many respects a turbulent decade marked by upheaval. The erection of the Berlin Wall cemented the division of Germany, and "Eternal Chancellor" Konrad Adenauer was replaced in 1963 by the architect of the economic miracle, Ludwig Erhard. Despite his role in the years of growth before becoming Chancellor, Erhard could not prevent West Germany's slide into recession with a large budget deficit and rising unemployment after 1966. The policies of the first grand coalition as well as the Vietnam War led to the establishment of the "Außerparlamentarischen Opposition" (extra-parliamentary opposition, APO), which found expression in student protests and new lifestyles. A desire for greater political participation and a progressive youth culture that embraced fashion and beat music had a lasting effect on society. In 1969, as the decade came to a close, the first man walked on the moon and Willy Brandt became the first Social Democrat to head the West German government.

1960

Hydrocyclone for cleaning cooling and cutting fluids

PRODUCTION LINE FOR AIR FILTERS / Rising cost pressure and labor shortages necessitated consistent rationalization and automation in the 1960s.

1961

Development of the MANN Pico cyclone

FULL SPEED AHEAD TO A NEW AGE

At the beginning of the decade, economic development in Germany showed no signs of slowing down. In 1961, annual production of the VW Beetle broke through the one million barrier for the first time. Over half of these cars were exported.[1] The car became a symbol of freedom and success, and could be afforded by an increasingly broad section of the population. In 1955, there were 1.9 million cars in Germany. This increased to more than 10 million over the following decade. In the same period, the number of commercial vehicles rose from 1.3 to just under 2.2 million.[2]

For Mann + Hummel, this was an extremely positive trend which already saw sales increase significantly in 1960. Along with the OEM business, demand for replaceable filters with paper elements grew strongly in the years that followed. This development necessitated the rapid expansion of production capacities. The establishment of the Marklkofen plant in the Vils Valley in Lower Bavaria in 1962 played a key role here (see “Locations / Marklkofen”, page 94). One of the main reasons for choosing this location was the labor shortage in the Stuttgart region. A large number of companies had to compete for a small number of workers, and the building of the Berlin Wall in August 1961 abruptly stopped the influx of workers from East Germany. In economically underdeveloped Lower Bavaria, however, this wasn’t a problem. In Ludwigsburg, Mann + Hummel introduced a measure that would soon come to define the entire manufacturing sector in West Germany – the recruitment of migrant workers (see “Labor shortage”, page 80).

SYSTEMATIC IMPROVEMENTS IN FILTER TECHNOLOGY

In the post-war era, innovation in filter technology focused mainly on protection against wear and air intake noise insulation. The 1960s saw engine consumption and performance optimization and the prevention of pollutant emissions become increasingly important. Working closely with its customers, Mann + Hummel stepped up its research and development activity. A variety of new test facilities, engine test rigs, and test methods were deployed. The company thus managed to consolidate its position as a leading development partner and supplier to the automotive industry.

A major trend in air filtration was the replacement of sheet metal with plastic. This paved the way for completely new housing designs, which could fit in the increasingly restricted space under the hood. Furthermore, air filters were combined with thermostat-controlled and pneumatic systems to regulate the intake air temperature for the first time. However, these innovations required a high level of investment in the development of new production technologies and materials.

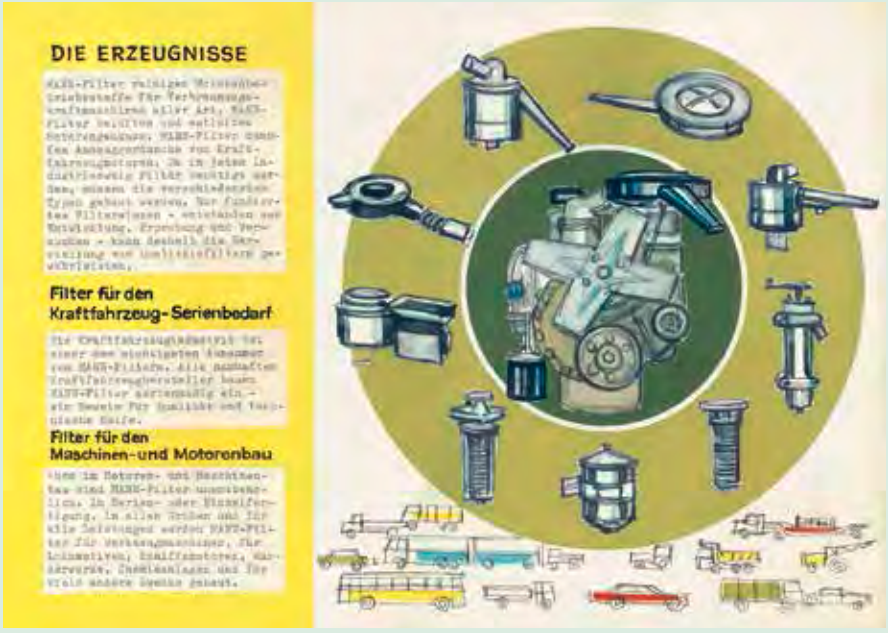
BY THE WAY / Filterwerk ...

... Mann + Hummel developed the air filter for the legendary Ro 80 with rotary piston engine in 1967. The principle – better known as the Wankel engine – did not prove very popular on the market. Nevertheless, the revolutionary drive concept was a masterpiece of engineering skill.

CONTINUED GROWTH / Plant 2
in Grönerstraße, Ludwigsburg, around 1960.


STAHLBAU SCHNEIDER

VW oil-bath air filter with intake snorkel and flap for regulating the intake air temperature
MANN Pico single-stage air cleaner



OF ITS TIME / The draft for a brochure to mark the company's 25th anniversary reflects the modernity of the 1960s.

ADVERTISING WITH HARD FACTS / A 1964 advertisement used the Algiers Central African Rally to illustrate the efficiency of MANN filters.

Oil filter development also progressed. New paper filter materials ensured better separation and a higher dirt capacity. A patented release cam facilitated replacement.

In the area of industrial filters, innovation was centered on hydrocyclones for liquid filter systems. To separate solids from liquids with low viscosity, such as the cooling water of grinding machines, the fluid is set in rotation by a pump, which separated the heavy solid particles. Originally assigned to the mill and plant construction division, hydrocyclone sales were integrated in the sales department for conventional filters in 1964. After initial market difficulties, sales began to rise significantly in 1967, helped largely by the fact that the development of innovative grinding emulsions had created a new area of application for the hydrocyclone. The hydrocyclone group later became a separate division, "which is involved in the processing, cleaning, and disposal of liquids of all kinds in a wide range of industries and therefore employs a variety of technical processes".[3] From the mid-1960s, Mann + Hummel also began to develop and produce hydraulic filters, opening up yet another field of business that would experience a huge boom a decade later.

1964 – 1965

Release cam on oil spin-on filter

THE "BRACHER ERA" BEGINS

The company continued to grow steadily. In 1964, the capital stock was increased to six million deutschmarks and the company acquired a stake in Spanish company Taca, which three years later became Filtros MANN S.A., Zaragoza (see "Locations", page 92). In 1965, the workforce of just under 3,200 employees generated sales of around 92 million deutschmarks. The steady growth of Mann + Hummel necessitated organizational and personnel changes. This process was accelerated by the sudden death of General Manager and Technical Director Alfred Wacker in 1965. As part of the subsequent reorganization, Adolf Mann and Dr. Erich Hummel appointed Dr. Erich Bracher first as Management Board Spokesman in 1967, then as Chairman of the Management Board. Dr. Bracher was a lawyer like Dr. Erich Hummel and had worked at Mann + Hummel since 1954. He led the company for 22 years and was responsible for the "Bracher era", which continued after the death of the company founders (see "Dr. Erich Bracher", page 98). Sales was also reorganized and Hans Mauser was replaced by Dr. Oswald Parr as Head of Development. Another key change took place at the next hierarchical level. Dr. Hermann Fischer, the son-in-law of Adolf Mann, became head of the entire technical division and was also granted power of attorney (see "Dr. Hermann Fischer", page 86).

REVIEW OF 25 SUCCESSFUL YEARS

In 1966, in the middle of the restructuring phase, Filterwerk Mann + Hummel celebrated its 25th anniversary. Despite the dark clouds looming on the economic horizon, the anniversary was celebrated with a huge ceremony held in a newly constructed hall in Plant 2 in Grönerstraße, which was attended by the workers along with many guests of honor from the worlds of business, politics, and the clergy. In typical Adolf Mann fashion, he began his speech by thanking the employees. He made a point of thanking everyone, "the cleaner, the caretaker in the boiler house, the foremen and the engineers, the typists and the switchboard operators, the authorized representatives and the directors".[4]

Later on in his speech, Adolf Mann reiterated the importance of putting people first in entrepreneurial thinking and activity. When founding the textile and filter plants, the focus "was not any material objective. Nor was it on the challenges of the market and sales opportunities, on investment capital or the pursuit of profit […]", "but uniquely and predominantly people. This fact […] inevitably meant that undertakings were to

1968 / Society in upheaval

The protests of 1968 were triggered by events a year earlier. During a state visit by the Shah of Iran to Berlin, a violent student protest broke out, during which student Benno Ohnesorg was shot dead by a policeman in unexplained circumstances. This incident was followed by a wave of student demonstrations, particularly in Germany and France, and leaders such as Rudi Dutschke and Daniel Cohn-Bendit mobilized the masses. The protests were aimed at antiquated authoritarianism, the perceived arbitrariness of government institutions, the fact that academics and their institutions had not changed for a thousand years, and the capitalist system. The Vietnam War was also condemned, as was the inability of the war generation to talk about their role during the Nazi dictatorship. The protests were accompanied by new ways of living together – in communes, for example – the practicing of "free love", and calls for the emancipation of women. Fashion was dominated by the miniskirt, and social change found a cultural expression in the form of revolutionary beat music. A small number of the 1968 protesters were radicalized and went on to form the Red Army Faction (RAF) terrorist organization. Others took the long "march through the institutions" and went on to hold high public office. Society as a whole changed radically after 1968 – for everyone.

Oil spin-on filter with specially developed paper filter media

LABOR SHORTAGE / From migrant worker to fellow citizen

The economic miracle of the 1950s had a paradoxical effect, whereby the material and resource shortages of the post-war years gave way to an increasing labor shortage. In 1955, the Federal Government concluded an agreement with Italy for the recruitment and placement of workers, who were initially allowed to work in Germany for a period of one year. By July of that year, there were almost 80,000 Italians employed in Germany, the majority as unskilled workers in the manufacturing sector. In 1959, Mann + Hummel decided it was necessary to follow this trend and recruit workers in Italy. In a move that was unbureaucratic – and also illegal without the involvement of the Italian public employment service, though the company was unaware of this – Mann + Hummel placed advertisements in the Südtiroler Zeitung. Representatives of the company, including Chairman of the Works Council Erwin Greiner, Head of Production Alfred Wacker, and Head of Personnel Erich Mayer traveled to Italy in person and conducted interviews with applicants in hotels.

One of the first recruits was Antonio Spagnol, who came to Ludwigsburg at the end of 1959 and spent 34 years working at Mann + Hummel. "After we arrived," he recalled, "we were collected by an interpreter and taken to a youth hostel".[5] His fellow countryman Ignaz Agreiter was recruited by the Chairman of the Works Council himself at Gasthof Rose in Brixen, where he was working as caretaker. Both men recall how well they were looked after in their new homeland. "Mr. Greiner took care of everything. We had no idea what to do. That set us off on the right path."[6] >>>

M & H - OL

Lohntafel - gültig ab 1. April 1960 - Ortsklasse IB

(Die eingerahmten Werte sind gültig)

1. Zeitlohn

Mindestlohn

Berufsgruppe		Tarif %	Einstell-Lohn seither DM/Std.	Einstell-Lohn jetzt DM/Std.	Lohn n.8 Woch. seither DM/Std.	Lohn n.8 Woch. jetzt DM/Std.	betr. Vereinbarung %	Einstell-Lohn seither DM/Std.	Einstell-Lohn jetzt DM/Std.	Erhöh. D-Pfg.	Lohn n. 8 Woch seither DM/Std.	Lohn n. 8 Woch jetzt DM/Std.	Erhöh. D-Pfg.
Vorarbeiter	V						125	2.52	2.73	21	2.77	3.00	23
Einsteller	E						112	2.25	2.44	19	2.47	2.69	22
Spitzenwerkzeugmacher	As						106	2.13	2.31	18	2.34	2.54	20
Spitzen-Facharbeiter	A												
n. vollend. 21. Lebensjahr		100	2.01	2.18	2.21	2.40	100	2.01	2.18	17	2.21	2.40	19
im Alter von 19 + 20 Jahren			1.90	2.07	2.09	2.28		1.90	2.07	17	2.09	2.28	19
" " " 17 + 18 "			1.70	1.85	1.87	2.04		1.70	1.85	15	1.87	2.04	17
Angelernte Facharbeiter	A1												
n. vollend. 21. Lebensjahr							95	1.90	2.07	17	2.09	2.28	19
im Alter von 19 + 20 Jahren								1.80	1.96	16	1.98	2.16	18
" " " 17 + 18 "								1.62	1.76	14	1.78	1.94	16
Angelernte Spezialarbeiter	B												
n. vollend. 21. Lebensjahr		90	1.80	1.96	1.98	2.16	90	1.80	1.96	16	1.98	2.16	18
im Alter von 19 + 20 Jahren			1.71	1.86	1.88	2.05		1.71	1.86	15	1.88	2.05	17
" " " 17 + 18 "			1.53	1.67	1.68	1.84		1.53	1.67	14	1.68	1.84	16
" " " 15 + 16 "			1.26	1.37	1.39	1.51		1.26	1.37	11	1.39	1.51	12
" " " 14 "			1.17	1.27	1.29	1.40		1.17	1.27	10	1.29	1.40	11
Angelernte Arbeiter	B1												
n. vollend. 21. Lebensjahr							87,5	1.75	1.91	16	1.92	2.10	18
im Alter von 19 + 20 Jahren								1.66	1.81	15	1.83	1.99	16
" " " 17 + 18 "								1.49	1.62	13	1.64	1.78	14
" " " 15 + 16 "								1.22	1.33	11	1.35	1.47	12
" " " 14 "								1.14	1.23	9	1.25	1.36	11
Ungelernte Arbeiter	C												
n. vollend. 21. Lebensjahr		85	1.70	1.85	1.87	2.04	85	1.70	1.85	15	1.87	2.04	17
im Alter von 19 + 20 Jahren			1.62	1.76	1.78	1.94		1.62	1.76	14	1.78	1.94	16
" " " 17 + 18 "			1.45	1.57	1.60	1.73		1.45	1.57	12	1.60	1.73	13
" " " 15 + 16 "			1.19	1.30	1.31	1.43		1.19	1.30	11	1.31	1.43	12
" " " 14 "			1.11	1.20	1.22	1.32		1.11	1.20	9	1.22	1.32	10
Vorarbeiterinnen	Vo						90	1.80	1.96	16	1.98	2.16	18
Angel. Spezialarbeiterinnen	C						85	1.70	1.85	15	1.87	2.04	17
Angelernte Arbeiterinnen	D2												
n. vollend. 21. Lebensjahr		78	1.56	1.70	1.72	1.87	78	1.56	1.70	14	1.72	1.87	15
im Alter von 19 + 20 Jahren			1.49	1.62	1.64	1.78		1.49	1.62	13	1.64	1.78	14
" " " 17 + 18 "			1.33	1.45	1.46	1.60		1.33	1.45	12	1.46	1.60	14
" " " 15 + 16 "			1.09	1.19	1.20	1.31		1.09	1.19	10	1.20	1.31	11
" " " 14 "			1.02	1.11	1.12	1.22		1.02	1.11	9	1.12	1.22	10
Hilfsarbeiterinnen	D1												
n. vollend. 21. Lebensjahr		75	1.50	1.64	1.65	1.80	75	1.50	1.64	14	1.65	1.80	15
im Alter von 19 + 20 Jahren			1.43	1.56	1.57	1.72		1.43	1.56	13	1.57	1.72	15
" " " 17 + 18 "			1.28	1.39	1.41	1.53		1.28	1.39	11	1.41	1.53	12
" " " 15 + 16 "			1.05	1.15	1.16	1.27		1.05	1.15	10	1.16	1.27	11
" " " 14 "			0.98	1.07	1.08	1.18		0.98	1.07	9	1.08	1.18	10

2. Akkordlohn

		Tarif %	Akk.Richtsatz seither	Akk.Richtsatz jetzt	Min.-Faktor seither	Min.-Faktor jetzt	betr. Vereinbarung %	Akk.Richtsatz seither	Akk.Richtsatz jetzt	Min.-Faktor seither	Min.-Faktor jetzt	Erhöhung D-Pfg.
Spitzenwerkzeugmacher	As											
Spitzenfacharbeiter	A	100	2.21	2.40	3.69	4.00	101	2.23	2.42	3.72	4.04	19
Angelernte Facharbeiter	A1		-	-	-	-	96	2.12	2.30	3.53	3.84	18
Angelernte Spezialarbeiter	B	90	1.99	2.16	3.32	3.60	91	2.01	2.18	3.35	3.64	17
Angelernte Arbeiter	B1		-	-	-	-	88,5	1.96	2.12	3.27	3.54	16
Ungelernte Arbeiter	C	85	1.88	2.05	3.14	3.42	86	1.90	2.06	3.17	3.44	16
Angel. Spezialarbeiterinnen	C	85	1.88	2.05	3.14	3.42	86	1.90	2.06	3.17	3.44	16
Angel. Arbeiterinnen	D2	78	1.73	1.87	2.88	3.12	78	1.73	1.87	2.88	3.12	14
Hilfsarbeiterinnen	D1	75	1.66	1.81	2.77	3.02	75	1.66	1.81	2.77	3.02	15

13.4.60
OL Pf/He

Vert: ML - GL 5x - PL - FL1 - FL2 - DO - H.Br.Bracher - CUL - AV1 - AV2 - OK - WN - ZB - AZ4 2x- AZ5 - AZ6 - AZ7

SYSTEMATIC WAGE POLICY / The wage table from 1960 contains detailed information about the various wage and occupation groups.

1967

The dry air cleaner with radial inlet and integrated pre-separation ring (MANN Piclon) is presented at the IAA in Frankfurt.

a certain degree centered around people from the very outset. People were, are and, I hope, will continue to be at the heart of our business".[7] Unsurprisingly, "the speech was received with enthusiastic applause"[8] and was accompanied by a special reward for the workforce. Every employee received an anniversary bonus based on their years of service with the company, and the bonuses for marriage and for the birth of a child were increased.

END OF UNLIMITED GROWTH

The probability that Adolf Mann had made a vague reference to at the 25th anniversary celebration became a worrying reality not long afterward. The period of rapid and continuous growth, which saw Mann + Hummel record average annual growth of over 20 percent between 1950 and 1966, was at an end. In 1966, recession set in across Europe – the first time since the Second World War – and by the beginning of 1967 the situation had reached crisis point. The automotive industry was particularly hard hit, and by early 1967 many companies had introduced extended plant vacations and temporary closures. Short-time work and redundancies, concepts that were simply unthinkable in the German economy after 1948, suddenly became unavoidable in many industries. The grand coalition, which had been in office since 1966, responded quickly with the "Act to Promote Economic Stability and Growth" (Stability Act) on June 8, 1967, marking a shift towards global guidance. The core of this Keynesian economic policy was the stimulation of the economy through debt-financed government expenditure. The program proved to be successful. The crisis was over within a relatively short time and without any major impact on the overall economy.

Mann + Hummel also survived this difficult year relatively unscathed. The automotive industry was the company's biggest customer in 1967. Despite this sector selling 18 percent fewer vehicles in 1967 than in the previous year, Mann + Hummel managed to retain its workforce simply by introducing two additional vacation days defined as short-time work as well as a permanent reduction in the working week to 40 hours. In the 1967 Annual Report, Adolf Mann was able to "note with great satisfaction that our workforce was spared a substantial reduction in income".[9] Showing great foresight, the company founder identified a new economic trend that is still valid today: "Nevertheless, we must realize that the years of uninhibited development and expansion [...] are now over for our company and for the economy as a whole; that we will face much tougher tasks and greater competition in the future; that we can no longer expect the kind of growth that we experienced over the last 19 years."[10]

In the shadow of the crisis, the company introduced a number of new developments in 1967. The Honeywell H 200 computer system marked the company's first entry into the world of electronic data processing. The system went into operation at the end of the year. Industrial employees now had their wages paid directly into their account on

>>> Most of the early migrant workers were housed in old military barracks in Ludwigsburg-Grünbühl, then in newly constructed living quarters in Ludwigsburg Plant II. By the mid-1960s, there were already around 700 foreign workers from 16 countries, and by 1970, this number had risen to 1,200. More than half the workforce therefore came from abroad. The majority of migrant workers came from Italy, Spain, Portugal, and increasingly also from Turkey.

Over time it became apparent that the majority of foreign employees wanted to stay permanently in Germany. Migrant workers became fellow citizens. Mann + Hummel was therefore early in adopting integration measures. After 1980, for example, special language courses were offered. Many former migrant workers even remained in their new homeland following their retirement. Antonio Spagnol and Ignatz Agreiter are just two of the many early migrant workers who still live with their families in Ludwigsburg today.

FEMALE-FREE ZONE / The first migrant workers came to Ludwigsburg without their families and spent most of their free time together in their living quarters.

1967

Passenger car plastic filter elements
and flat filter elements

COMPANY BULLETIN /
"Unser Betrieb" becomes the vehicle for internal communication in 1967

Since discontinuation of "Der Herold" at the end of the Second World War, there had been no company bulletin. It is not clear whether the decision to relaunch a regular publication was prompted by the 25th anniversary or the economic crisis. Its objective was, however, described in detail in the first issue of "Unser Betrieb", which was published at the end of 1967. The editorial read as follows: "Because the spoken word [referring to the annual company meetings] vanishes all too quickly, we would also like to, for the very first time, publish a written report for 1967."[11] The new company bulletin was to be much more than just a printed report, however. It should "also provide a means for people involved in important events to remember them and for those not involved to be informed about them".[12] "Unser Betrieb" fulfilled this objective twice a year until it was replaced by the successor publication "Blickpunkt" in 2000. Since 2001, "Filtermedia" has been keeping the workforce up-to-date with the latest news and events and continues to be extremely popular despite the growth of the Internet, with a print run of 6,500 copies.

a monthly basis. Weekly wage packets became a thing of the past. Another new development came in the form of the company bulletin "Unser Betrieb", which appeared for the first time at the end of the year (see "Unser Betrieb", page 84). A long piece entitled "No need to fear EDP" explained the need for the EDP system, stating: "The changeover produced beads of sweat, cries of despair, a few wisecracks and countless hours of overtime."[13]

At the start of 1968, incoming orders were surprisingly high. Three-shift operation was therefore introduced for the progressive die presses. In 1969, just two years after the crisis, the company celebrated a record year. Sales exceeded the 100 million mark. The results of this success were passed on directly to the workforce. Starting salaries were increased (DM 4.30 per hour for men, DM 3.80 per hour for women), as was the monetary conversion factor for profit sharing. In the last year of the decade, the order situation was so good that the company remained open between Christmas and New Year for the first time ever, closing for only one day on December 24, 1969.

Transition from round to square designs for (passenger car) air filters and new square-shaped air filter inserts

A NEW AGE / In 1967, computers were deployed for the very first time at Mann + Hummel for electronic data processing. The bulky technology was housed in a rented premises of the textile plant, the “high-speed printer” produced 27,000 lines per hour.

1969

First series production orders for plastic air filters for passenger cars

Dr. Hermann Fischer

Visionary engineer and motivator. It would be unfair to say that Dr. Hermann Fischer "married into" his father-in-law's company. His career as an engineer led him to the automotive industry and to America. He joined Mann + Hummel at the express request of Adolf Mann, and was responsible for the entire technology division for two decades. Despite illness, he succeeded in building and consolidating the company's technological expertise through difficult times.

The graduate engineer Hermann Fischer did not start his career with the family-owned company. The son-in-law of Adolf Mann – he was married to his youngest daughter, Sibylle – gained experience working with companies such as General Motors in the United States. When the position of Technical Director had to be filled following the death of Alfred Wacker, he was the favored candidate. His father-in-law wrote him a letter, encouraging him to accept the challenge. In 1960, Dr. Hermann Fischer joined the company as Head of the Technical Division and of Material Procurement. In 1965, he was granted power of attorney. Two years later, he became a member of the Management Board with responsibility for the technology division.

Having suffered from multiple sclerosis since his youth, holding a position of such responsibility demanded a great deal of effort on the part of Dr. Hermann Fischer. Undeterred, he showed tremendous personal dedication in his role. It is thanks to his foresight that Mann + Hummel is a leader not just in production technology, but also in the area of research and development.

Dr. Hermann Fischer had to retire at the end of 1988 due to his ailing health. The Supervisory Board summed up his contribution to the company over more than 20 years: "His extensive technical knowledge, his ability to identify practical correlations, and his talent for motivating others made him a key figure in the successful development of the company."[14] In December 1998, Dr. Hermann Fischer died as a result of his illness, just a few months after the death of his management colleague, Dr. Jörg-Dieter Hummel. The death of his wife Sibylle Fischer in 2014 marked the passing of the last surviving child of company co-founder Adolf Mann.

1969

Regulating boxes for regulating the intake air temperature

JULY 1973 / Dr. Ing. Hermann Fischer (second from left)

System for regulating the intake air temperature based on thermostats and pneumatic elements

Friedrich Ebertseder

A reluctant hero for the Marklkofen plant. Friedrich Ebertseder, an experienced tractor production manager, initially rejected a move to Mann + Hummel, as he felt that the company had inadequate technical facilities. Adolf Mann had to use all of his powers of persuasion to get the right man in the right place at the right time.

"MISTER MARKLKOFEN" TODAY / Friedrich Ebertseder played a key role in transforming a former pasta factory into the world's biggest filter plant.

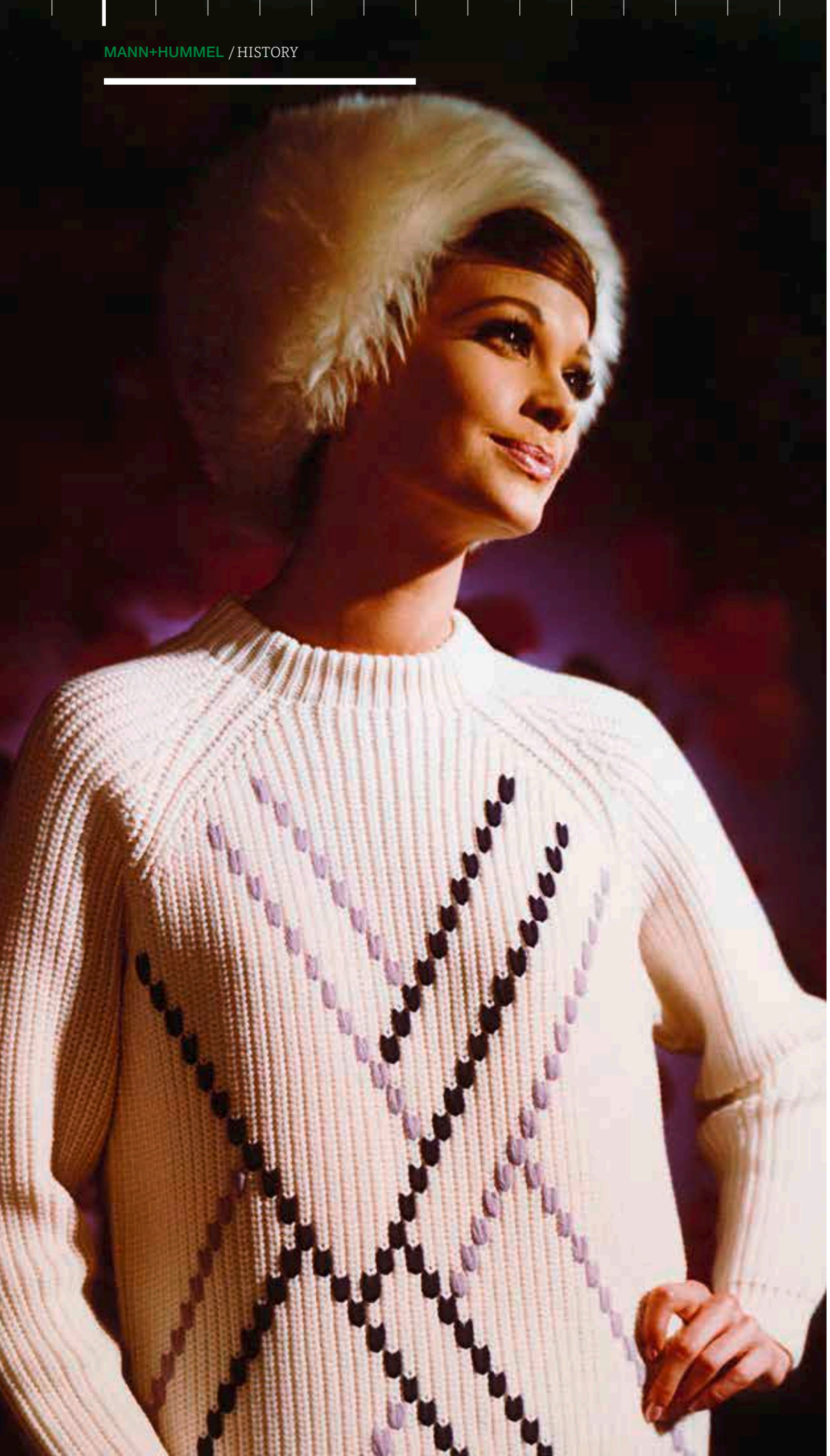
1960 – 1969

PLASTIC BEGINS TO DOMINATE / In the 1960s, there were two major challenges facing the filter technology industry. On the one hand, demands on oil and air filters were increasing in parallel with developments in engine performance. On the other, the amount of space available under the hood was shrinking. Air filter housings in particular had to be adapted to the relevant conditions. This task was made considerably easier with the use of plastics, which revolutionized filter housing construction and design.

It isn't quite clear exactly when and where Adolf Mann first came into contact with Friedrich Ebertseder. It may possibly have been at the Eicher tractor factory in Forstern, near Munich, where the Bavarian native worked as a production manager in the early 1960s. Following the acquisition of the former Kaiser pasta factory in Marklkofen and the beginning of the expansion of this location, Adolf Mann was determined to hire Friedrich Ebertseder as plant manager. However, Ebertseder was disappointed after visiting the plant and decided not to make the move. He later recalled: "When I saw the plant, I have to say that while the buildings themselves were OK, they contained just basic conveyor belts and virtually no machines. I was therefore extremely disappointed by the technology available and wrote the company off."[15]

When nothing more was heard from the sought-after candidate in Ludwigsburg, Dr. Hermann Fischer decided to dig deeper – and in return received a rejection, stating the poor technical facilities as the reason. Adolf Mann wasn't going to give up so easily, and decided to call Friedrich Ebertseder himself at his place of work at Eicher. He pleaded with the reluctant Ebertseder to speak to him, telling him that he was passing up an amazing career opportunity. The telephone call had the desired effect. Ebertseder visited Marklkofen several times and examined the plant as well as the surrounding area in great detail. "It was an extremely difficult decision for me to make."[16]

Fortunately, the decision ultimately went in Mann + Hummel's favor – heralding the start of a mutually beneficial relationship. The plant manager requested and received the necessary technical facilities. Under the leadership of Friedrich Ebertseder, whose tireless commitment and professionalism had a huge impact on the company, the Marklkofen plant developed into the largest and most modern filter plant in Europe – and eventually in the entire world.



PAMINA MANN MODEN 1965 / Women's clothing made from woven and knitted fabrics.

SIBYLLE FISCHER / The daughter of Adolf Mann models women's fashion (photo on right).

NEW BEGINNINGS AND THE END OF TEXTILE PRODUCTION / From Bleyle to Pamina Mann

As far as Adolf Mann and Dr. Erich Hummel were concerned, this area of the business, which had its origins in the textile industry, was on the verge of collapse after the Second World War. Responsibility for the Bleyle plants reverted to the original owners. The repurchase of the asset by the Bleyle family added 450,000 deutschmarks to the company's coffers. Furthermore, many employees didn't want to remain with the company under the new owners. For Adolf Mann and Dr. Erich Hummel, this was reason enough to revive the textile tradition and found Textilwerk Mann in 1949. Initially, production was based in emergency shelters at the filter plant and in the neighboring military prison, which was lying empty. A garden plot was then acquired not far from the filter plant, where the textile plant was constructed in phases. To make a clear distinction between this operation and filter production, the knitwear and jerseywear produced here was sold under the brand name "Pamina Mann Moden". The founders held all of the stakes in the company, and the General Manager of the filter plant, Dr. Erich Bracher, later acquired a 10 percent stake.

After some initial difficulties, including numerous trademark and product liability disputes with the Bleyle family, the textile plant performed well. At its peak, the plant had 600 employees, most of whom produced women's clothing and knitwear in the higher price segment. Alwine Zehender, who was Adolf Mann's last secretary, recalls: "The clothes were very stylish. Stylish and expensive. You could tell from a distance that a blouse, skirt, or dress was of exceptionally high quality."[17] The quality of the garments was also appreciated outside Germany, and international sales increased by 80 percent between 1951 and 1955. So impressive was this success, that "ZEIT" magazine devoted an article to the company, describing it as "one of the leading manufacturers of jersey clothing in West Germany".[18] Production capacities were later increased with the addition of a location in Waibstadt. However, the end of the 1960s saw a period of concentration and internationalization in the textile industry, which presented small manufacturers like "Pamina Mann Moden" with an immense challenge. The first signs of globalization and the relocation of production to low-wage countries were already evident. In the short term, it was possible to counter this trend by introducing technical adaptations and changes in the product portfolio. However, it was clear to the far-sighted owners that a textile producer of this size could not survive in the long term. The company had long since focused mainly on the filter plant anyway.

It was in this situation that the opportunity arose to enter into cooperation with Emella AG, a company in the Schiesser Group, in nearby Besigheim. In 1971, the entire business operations were sold to Emella, and the tradition of Mann + Hummel Group involvement in the textile industry came to an end for the second and final time. In keeping with the social engagement of the company founders, all employees retained their jobs – either by staying with Emella or moving to the filter plant.

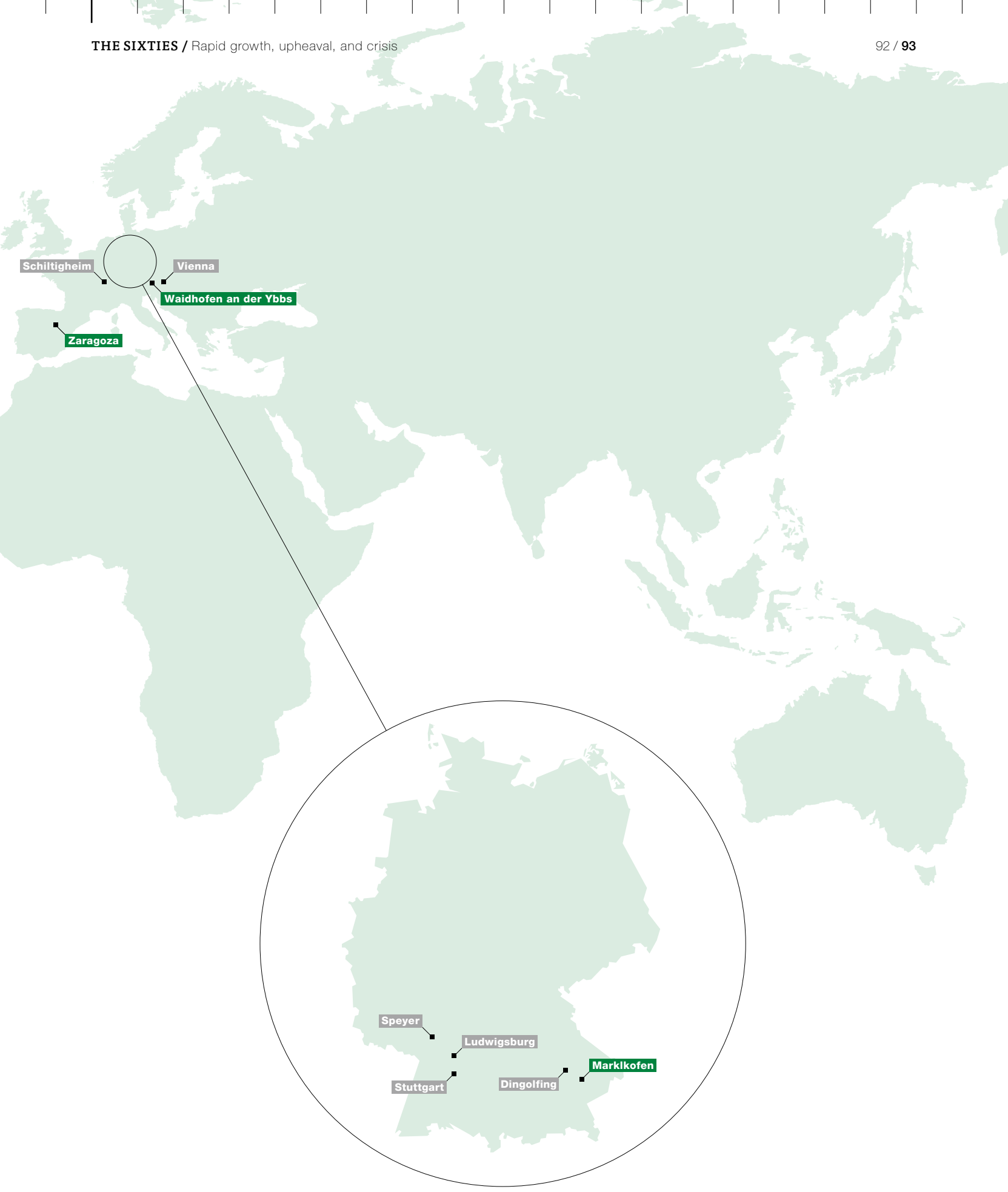
Locations

AUSTRIA / Waidhofen an der Ybbs In 1969, Mann + Hummel acquired a stake worth 77,000 deutschmarks in Filter GmbH, a company that had been founded in the Austrian city of Waidhofen an der Ybbs in 1967. Trading as IFE Filterbau GmbH, the company was assigned to the Industrial Technology Division. In 1992, the stake was sold back to IFE. The 1992 Annual Report justified this step with the explanation that a forward-looking strategy could not be defined with the IFE product portfolio "and it no longer made sense for this company to remain within the Group"[19].

AUSTRIAN INTERLUDE / From 1967 to 1992, IFE Filterbau GmbH was part of the Mann + Hummel Group.

MANN+HUMMEL IBÉRICA S.A. /
An established name in the Spanish market – MANN+HUMMEL Ibérica S.A. in Zaragoza.

SPAIN / Zaragoza In 1964, Mann + Hummel acquired a stake in Taca-Mann based in Zaragoza, Spain. One year later, Filtros MANN S.A. was founded in Zaragoza, Spain. Thanks to personnel and technical support from Ludwigsburg, the company became a leader in the Spanish filter market in the years that followed. When a serious sales crisis hit the Spanish automotive industry in 1971, the former partners withdrew completely from the company. Mann + Hummel therefore took over the majority of shares and continued to run Filtros MANN S.A. itself. This proved to be an extremely successful move, and by 1972 the Iberian automotive industry had staged a recovery. 700,000 filter units were produced in Zaragoza. 1976 marked a new milestone, when the production of air filter housings for the Ford Fiesta began. Additional OEM customers soon followed, and in 1977 the 520 employees generated sales of 35 million deutschmarks. In 2000, Filtros MANN S.A. in Spain was selected as "Best Supplier of the Group". In 2003, the company was merged with a subsidiary acquired from the Belgian Solvay Group to form Mann + Hummel Ibérica S.A. Unipersonal. Today, around 700 employees working in Zaragoza produce air and oil filter elements, air lines, fuel filter elements, and reservoirs.


Schiltigheim
Vienna
Waidhofen an der Ybbs
Zaragoza
Speyer
Ludwigsburg
Stuttgart
Dingolfing
Marklkofen

Locations

HUMBLE BEGINNINGS / The former Kaiser & Co. pasta factory building in Marklkofen at the start of the 1960s.

EARLY 1970S / The Marklkofen plant underwent major expansion. The former pasta factory building can be seen at the bottom of the picture.

GERMANY / Marklkofen The continuing boom at the start of the 1960s presented Filterwerk Mann + Hummel with a new problem in the form of a labor shortage, which was exacerbated by the construction of the Berlin Wall. Quite by chance, new perspectives opened up far away from Ludwigsburg. In the Lower Bavarian municipality of Marklkofen, not far from the production site in Schloss Warth, the Kaiser pasta factory went bankrupt in 1962. The building was quickly purchased and the decision was made to locate the long-planned expansion of production capacities here. This decision was motivated to a large extent by the good experiences with the workforce in Schloss Warth and the reasonable prospect of finding adequate skilled labor in the Vils Valley. Following the BMW takeover of Dingolfing-based company Hans Glas, producer of the legendary Goggomobil, many employees did not want to endure the long commute to Munich – and therefore applied to work at the new Mann + Hummel plant instead.

Within a few short months of the purchase, the building was ready for filter production. Production began in September 1962. Two years later, there were already 123 employees working in the former pasta factory. This was the nucleus for what is now the largest filter plant in the world, although nobody knew it at the time – particularly as the expansion of the site that soon became necessary proved difficult and complex. The reason for the expansion problems was opposition from local farmers, who were skeptical about the filter plant for a number of reasons. They worried that they would lose their workers, as the industrial enterprise paid much higher wages. They were also opposed to the sale of neighboring land on account of the large amounts of tax that would be payable on the sums involved. The corporate counsel at the time, Dr. Gerhard Schaal, therefore came up with an idea that the farmers eventually agreed to after lengthy and difficult negotiations. The land was purchased on the basis of hereditary building rights or leasehold. This meant that Mann + Hummel initially acquired only the right to use the land, which significantly reduced the tax burden.

New factory buildings were gradually constructed, though they were sparsely equipped at first (see “Friedrich Ebertseder”, page 88). Storage was also only temporary in the beginning. “Storing parts was also extremely difficult in the first few years. Barns were rented within the Marklkofen municipality and in Frontenhausen. They were used to store components, in particular packaging material, filter paper etc., but even the warehouse employees sometimes didn’t know where anything was,” recalled Friedrich Ebertseder later.[20]

Another problem faced in the early years was resolved relatively quickly. Company bus lines introduced in 1964 made it easy for employees living in the countryside to get to work despite the lack of local public transport links. The company also encouraged young talent. In 1966, the first apprenticeships for toolmakers and fitters were offered.

ROLL THE FILM / A sophisticated corporate film was made at the Marklkofen plant in 1965.

In the years that followed, the Marklkofen plant experienced an unprecedented upturn. What began as a small pasta factory was transformed into Mann + Hummel's largest production site. By 1989, the number of employees had risen to over 1,400. In the same year, almost 70 million filter elements were produced. This development was only possible thanks to the consistent modernization and improvement of workflows and manufacturing methods. In 1973, analytical job evaluation and the group piece rate were introduced. The optimizations also included the decision to locate the central warehouse for worldwide parts shipping for vehicle filters and filter elements in Marklkofen and equip it with state-of-the-art EDP technology.

In the 1990s, the location was restructured and organized as a largely independent unit within the group. Since then, plant purchasing, production planning, equipment design, and building services and plant planning have been based in Marklkofen. In 2011, the company celebrated production of the three billionth filter. Today, the plant produces 166 million filters and filter elements annually (2014), has around 3,000 employees and covers a total area of 200,000 square meters, making it not only the world's biggest filter plant, but also one of the most innovative, capable of meeting the ever increasing demands of the automotive industry with respect to quality, flexibility, delivery reliability, and pricing for over 50 years.

MARKLKOFEN TODAY / With more than 160 million parts produced per year, the site is the largest filter plant in the world.

The seventies

"Persistence and perseverance will, for many of us, be his unforgettable and permanent legacy."

Dr. Erich Bracher, at a memorial event following the death of Adolf Mann

Oil crisis, environmental protection, construction

THE DEATH OF MANN + HUMMEL CO-FOUNDER ADOLF MANN IN 1971 MARKED THE END OF AN ERA. Shortly afterward, the company was hit hard by the oil crisis. Innovation, particularly in the area of plastics, prudent business policies, and the expansion of modern production capacities helped the company to bounce back quickly from the crisis. By the end of the decade, the filter plant was once again breaking records.

The 1972 Olympic Games in Munich were meant to present an image of a friendly, inviting, and colorful Germany to the world – but instead became the scene of a horrifying terrorist attack. One year later, the oil crisis finally brought the period of economic miracle to an end. Countercyclical economic policies led to a dramatic increase in national debt. From the middle of the decade onwards, Germany was rocked by a series of terrorist acts committed by the Red Army Faction, which culminated in the kidnapping and murder of Hanns Martin Schleyer and the hijacking of a Lufthansa aircraft. With the slogan "Mehr Demokratie wagen" (Dare more democracy), the German government enacted a series of laws in the area of social policy after 1970, which gave workers greater and unions more rights.

ASSISTANT TO ADOLF MANN /
Dr. Erich Bracher

As a 20-year old returning from the war in 1945, he seemed destined for a career as a teacher. He initially worked as an assistant teacher in Feuerbach before beginning studies in classical philology. Only later did he decide to also study law. His legal internship saw him spend six months with Mann + Hummel in 1951. After completing his studies and obtaining his doctorate, Dr. Erich Bracher returned to Ludwigsburg. At the end of 1954, he joined the company as assistant to Adolf Mann. At the time, the company had around 900 employees and sales of 15 million deutschmarks. His potential was quickly spotted and in 1956, Dr. Erich Bracher was granted power of attorney. Three years later he became a Managing Partner.

Dr. Erich Bracher

Leader who continued the legacy of the company founders.

Dr. Erich Bracher has much in common with his mentors Adolf Mann and Dr. Erich Hummel, not least his humanistic background and the fact that he studied law. In the 22 years that he led the company, he achieved the seemingly impossible by combining strong growth with a consistent focus on the Mann + Hummel family tradition based on social principles.

When the company founders reorganized the management structure following the death of Alfred Wacker in the mid-1960s, Dr. Erich Bracher initially took the position of Spokesman of the Management Board, and a short time later became Chairman. This decision was based not only on his ability, but also on his background. Like Dr. Erich Hummel, he is a lawyer. Like Adolf Mann, he received a profoundly humanist education, which gave him a broader view of the world than that of an entrepreneur bent on maximizing profit. He is also directly involved in many of the sociopolitical initiatives of the company founders. “Most of these ideas,” he recalls, “came from Adolf Mann. But I was able to play a major part in their implementation. Firstly, because I was myself a lawyer, and secondly, because I take a great interest in these matters.”[1]

Over the following 22 years, Dr. Erich Bracher showed that the trust placed in him was well deserved. Following the deaths of Adolf Mann and Dr. Erich Hummel, he continued to run the company as they would have wanted, thus ensuring continuity. He also delivered success. At the time of his retirement at the end of 1989, Mann + Hummel had 8,500 employees and sales of more than one billion deutschmarks. At the ceremony held to mark his retirement, President of the Supervisory Board Dr. Bernhard Kiefer summed up the “Bracher era” as follows: “I have to admit that I was impressed by the unwavering continuity and consistency in company management, the open information policy, good working environment, sound financial strategy, excellent technical expertise, customer-oriented market penetration, and remarkable understatedness.”[2]

Dr. Jörg-Dieter Hummel

Like father, like son. The son of the company founder began his career working in a different company as a commercial lawyer – just like his father. When he later joined Mann + Hummel, he gradually took over the duties of Dr. Erich Hummel. Moreover, he continued his father's tradition as an entrepreneur with a humanist education and an interest in music.

With several years of experience under his belt, he accepted his father's invitation to join Mann + Hummel in 1969, where he worked mainly in financial management and legal affairs. In 1972, he became a member of the Management Board. This prepared him for the responsibilities of the role of full General Manager, which he took over from Dr. Erich Hummel in 1977.

In addition to performing his management duties, "Dr. Hummel jun." – as he was referred to within the company – also worked with the Federation of German Industries (BDI), representing the company in relation to quality assurance issues. Moreover, he served as an honorary commercial judge at the Stuttgart Regional Court.

In his personal life, Dr. Jörg-Dieter Hummel also bore many similarities to his father. He had the same broad humanist education and took a great interest in culture, particularly music. His second wife was a concert pianist, and he himself was an excellent flautist. He was also a member of the Board of Trustees of the Ludwigsburg Festival and served as a Board Member of Orchesterverein Stuttgart. The fact that he was also something of a philosopher, was demonstrated in his essay "Der Horaf", published to mark the company's 50th anniversary, in which he explained the origins and significance of the company logo.[3]

When Dr. Jörg-Dieter Hummel retired in 1995, he was the last representative of one of the founder families to leave operational management of Mann + Hummel. The son of the company co-founder stayed on as a member of the Supervisory Board following his retirement from management. Unfortunately, he died from cancer in 1998, just a few months before Dr. Hermann Fischer, with whom he had led the company for many decades.

SON OF DR. ERICH HUMMEL /
Dr. Jörg-Dieter Hummel

Born in 1931, the eldest son of Dr. Erich and Edith Hummel followed in his father's footsteps after leaving school and became a lawyer. He also shared his father's passion for law. They enjoyed sitting around the table together discussing legal matters. After obtaining his doctorate, Dr. Jörg-Dieter Hummel initially worked as a commercial lawyer with a bank in Stuttgart.

END OF AN ERA: DEATH OF ADOLF MANN

From an economic perspective, the new decade began much as the old one had ended – with rapid growth. In the German automotive industry, sales of cars and commercial vehicles reached a record high of 3.8 million units in 1970. At the same time, production in the supplier and aftermarket industry rose by 18 percent compared with the previous year. For a short time at least, it seemed as if economic growth was back on track.

1970 – 1979

PROGRESS THROUGH PLASTIC / Innovation activity remained focused on plastic filter components as well as other components made from this versatile material. Development of paper filters continued with the opening up of new areas of application. Components for industrial process and control and therefore the development and production of entire assemblies were becoming increasingly important.

SAD OCCASION / At a memorial service in July 1971, Dr. Erich Bracher honored the life and work of Adolf Mann.

However, just when things also seemed to be going well for Mann + Hummel, the company was struck with bad news. On July 16, 1971, Adolf Mann died unexpectedly after suffering a heart attack. Although the company co-founder had not been involved in day-to-day operations for some time, his death nevertheless left a great void.

At the memorial service held for Adolf Mann, General Manager Dr. Erich Bracher honored his life and work, noting in particular his entrepreneurial principles – creative vision, courage to take risks, obsession with work, and social responsibility. In terms of social responsibility, the legacy of Adolf Mann was "not the external facilities and the social benefits of our company, which are based on his ideas and initiatives […], but the spirit of charity, of respect, and of justice that influences everything that we do […]".[4]

Following the death of Adolf Mann, his son-in-law Dr. Hermann Fischer was promoted to the Management Board in 1972, joining Dr. Erich Hummel, Dr. Erich Bracher, Dipl.-Phys. Ottmar Schneiderhan, and Dr. Jörg-Dieter Hummel.

BIRTH OF THE GREEN AND YELLOW LOGO

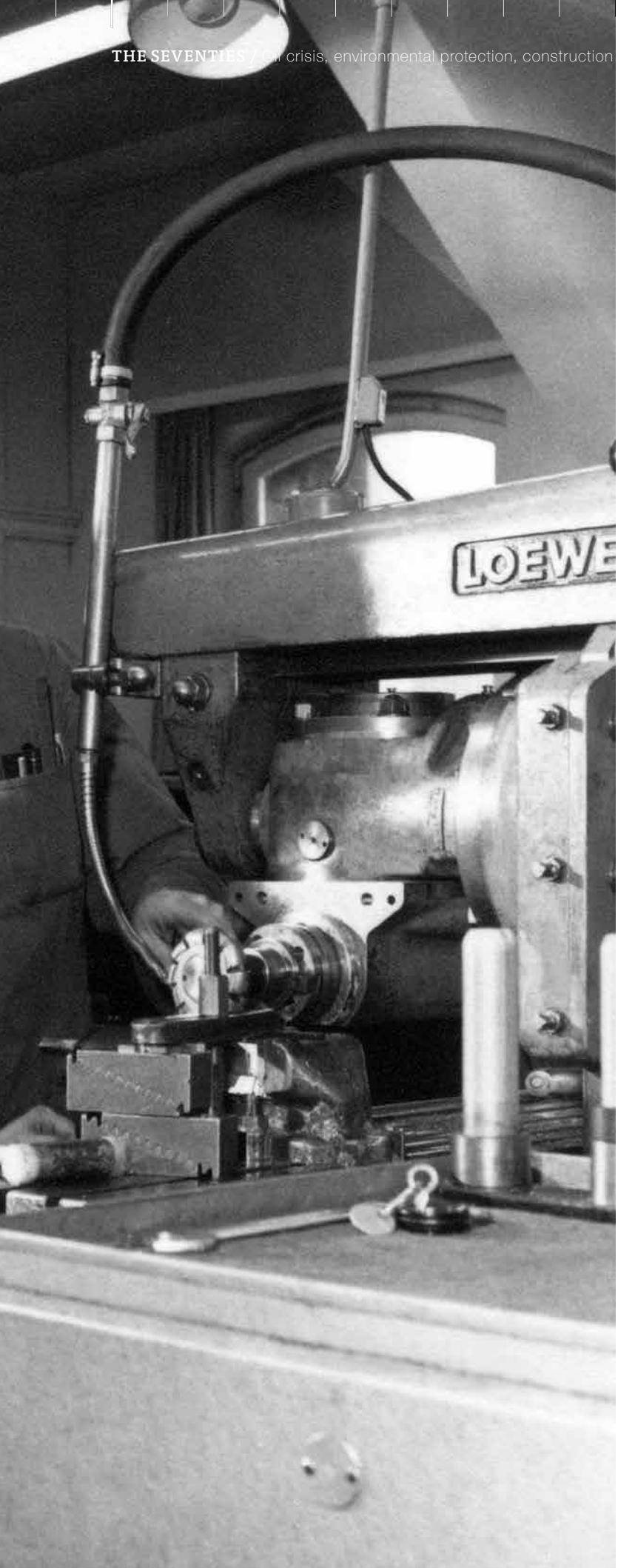
The company's image change that same year had been planned for a long time. Herbert Brindöpke, authorized representative and Head of Aftermarket Sales, had been an active campaigner for a change in the company colors – the term "Corporate Design" was not yet commonly used at the time. The blue color used since 1941, in which all trucks were also painted, was replaced by a fresh green with yellow as an accent color, in keeping with the spirit of the times. The yellow and green packaging quickly became a distinctive trademark for MANN-FILTER. However, the international rollout of the new image did not happen overnight, as demonstrated by a friendly, yet firm letter sent to Austrian subsidiary IFE Filterbau GmbH in November 1974: "Around two years ago we standardized our company colors and logo for all product segments. We are obviously interested in presenting a uniform image at an international level and would therefore ask you to examine the possibility of introducing a similar design in your company."[5]

EYE-CATCHING / From the mid-1970s, the logo was also used for sports sponsorship – as seen here on the TSG Ludwigsburg basketball team.

PLASTICS REVOLUTIONIZED AUTOMOTIVE ENGINEERING / and brought about change at Mann + Hummel

New technologies and production methods led to a sharp rise in the use of plastics in many areas of application in the 1970s. Worldwide annual production of plastics increased from 15 to 50 million tons between 1965 and 1975. In the automotive industry, the new, improved materials gave rise not only to more cost-effective production methods, but also technically more sophisticated solutions. Significant advances were made with regard to the mechanical properties and resistance to temperature, fuel, and aging of plastics. It was therefore possible to produce high-stress components for regulating the temperature of intake air, service indicators, or pressure regulators for the crankcase from plastic. This development opened up a host of new opportunities for Mann + Hummel. Whereas up to now the use of plastic had been mostly restricted to filter elements and filter housings, other peripheral components around the air filters were now being made from plastic as well. The path to becoming a fully fledged systems supplier was thus mapped out. Mann + Hummel identified this trend at an early stage and responded with the construction of a special plastics plant in 1976 – Plant 6 in Ludwigsburg – and close cooperation with plastics manufacturers and automotive manufacturers. This made it possible to significantly increase production of filter housings as well as numerous other components from plastic.

REDEFINITION OF ROLES / In 1972, female apprentices in the mechanic training workshop learn the ropes in what was traditionally a male-dominated profession.



Control directions for the intake air temperature

GROWTH DURING A TIME OF CRISIS

In 1973, the global economy, particularly the automotive industry and its suppliers, reached a turning point. In the aftermath of the Yom Kippur War between Israel and Egypt as well as Syria, the decision by OPEC countries to drastically reduce oil production led to a sharp rise in the price of oil and consequently to the oil crisis, triggering the worst recession since the end of the war in all the industrialized countries of the West. The four car-free Sundays organized by the Federal Government in November and December 1973 were visible proof of the crisis. Although the savings achieved were questionable, the initiative did manage to achieve another objective – increasing awareness with regard to the more responsible use of finite resources and environmental protection. This rethink also had a major – and positive – impact on Filterwerk Mann + Hummel.

The initial impact of the oil crisis was, however, very severe. In West Germany, sales in the automotive industry collapsed in 1974, falling by 20 percent compared with the previous year. By 1976, unemployment had risen to over one million. Other factors were responsible for this decline, among them increasing streamlining and automation as well as strong competition from Japanese automotive manufacturers.

Mann + Hummel did not escape the crisis unscathed. However, unlike automotive manufacturers and many suppliers, the company was able to compensate for the poor economic situation with a series of prudent measures. Exports were increased, automotive aftermarket activity was stepped up, and the automotive original equipment business was restructured. The company depended chiefly on the commercial vehicle market, which was expanding despite the crisis. These measures proved successful, and sales increased by 28 million deutschmarks to 254 million deutschmarks from 1973 to 1974 – right in the middle of the crisis. However, this success came at a price. Profits actually fell sharply to 2.8 million deutschmarks, and company debt reached a record high of 37 million deutschmarks.

Devices for crankcase ventilation (oil separator valves)

1972

Strainer pocket filters with individually removable strainer pockets

THE DECADE OF SOCIAL LIBERALISM BROUGHT MANY CHANGES / These changes were already a reality at Mann + Hummel

A series of social policy measures introduced by the social-liberal West German government after 1970 created a new framework for the employee benefits provided by Mann + Hummel. They created a legal entitlement for many of the benefits that had long since been a reality at the company. The biggest change came in 1972 with the amendment of the Works Constitution Act, which strengthened the codetermination rights of employees and gave trade unions better access to companies. Following approval of the highly controversial Codetermination Act of 1976 by the Federal Court of Justice, a new Supervisory Board had to be appointed. The reason for this was the fact that the employee representative body now had to consist of two wage earners, one salaried worker, and one executive as well as two trade union representatives. A new Supervisory Board was elected according to these requirements at Mann + Hummel in 1978.

Other legal and collectively agreed regulations had implications for the company. In 1970, the collective agreement for the metal industry declared Saturday to be generally a day off, which would no longer be credited against vacation time. Two years later, a collectively agreed special payment was introduced. The profit sharing scheme, which had been in effect since 1953, therefore had to be revised – especially since it would have left most Mann + Hummel employees worse off. Eventually, an arrangement was concluded that was not linked to company profits, and avoided any disadvantage through a combination of collectively agreed and voluntary benefits. However, it applied only to employees who joined the company before 1971.

In 1972, following lengthy negotiations between the Works Council and management and despite serious concerns raised by many managers, a new working arrangement that many of us take for granted today was introduced – flexible working hours for salaried workers. >>>

A major contributor to the increase in sales after the mid-1970s was the new authorized dealer strategy for the sale of filters in the commercial vehicle sector. On the one hand, the use of dry air cleaners with replaceable star-shaped paper filter elements was on the increase. On the other hand, producers were flooding the market with cheap imitation parts of dubious quality. At the suggestion of wholesalers, Mann + Hummel therefore established a system of authorized dealers who, from a legal viewpoint, were positioned between dealers and independent wholesalers. This strategy quickly produced results. Within just a few weeks of the program starting in 1976, 98 authorized dealer contracts had been signed. By the middle of the same year, there were already over 200 authorized dealers in more than 100 countries.

The economic recovery in the second half of the decade and the successful growth strategy of Mann + Hummel necessitated further rationalization measures and an expansion of production capacities. At the company headquarters in Ludwigsburg, in Marklkofen, and in Speyer, sites were gradually expanded or new plants or halls constructed (see “Locations”, page 112). The acquisition of Stahlbau Schneider in 1976 was particularly significant in this context. Firstly, because it was directly adjacent to Plant 2 in Grönerstraße, it provided the option of increasing the existing production and storage areas. More importantly, all employees were taken on by Mann + Hummel and had their years of employment with the company taken into account.

The plant engineering division also contributed to the development of the business. In 1976, the company signed its biggest ever individual contract for the delivery of a system to produce PVC granules, worth 7 million deutschmarks. The customer was Kablo, a manufacturer of electric cables based in Bratislava. The company processed 15,000 tons of PVC granulate for the production of cable sheathing every year.

1976

Paper filters were being used in areas of application that had previously been dominated by other filter types.

Sheet metal housings and other sheet metal parts were replaced by plastic components from the special plant.

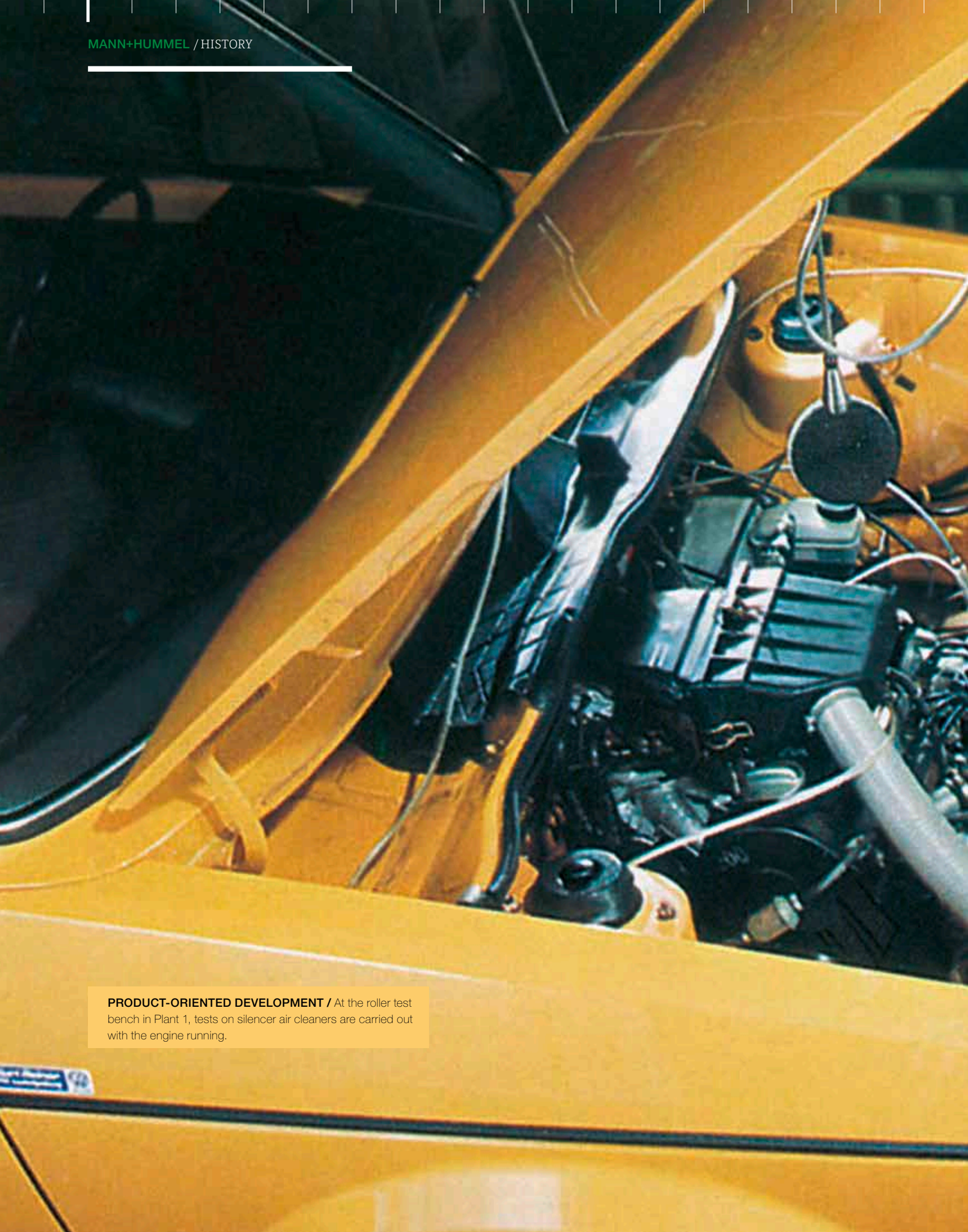
OPEN DAY / In 1977, many visitors take the opportunity to visit Plant 2 in Ludwigsburg.

NEW PLASTICS TAKE OFF

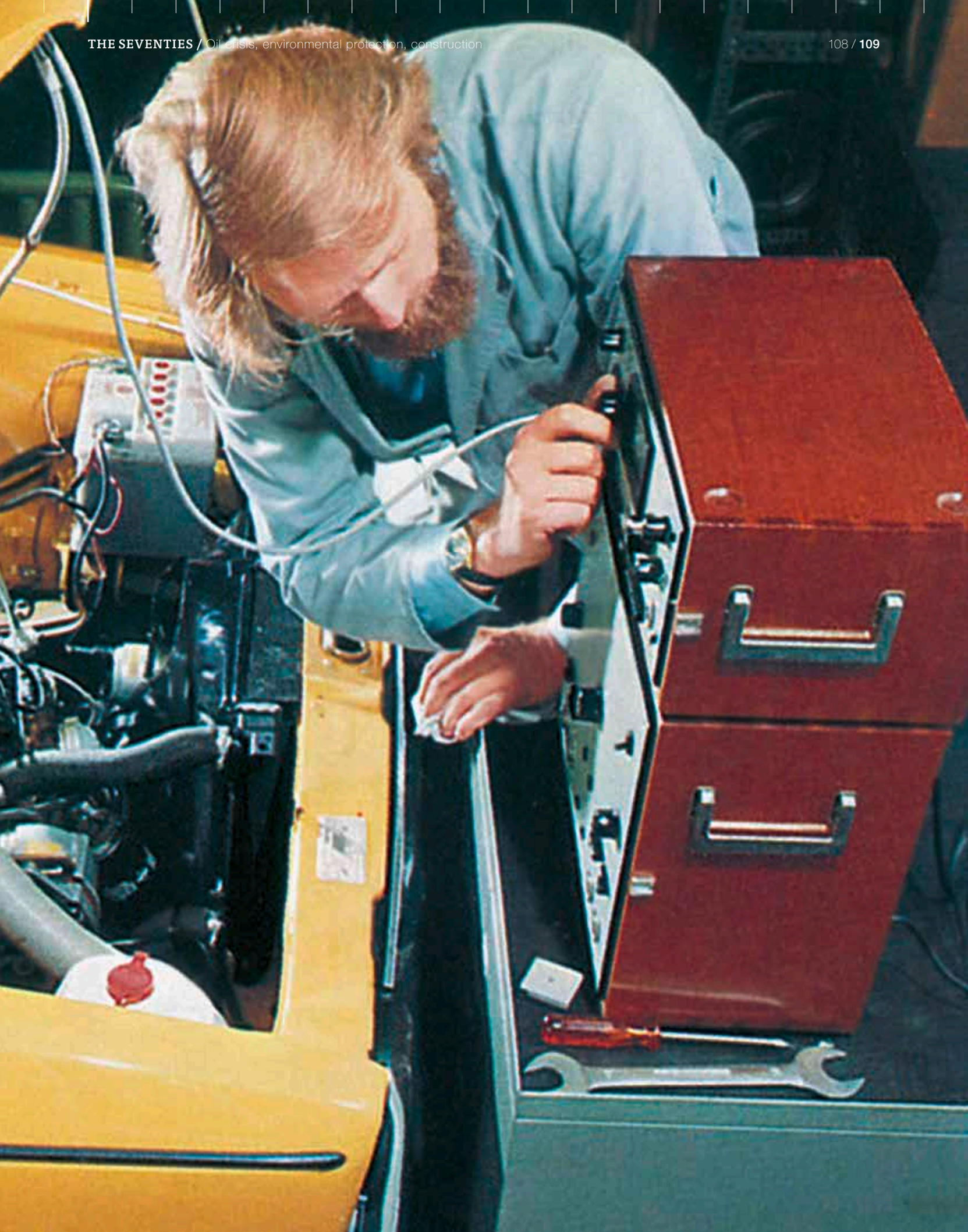
The trend towards using plastic instead of sheet metal for the air filter housings continued unabated. This was influenced by lower production costs and demand for special, customized housing designs. Furthermore, the automotive industry was increasingly looking for system solutions that covered the entire journey of air from the intake into the engine and that could meet increased requirements with respect to the regulation of temperature and exhaust gas recirculation. For Mann + Hummel, this meant two things. Firstly, new production areas had to be acquired for plastics manufacturing. Secondly, however, expertise in relation to plastics had to be built up first. Customers in the automotive industry were particularly demanding in this respect: “In many discussions with our customers, we were told that our expertise only extended to the filter pack, and that we knew nothing about induction and so on. We were in a tight spot and needed to ensure that we built up the necessary expertise.”[6] This required not only intensive research and development activities, but also close cooperation with plastics manufacturers. Polyurethane, which had largely replaced PVC, played an important role here. Manfred Wagner, who was Head of the Chemical Laboratory at the time, recalls: “In the beginning we only made round filters, and PVC was perfect for the job.

>>> Mann + Hummel continued to offer above-average employee benefits. For example, the company made up the difference between collectively agreed sick pay and net wages for employees with at least three years of service for a maximum of 26 weeks.

Perhaps the oldest and most important employee benefit offered by Mann + Hummel – the pension fund introduced in 1949 – also had to be reorganized as a result of the new legal and collectively agreed conditions. At the end of 1977, it was changed to an occupational pension scheme based on direct commitments and guaranteed through Mann + Hummel’s membership of the Pension Insurance Association. However, it was important to the company that future entitlements from the pension fund be preserved, and that employees with many years of service would not be disadvantaged. Fortunately, both of these conditions were met.



PRODUCT-ORIENTED DEVELOPMENT / At the roller test bench in Plant 1, tests on silencer air cleaners are carried out with the engine running.



Filters filled with activated carbon for the adsorption of gasoline vapor from the fuel tank
Filters for exhaust gas recirculation

Hydraulic series for dynamic continuous stress to 400 bar in the area of industrial filters

A BOOK AND A PHOTO TRIGGER A RETHINK / Environmental protection and sustainability became key issues

As early as the 1960s there was already a growing awareness that advancing industrialization could have a negative impact on the environment. In 1972, two events shone a spotlight on this issue, which up to now had attracted little attention. The report "The Limits to Growth" was published on behalf of the Club of Rome. The report concluded that the continued growth of the world population, industrial production, and pollution would push the Earth to its limits within the next hundred years. The widely respected report used rational data and projections to present its arguments. However, the rethink that it triggered was also helped to a large extent by a single photo conveying a strong emotional message. The image, taken by the Apollo 17 astronauts on their return voyage from the moon, showed the earth floating alone in space. The second half of the 1970s saw the emergence of a number of new social movements in West Germany. They were united in their opposition to nuclear power, largely for reasons of sustainability. This led to the formation of the political party "The Greens" in 1980, which took its first seats in the Bundestag in 1983. At the time they were mocked for being nothing more than a bunch of radicals. However, much of their environmental agenda has since become widely accepted, for example the phasing out of nuclear power and the "energy revolution".

SHOWING THE WAY / In 1974, workers attach the "MANN UND HUMMEL" sign to a building at Plant 2 in anticipation of the subsequent company name change.

The automotive industry then came along and said: 'Put your filters in at the back there, that's all the space you're getting.' The use of cold cure polyurethane made it possible for us to produce special shapes."[7]

Increased plastics production brought the issue of environmental protection to the fore at Filterwerk Mann + Hummel, an issue that was to become increasingly important in the 1970s (see "A book and a photo trigger a rethink", page 110). For example, chlorofluorocarbon was used as a propellant in the production of polyurethane. The Head of the Laboratory, Manfred Wagner, saw a problem with this: "To me, this was unacceptable. I stopped it right away."[8] Instead, Mann + Hummel opted for a supplier that used water as a propellant – long before most of its competitors. This environmental awareness also made it necessary to make the replacement cycles for air filter elements longer and thus reduce the amount of waste produced. Although not strictly necessary from the point of view of sales figures, significant investment was made in the area of research and development to produce filter elements with a much longer service life.

1978

The range of products in the "Filter systems" segment was further expanded.

BY THE WAY / Mann + Hummel supplied systems ...

... for the plastics industry to Billund in Denmark for many years. This is where Lego bricks are manufactured.

A DIFFICULT DECADE ENDS ON A POSITIVE NOTE

Two anniversaries were celebrated in 1977. First was the production of the 100 millionth spin-on filter. Later that year, the total number of spin-on filters and filter elements produced by Mann + Hummel reached the 200 million mark. The company bulletin "Unser Betrieb" calculated that "if placed 20 cm apart, these 200 million […] would circle the earth once".[9]

The strategy aimed at gaining a foothold in the US market was equally far-reaching. In 1977, Mann + Hummel paid 1.2 million deutschmarks for a 50 percent stake in Aero-Mobile Systems, based in Battle Creek, Michigan. Despite some initial difficulties, this investment represented an important step towards further internationalization of the company.

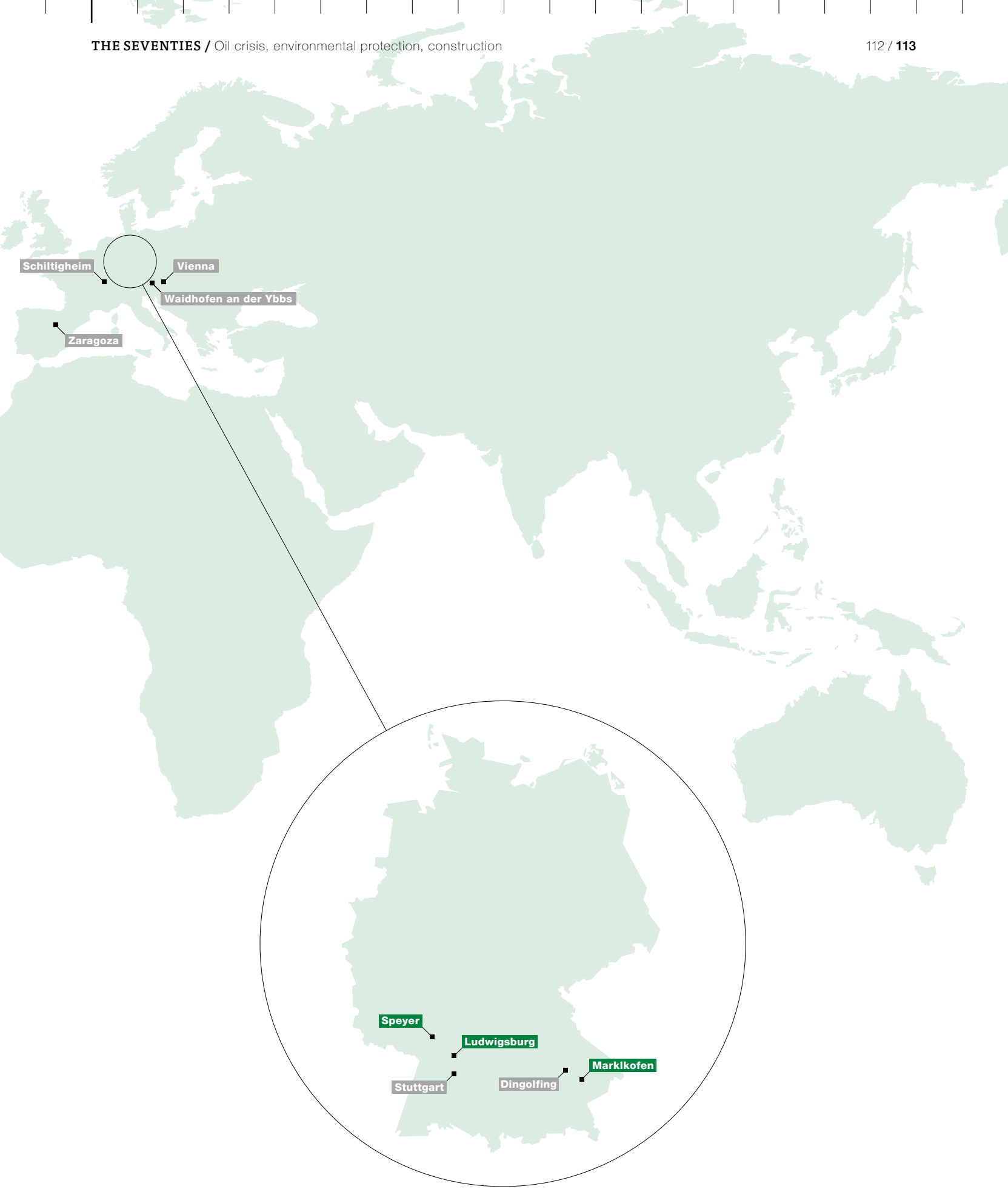
Overall, the decade was a satisfactory one for Mann + Hummel despite the numerous challenges and crises. The enormous growth rates of the "economic miracle" were by now a thing of the past. Nevertheless, management in Ludwigsburg were able to keep the company on a course of steady, organic growth. Proximity to customers, intensive research and development activity, and the consistent modernization of production facilities paid off. In 1979, the company – now with over 7,000 employees worldwide – broke a new sales record with sales of 555 million deutschmarks.

Locations

EXPANSION / In 1969, work began on a production building for plant engineering next to Plant 2 in Grönerstraße, Ludwigsburg.

São Paulo

GERMANY / Ludwigsburg By the early 1970s, the premises at Plant 1 in Hindenburgstraße in Ludwigsburg, where Mann + Hummel had its headquarters, were struggling to keep pace with the demands of modern, large-scale production. The process of relocating to other sites that had already begun was therefore continued in earnest. In 1969, construction of Plant 5 began in Grönerstraße, right next to Plant 2. Expansion of this location for the plant engineering business was completed in 1972. In the same year, a state-of-the-art packaging system went into operation at Plant 2 with a new shrink wrap machine. This move significantly improved the packaging and storage of filter elements. Relocation of the entire sheet metal fabrication operation to Plant 2 in 1974 also facilitated much more efficient production than in the cramped conditions in Hindenburgstraße. The growing complexity and importance of plastics manufacturing led to the next obvious step, one which had been contemplated for a long time. Two years after the purchase of a site in the Waldäcker area for two million deutschmarks in 1970, construction began on Plant 6. Designed as a special plant for plastics processing, the plant went into operation in 1976. In the same year, additional production and storage capacities were created thanks to the acquisition of the company Stahlbau Schneider directly adjacent to Plant 2. The halls were integrated into Plant 2 after completion of the necessary conversion work.


Schiltigheim
Vienna
Waidhofen an der Ybbs
Zaragoza
Speyer
Ludwigsburg
Stuttgart
Dingolfing
Marklkofen

Locations

CONTINUOUS GROWTH / The first factory hall was constructed in 1963, next to the former pasta factory. Additional buildings were constructed ten years later, and more followed.

GERMANY / Marklkofen The conversion and expansion of the former Kaiser pasta factory in the Lower Bavarian municipality of Marklkofen had begun immediately after its purchase in 1962. However, much of this work was carried out without proper planning, and the technical equipment initially available at the site was rather modest. This changed after the decision to expand Plant 4 and make it the main production site for high-volume parts. The prelude to this was the purchase of a pallet shrink wrap machine in 1975, which facilitated direct shipment and was the first step towards making the Marklkofen site the worldwide central warehouse for filter elements and the automotive aftermarket business. Over the next 15 years, there was constant construction activity at the site as it underwent expansion. Today it covers a total area of 200,000 square meters and is the largest filter plant in the world.

THE START OF BRISK CONSTRUCTION ACTIVITY / FILAP, now Plant 3, moved to a new premises on the outskirts of the city of Speyer in the mid-1960s. Additional production halls and an administration building were added over time.

GERMANY / Speyer FILAP (Filter- und Apparatebau-Gesellschaft mbH), which had been based in Speyer since 1951, served as a supplier for Mann + Hummel after the end of the war, and therefore experienced the same level of growth. Back in the 1960s, it already became clear that the sites distributed throughout Speyer could no longer meet increasing requirements. Construction of a new premises in an industrial area on the outskirts of the city therefore began in 1964. The project was assisted by a capital injection from Mann + Hummel in 1966. Construction of the new site was completed in phases, and by 1972, FILAP had become Plant 3. The site produced mainly special filters for construction machinery and industrial applications as well as small series. 1978 saw the addition of a new production hall as part of a further program of expansion. However, within a short time this too was no longer sufficient to meet demand. Following the integration of FILAP – which until then had been legally independent – into Filterwerk Mann + Hummel in 1980, no fewer than six additional production buildings were constructed up to 1986, followed over time by additional production buildings and an administration building. Since 1992, Plant 3 in Speyer has been the lead plant and headquarters of the independent Industrial Filters Business Unit.

The eighties

"Both founding partners have taken steps to ensure that there is continuity of leadership after they have gone and that the company can continue to grow organically."

"Unser Betrieb" on the death of
Dr. Erich Hummel in February 1984

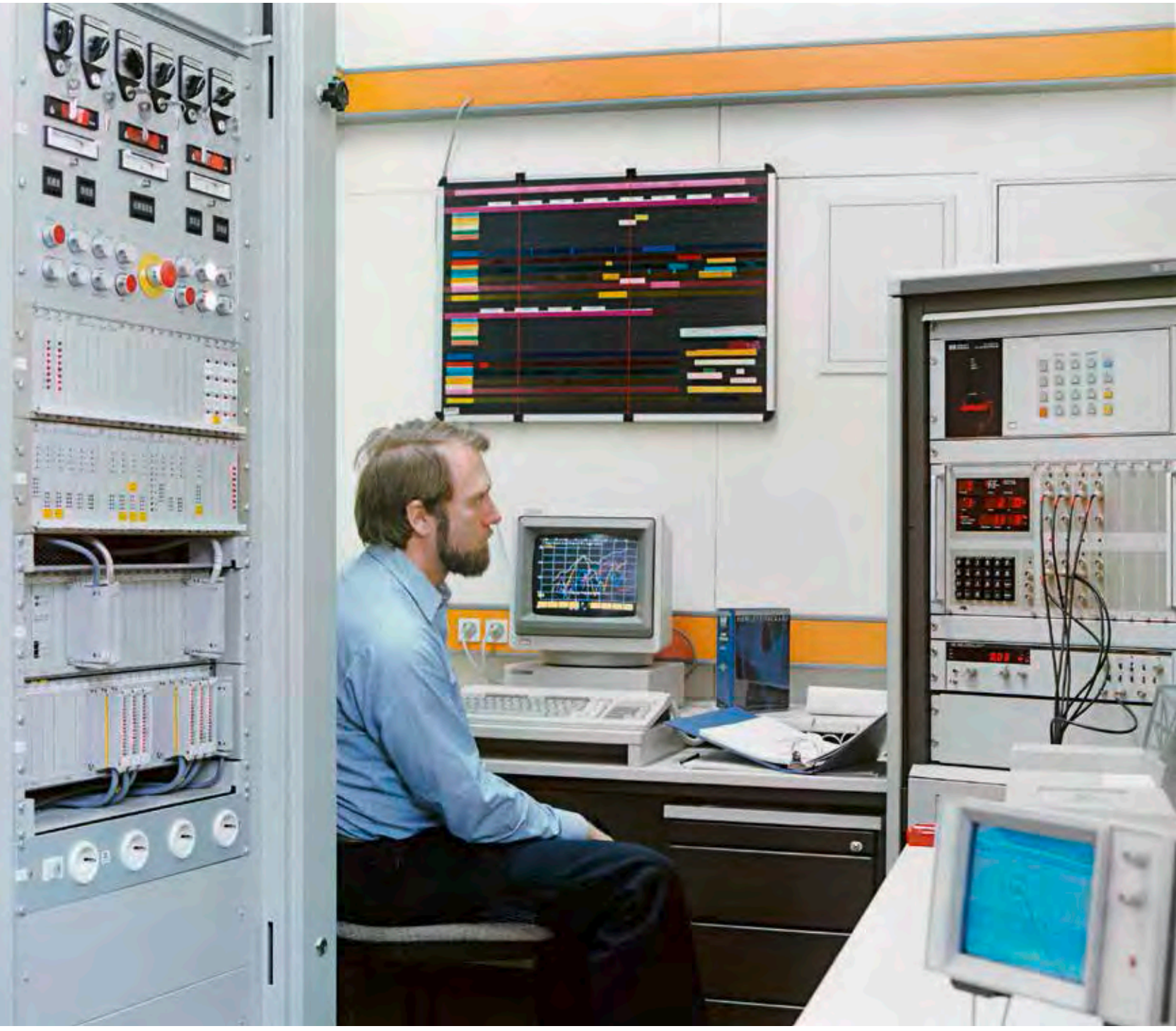
Flexible systems provider through research and development

DESPITE THE DEATH OF DR. ERICH HUMMEL AND NUMEROUS PERSONNEL CHANGES, THE CONTINUITY OF THE FAMILY BUSINESS WAS SECURED BY THE END OF THE DECADE. A brief economic recovery was followed by yet another downturn, which had a negative impact on Mann + Hummel. Investment in new production buildings and intensive research and development activity, particularly in the area of plastics and environmental technology, helped the company to emerge from the crisis even stronger than it was before.

The new decade began with a poor economic outlook and rising unemployment. Economic policy was one of the issues that brought down the social-liberal coalition and, in 1982, Chancellor Helmut Schmidt was replaced by Helmut Kohl. In the new elections that followed, "The Greens" entered the Bundestag for the first time and brought the protests against nuclear power and the NATO Double-Track Decision to the German parliament. In 1985, Mikhail Gorbachev breathed new life into deadlocked East-West relations and, with his policies of Perestroika and Glasnost, he laid the foundations for far-reaching political changes. In 1986, the Chernobyl nuclear reactor disaster forced a rethink in relation to nuclear energy. In 1989, right in the middle of a period of economic growth, came one of the most important events in world history – the fall of Berlin Wall. This was followed in less than a year by German reunification.

1980 – 1989

Increased research and development activity expanded the product portfolio and ensured future growth. The use of plastics, which had begun in the 1970s, was further intensified in parallel with extensive research. >>>



EDP / By 1988, the data from silencer air cleaner testing on the roller test bench was being analyzed using computers.

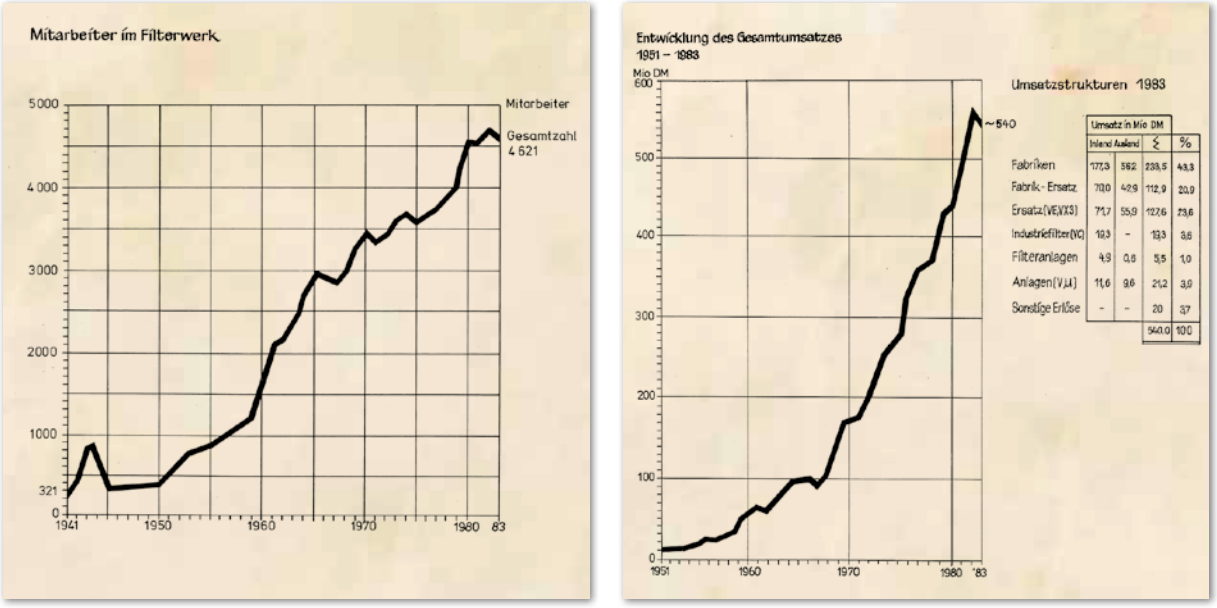
>>> This led to the development of innovative, pioneering products for engine peripherals. Cabin filters opened up a new product area, as did the development of particulate filters. With these pioneering achievements, Mann + Hummel consolidated its market position as a leading partner to the automotive industry.

AFTER THE CRISIS IS BEFORE THE CRISIS

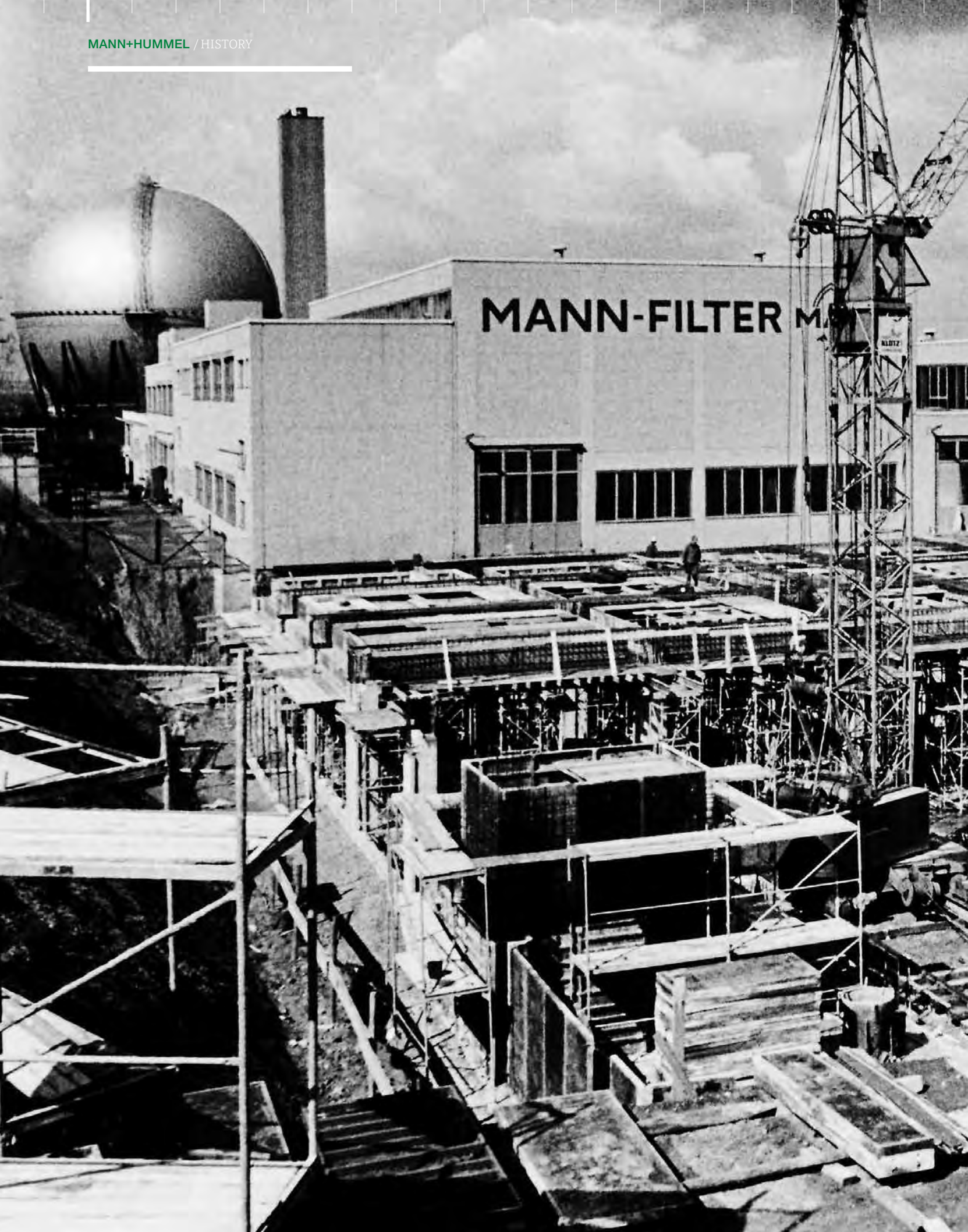
For Mann + Hummel, the new decade began with an important change. On January 1, 1980, FILAP in Speyer – which until then had been legally independent – was integrated in the company. However, the resulting increase in sales and employee numbers could not conceal the fact that the positive economic trend of the previous year had come to an end. West Germany's gross national product actually fell for the first time and the number of people out of work rose sharply, reaching a record high in 1985.

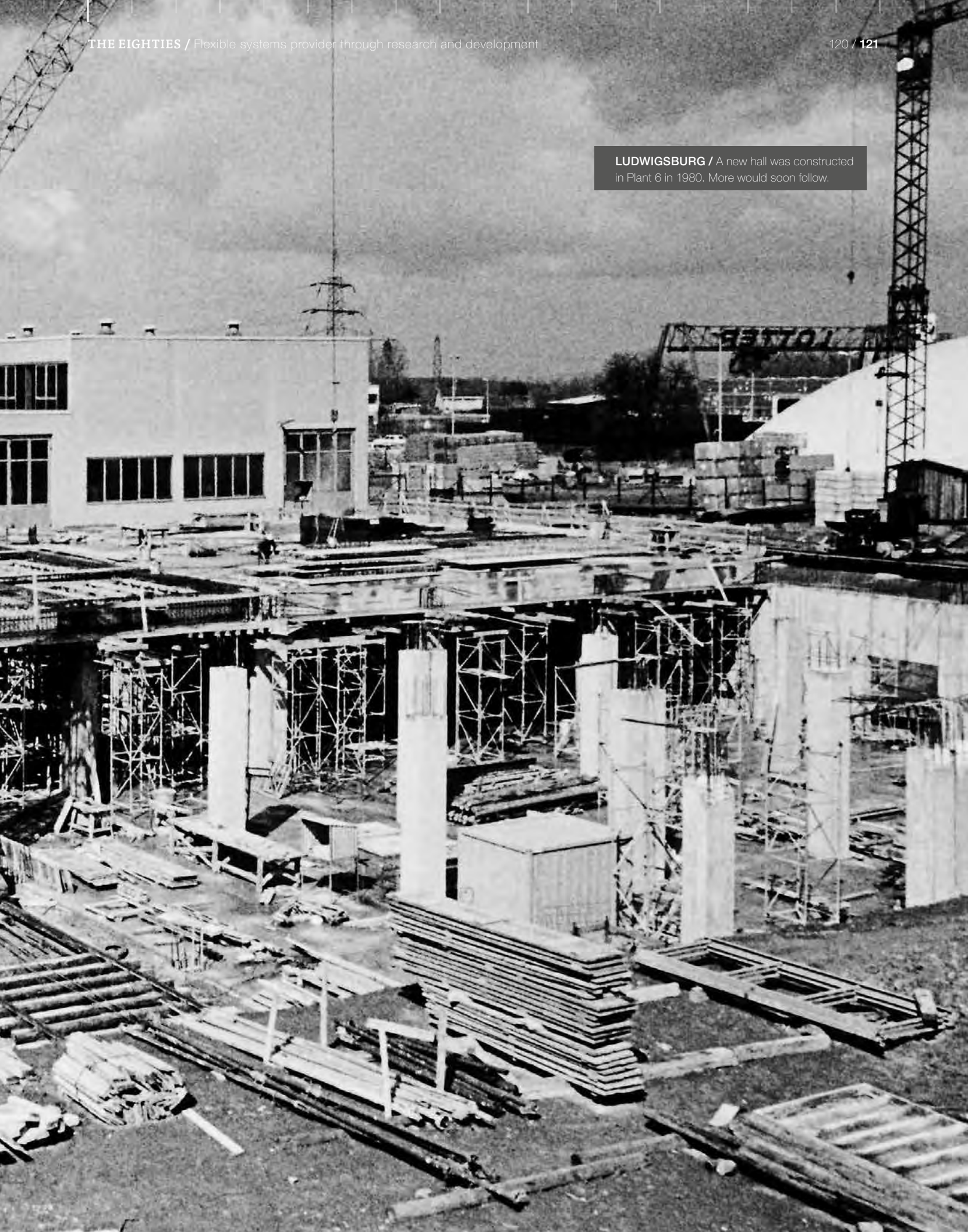
The automotive industry and in turn its suppliers was particularly hard hit. This was due in no small part to increasing international competition. Japanese manufacturers in particular gained significant market share with high-quality, low-cost passenger cars. A crucial factor in this success was a production system developed by Toyota, which was quickly adopted by other Japanese manufacturers (see "The factory of the future was created in Japan", page 135). This system, which today goes by the name "Lean Production", set standards in efficiency and quality. The situation faced by the automotive supplier industry was aggravated by the fact that manufacturers were increasingly outsourcing orders to other countries on account of their lower production costs. The involvement of suppliers such as Mann + Hummel in the development of new products led to increased design costs and therefore also an increase in the amount of capital investment required. Other changes included shorter development cycles, higher numbers of variants, just-in-time delivery, and a shift in responsibility for quality to suppliers.

Against this background, Mann + Hummel experienced a significant decline in the OEM business in 1980, which could not be compensated for by consistently good performance in the filter aftermarket business. At the end of the year, the company took the unprecedented, but necessary step of introducing short-time work (see "Fight for shorter working hours", page 134).



TWO GRAPHS, ONE DIRECTION / Employee numbers (left) and sales (right) at Mann + Hummel rose steadily for decades. At the beginning of the 1980s, there was a brief reversal in this trend.


MANN-FILTER



LUDWIGSBURG / A new hall was constructed in Plant 6 in 1980. More would soon follow.

1981

Start of testing with lost core technology for the manufacture of intake manifolds made from plastic

REVOLUTION IN THE WORKPLACE /
Referred to at the time as the "microcomputer", the PC found its way onto desks at Mann + Hummel in 1984.

STRATEGIC VIEW OF THE FUTURE

These developments prompted Mann + Hummel management to think about long-term strategy. An internal study conducted in 1983 concluded that the "niche markets relevant for the company's current product range, in Europe at least, would at best continue to grow weakly, with pronounced volatility".[2] In order to maintain its strong position, the company would also have to "keep up the pace in terms of development, quality, low-cost production, flexibility, and adaptation to modern structures (EDP, etc.), to be able to cope with setbacks and slumps, and introduce special measures to counter their effects".[3] The study also accurately predicted two key developments that would shape the years that followed – increased internationalization in future growth markets and the consolidation of technological leadership. One of the measures adopted appeared initially to run contrary to this strategy. With the sale of its stake in MFI Inc. in Michigan in 1983, Mann + Hummel withdrew from the US market – temporarily. Five years later, the company took a step closer to greater internationalization with the acquisition of filter system manufacturer Hydromation N.V. based in Tongeren, Belgium (see "Locations", page 142).

END OF THE FOUNDER ERA: DEATH OF DR. ERICH HUMMEL

The death of Dr. Erich Hummel, who passed away aged 90 on February 14, 1984, after a long illness, brought the era of the eponymous company founders to a close. The "Ludwigsburger Kreiszeitung" newspaper paid tribute to him as an entrepreneur and as a man who "possessed a unique ability to recognize the essential and to set the course for the future".[4] The company bulletin "Unser Betrieb" added: "He also believed that as an entrepreneur, it was his duty to serve the people."[5] Particular praise was given to his commitment to ensuring that employees were provided for in their retirement through the company pension fund. Plans for the management of Mann + Hummel after the death of its co-founder had long since been put in place. The company stocks remained in the control of the founder families, who were represented at the general meeting and were involved in major decisions along with the Supervisory Board. This solution proved to be effective and is still in operation to this day.

IN DEMAND /
Training at Mann + Hummel

Since its foundation, Mann + Hummel had been a company that understood the value of training young talent. In the 1960s, the company had difficulty attracting sufficient numbers of apprentices. Internal training measures were therefore stepped up to transform unskilled workers into skilled professionals. The situation changed in the 1970s. Karl-Heinz Knorpp, who was Training Manager for many years, recalls that several admission tests for prospective employees had to be held every year.[1] >>>

MORE ROOM FOR INNOVATION

Despite the difficult economic situation, Mann + Hummel continued to pursue the objectives outlined in the aforementioned strategy study, investing considerable sums in modernization and in expansion of its production capacities in the 1980s. An extension to Plant 6 for plastics manufacturing went into operation in 1981, with further expansion just two years later. Construction of a fully automated high-bay warehouse for plastic

1983

New hydraulic filter series in the return line for integration in the tank unit

CAD / Also in product design, CAD gradually replaced the drawing board.

parts began in 1989. However, the advent of just-in-time delivery soon after its completion meant that it was no longer of critical importance.

In 1982, the administration building in Plant 2 was extended to six floors, while the EDP department in Plant 7, the former textile plant, underwent constant expansion in terms of both space and technology in the years that followed.

Beyond Ludwigsburg, construction activity was also brisk at other company locations. In Speyer, the large-scale expansion of the former FILAP production site got underway. By 1986, less than one year later, six new halls stood on the site. In the Lower Bavarian municipality of Marklkofen, agreement was reached with neighboring landowners, paving the way for the further expansion of Plant 4. In 1983, a large production warehouse was inaugurated. A year later, construction work began on halls 10 and 11. No sooner had they finished, than the excavators returned again in 1986 for the construction of yet another production hall. Just two decades after the acquisition of the former pasta factory, the site had changed beyond recognition, and the largest filter plant in the world was taking shape.

SECURING THE FUTURE THROUGH RESEARCH

Mann + Hummel faced many challenges in the 1980s. Difficult market conditions, increasing competitive pressure – especially from Japanese automotive manufacturers – and new environmental protection requirements meant testing times not just in series production, but also in research and development. Sophisticated engine concepts, shorter development cycles, and demand for modular solutions in particular made it necessary to step up development efforts, especially in the area of plastic parts. The expertise acquired in plastics technology and the construction and expansion of Plant 6 proved to be useful in this context. Improved test equipment with climatic chambers and computer-based evaluation of tests

1983

New single-stage filter series for intake air filtration in commercial vehicles

>>> In 1973, the training departments of the individual plants were merged with the establishment of a new training center in Plant 7, the former textile plant. The center was relocated to Plant 2 in 1996. In 1983, 50 apprenticeship positions were filled in Ludwigsburg alone. In all, there were over 100 young people undergoing training at Mann + Hummel.

The range of training opportunities has been constantly updated since then. To meet the demands of increasing internationalization, new commercial training courses incorporating foreign languages and placements abroad were added. Since 1996, future management graduates enrolled in a dual study program at the DHBW Villingen-Schwenningen can spend a semester abroad. And since 2001, unskilled workers can obtain a qualification as a fitter under the "Esslingen model" from the Chamber of Commerce and Industry. Today, young people working at Mann + Hummel sites throughout Germany can choose from twelve different commercial and industrial training courses. There are six different courses of study available under the dual study program.

TRAINING AT AN HISTORICAL SITE / In 1988, the training workshop for all Ludwigsburg plants was still housed in the former textile plant.

served as a major boost to development work after 1982. The importance of new technology to the company was underlined by the fact that in 1985, 5.7 percent of revenue was invested in research and development – more than ever before.

The main areas targeted by this investment were, on the one hand, the expansion of testing for entire vehicles on roller test benches and engine test rigs. The close cooperation traditionally enjoyed between Mann + Hummel and automotive manufacturers as well as practical, product-oriented development took on an entirely new dimension. On the other hand, the engine peripherals product line underwent major expansion to include new products such as cylinder head covers, temperature-resistant regulating elements, fuel rails, and air intake pipes. With pipes in particular, a key role was played by lost core technology, which revolutionized the manufacture of complex hollow plastic parts.

NEW TECHNOLOGIES LEAD TO NEW PRODUCTS

In 1981, Gerhard Brenner, who was Head of Product Design at the time, began developing a process for "lost core technology". With this technology, a core made from a metal alloy with a low melting point is molded into the desired shape and then cast with thermoplastics using the injection molding process. The metal core is later melted-out in a hot bath, leaving just the seamless plastic pipe. The melted-out metal can be reused in the production of new cores. Lost core technology offers clear advantages, including reduced part weights, greater freedom for flow-optimized design, and lower noise emissions.

Following several years of intensive research, the first prototypes were developed in 1985. The first plastic intake manifolds for sale to customers went into series production at the end of 1989. The following year, the BMW M50 and the Porsche 911 with 3.6 liter engine were the first vehicles to be launched on the market with a complete Mann + Hummel intake system manufactured using lost core technology. The rapid pace of

LARGE-SCALE PRODUCTION /
Manufacture of air filter elements at the Marklkofen plant.

1984

First oil filter housing made from plastic

BY THE WAY / Filtration technology from Mann + Hummel ...

... ensures that the spectacular fountain in Königstraße in Stuttgart operates smoothly. Numerous water jets are combined to create the image of a "dandelion clock". Unfortunately, many passers-by use the fountain as a trash can, throwing garbage into the fountain and potentially damaging the spray nozzles. A customized gap-type tube filter from the Speyer plant prevents this from happening and guarantees problem-free operation of the famous fountain in Stuttgart's main shopping street.

development was facilitated by the prototype development system installed in 1987. This allowed different intake manifold variants to be developed in close cooperation with customers. Consistent and rapid improvement of lost core technology meant that within a short time it was also possible to manufacture much larger intake systems for commercial vehicles.

At the same time, researchers at Mann + Hummel took on the challenge of developing oil filter housings made from plastic. The specific thermal and dynamic loads of these parts placed high demands not only on the materials, but also on the joining techniques used.

Lost core technology certainly laid the foundation for the outstanding expertise that Mann + Hummel subsequently acquired in the processing of engineering plastics in engine peripherals. This opened up a whole new world of complex modular solutions. For the first time, it was possible to combine the air intake pipe, the air filter, the intake manifold, and the fuel rail in a single module. Oil filters, oil coolers, and other components could also be combined in one unit. Above all, however, it enabled Mann + Hummel, whose operations now extended far beyond the name "Filterwerk", to establish itself as a reliable partner to the automotive industry and consolidate its position as an OEM.

BOOMING BUSINESS SEGMENT / Manufacture of plastic parts in Plant 6, 1986.

1984

Optimizing intake air temperature regulation using electronic components

NEW TECHNOLOGY FOR NEW PRODUCTS / In 1989, intake manifolds were produced in Plant 2 using lost core technology.

MODERN-DAY PIRATES / Counterfeiters try to profit from the good reputation of the brand

The growing international success of Mann + Hummel attracted unwelcome copycats. These pirates brought counterfeit filters trading on the "MANN-FILTER" name onto the market. These counterfeits, some of which came in packaging that looked genuine, were sold mainly in Finland, Greece, Indonesia, Malaysia, and Taiwan. The company took immediate action against the pirates with a series of trademark protection lawsuits. The company was in a strong position in terms of trademark and patent protection, and most of the cases were therefore successful. However, this did not alter the fact that pirates continue to this day to attempt to profit from the strength of the "MANN-FILTER" brand through criminal activity. Numerous organizational and logistical measures were therefore introduced over time to make life as difficult as possible for the pirates.

1985

Drying agent box for brake systems in commercial vehicles

THE FILTER MAN / It is not known who produced this impressive figure made from Mann + Hummel products in 1984.

AIR FILTRATION FOR THE BENEFIT OF MANKIND

The Ludwigsburg company also used its innovative strength in a completely different area – environmental protection. Mann + Hummel began developing particulate filters for diesel engines in the early 1980s. This proved to be a highly complex undertaking. Regeneration of the filter inserts during operation in particular posed problems at the start. These were eventually resolved through extensive bench testing with customers. In 1989, the first city buses and municipal vehicles were fitted with particulate filters as part of a major field test.

Development also focused on another new area of application – the vehicle interior. The initial focus was on driver's cabs in commercial vehicles that are operated in dusty environments, such as construction and agricultural machinery. This was followed by the development of cabin filters for passenger cars and a new production line for passenger compartment ventilation filters. A new area of business thus emerged, one which would become extremely important in the future.

CONTINUITY DESPITE PERSONNEL CHANGES

Towards the end of the decade, there were a number of management personnel changes at Mann + Hummel. At the end of 1988, Technical Director Dr. Hermann Fischer retired due to illness (see "Dr. Hermann Fischer", page 86). His successor was former Head of Product Design, Gerhard Brenner. At the same time, corporate counsel Dr. Gerhard Schaal took over as Director of Human Resources and Social Affairs. Another retiree in 1988 was Prof. Dr. Dr. Hans Möller, who stepped down as Chairman of the Supervisory Board after 32 years. Like Dr. Hermann Fischer, he was a son-in-law of Adolf Mann. Dr. Bernhard Kiefer, who had already been a member of the Supervisory Board for many years, was appointed as his successor. One year later, at the end of 1989,

1987

Series production of a new fuel rail for car engines begins

XXL FILTERS / An employee from the Speyer plant proudly presents the large special filters of the former FILAP in 1987.

the "Bracher era" came to a close with the retirement of Dr. Erich Bracher, who had served as General Manager for 22 years. In typical fashion, he decided to embark on a farewell tour of all the German production sites. Manfred Bär, who was later Chairman of the Works Council, still remembers it well to this day: "His greatest gesture of all was upon his retirement, when he spent the entire month of December visiting every plant, going from workshop to workshop and bidding farewell to his employees with a handshake. He traveled to every single place for which he was responsible, and said goodbye to his employees in person. He is still remembered fondly to this day."[6] The retiring managers left their successors with a company that was in extremely good shape. The successful implementation of the future strategy and the reinvigoration of the automotive industry after 1985 contributed to good results for Mann + Hummel in the second half of the 1980s. By 1986, despite intensive activity in construction, modernization, and research, the company's balance sheet no longer had any bank liabilities or shareholder loans. The company was free of debt for the first time in decades. Three years later, the number of employees had risen to over 8,000, and sales broke through the one billion deutschmark barrier for the first time in the company's history.

MANUAL LABOR STILL COMMON / Folding a star-shaped filter.

FROM EXTRA-PARLIAMENTARY OPPOSITION TO THE BUNDESTAG / Growing environmental awareness paved the way for "The Greens" to enter the Bundestag in 1983, three years after the party's formation.

1988

Series production of plastic intake manifolds using lost core technology

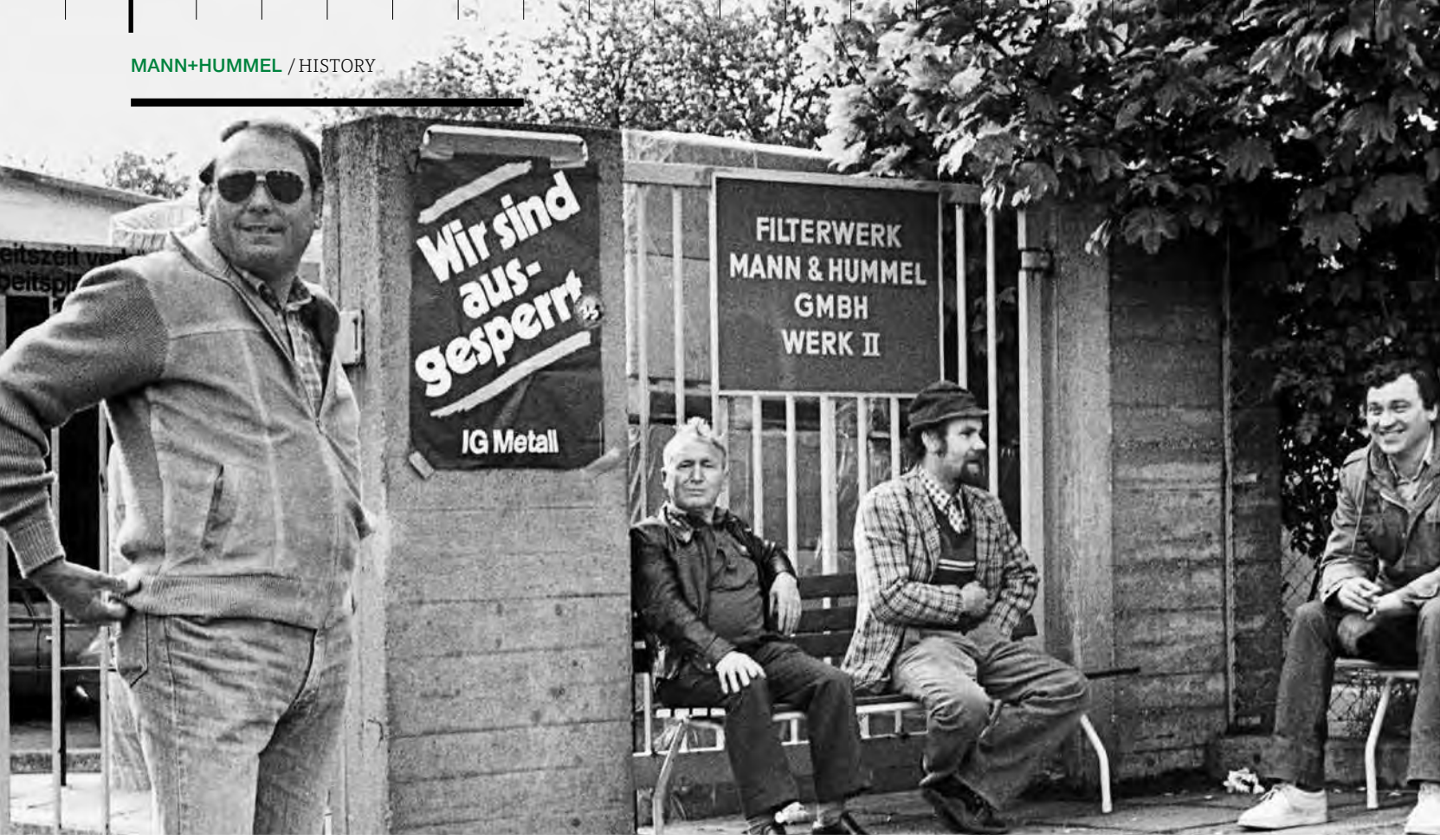
ENVIRONMENTAL PROTECTION / The catalyst for progress

The environmental movements that emerged in the 1970s and the rethink that they brought about in relation to environmental protection quickly grew in importance in West Germany in the 1980s for two reasons. One was the formation of the political party “The Greens” in 1980, which entered the Bundestag in 1983. This new political dimension had a much greater impact on society than the protests by environmental activists, who had been ridiculed as “hippies” and “crackpots”. In addition, a series of disasters made people more aware of environmental issues. “Forest dieback” caused by acid rain – in other words severe pollution – led to significant damage to trees and raised concerns about the future of forests in Germany. At the same time, fish were dying in German rivers, again due to the effects of pollution. The increasing size of the hole in the ozone layer also attracted public attention in the 1980s. The accident at a chemical plant in the Indian city of Bhopal in December 1984, which resulted in the deaths of more than 3,000 people, attracted huge international attention. However, the incident that had the greatest impact on public opinion was without doubt the disaster at the Chernobyl nuclear power plant in April 1986. This placed the issue of environmental protection firmly at the center of political and social debate.

Efforts to reduce emissions from road transport had been made in the past. In 1971, legal limits for the amount of lead in gasoline were introduced. Further reductions followed in 1975 and 1979. Stricter regulations in Japan and the United States forced German automotive manufacturers to find new ways of controlling emissions – in the form of the catalytic converter and later also the particulate filter.

These new technologies had a major influence on the research and development activity of Mann + Hummel. The use of catalytic converters placed high demands on the air intake system, particularly in relation to temperature and air volume regulation. Mann + Hummel also played a major role in the development of particulate filters. However, the area of development that was growing most rapidly at the end of the 1980s was industrial filters, which was based in Speyer. Evidence of the growing importance of environmental protection not only in products, but also in their production, came in 1989, when the company began to use environmentally friendly materials in the manufacture of filter inserts and a contaminant-free impregnating agent for curing filter paper.

EMOTIVE IMAGE / Forest dieback led to a rethink on environmental issues in the 1980s.



UNPRECEDENTED SCENES / Pickets at the entrance to Plant 2 during the 1984 strike.

FIGHT FOR SHORTER WORKING HOURS / The great strike of 1984

The poor overall economic situation in 1980 also had an impact on Mann + Hummel. Plant 6 in Ludwigsburg was operating at only two-thirds of its capacity, at a time when extension work was already underway. One-third of the workforce was therefore temporarily relocated to Plant 2. However, in the fall of that year, metal filter production was hit by a lack of orders and therefore underutilization of capacity, which could only be resolved through short-time working. A total of 700 workers were affected by this measure, which remained in place until 1981.

A few years later, just as the economy had begun to recover, the metalworking industry was paralyzed by the biggest strike in West German history in 1984. The striking workers were seeking the introduction of a 35-hour working week. Although Mann + Hummel workers were not directly involved in the strike, the employers' association had decided to also lock out workers in companies not affected by the strike as a countermeasure. With a heavy heart, Dr. Erich Bracher felt that he had no choice but to endorse this course of action given his position as head of the regional employers' association of the metal industry. However, he had no desire to get involved in a confrontation with the workers who had been locked out. In fact, management regularly sent refreshments out to the workers on the picket line.

Works Council Chairman Manfred Bär recalls a story that has become something of a company legend. The strike pay from IG Metall had to be collected in Stuttgart – in cash. "We got in the car with two metal boxes in the trunk, each containing 500,000 deutschmarks, and set off on the journey back to Ludwigsburg absolutely delighted with ourselves."[7] When we arrived back, we immediately distributed the money among the locked out workers.

The Mann + Hummel corporate health insurance company found itself faced with a different money problem. Due to the strike, contributions to the value of 900,000 deutschmarks had not been paid. The unbureaucratic way in which the company dealt with the problem was testament to the excellent relations between management and employees. The company immediately and voluntarily paid the missing contributions to the corporate health insurance company, thus protecting the employees against financial loss. The strike ended after seven weeks with a compromise. The

working week was reduced to 38.5 hours in 1985, with a commitment to further reductions on a gradual basis. As a result, the working week at Mann + Hummel was reduced to 37 hours on April 1, 1989. In the shadow of the great strike, another regulation went virtually unnoticed by the public. Since 1984, workers had been given the option of early retirement. In the Ludwigsburg region, Mann + Hummel was, as was so often the case, a pioneer in social development and was one of just a small number of companies to introduce the early retirement scheme as part of a company agreement.

THE FACTORY OF THE FUTURE WAS CREATED IN JAPAN / It revolutionized industrial production worldwide

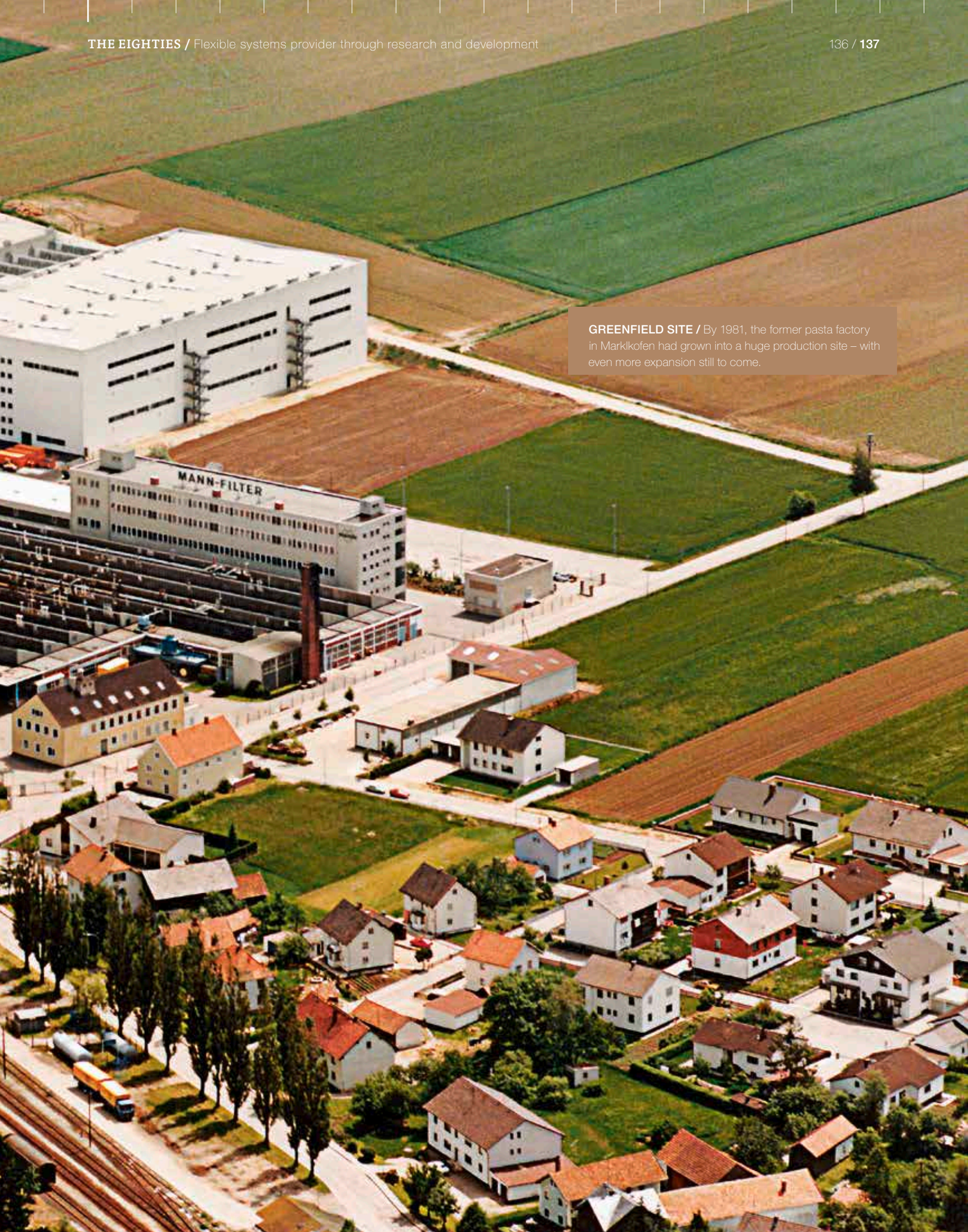
Although the automotive industry in Europe was well on the road to recovery by the mid-1980s, Japan continued to apply competitive pressure. In less than two decades, the automotive industry in Japan had evolved from humble beginnings into a huge success. Cars from the land of the rising sun were winning more and more customers, even in Germany. They offered excellent quality at affordable prices. A key factor in the success of Japanese manufacturers in the export market was a radical change in industrial production processes, which went by the name TPS (Toyota Production System) – now better known as "Lean Production" – and continues to set standards to this day.

The advantages of TPS were obvious: "At the end of the 1980s, European manufacturers required 36 hours per vehicle, while Japanese manufacturers needed just 16 – and had just one-third of the number of assembly errors. Toyota in particular managed to achieve higher quality and change its range of models more frequently."[8]

The main objective of the TPS system developed by Toyota production engineer Taiichi Ohno is to eliminate waste of all kinds in production as well as management. On this basis, maximum productivity as well as optimum quality and delivery reliability are to be strived for and achieved. Practical implementation of TPS requires two strategic measures. With the just-in-time process, companies produce only what is needed in order to fulfill a specific order. In addition, quality is not achieved by eliminating waste, but is created in the production process. All of these endeavors are centered around the learning, thinking person as part of a continuous improvement process – at management level as well as on the assembly line. In this respect, TPS also represents a shift away from Henry Ford's strict division of labor and responsibility.

Because TPS cannot be implemented overnight, most German companies, including Mann + Hummel, initially responded by optimizing existing production process, primarily through automation and rationalization. A true understanding of the benefits of TPS in the West did not come about until 1988, when Taiichi Ohno published his experiences in English for the first time.[9] Although it would still be some time before TPS was fully implemented at Mann + Hummel and other European industrial enterprises, the course for the future had been set.

REVOLUTIONARY VISONARY / Taiichi Ohno transformed industrial production processes. His concepts – "Kanban", "Kaizen" and "Lean Production" – are now used in factories all over the world.



GREENFIELD SITE / By 1981, the former pasta factory in Marklkofen had grown into a huge production site – with even more expansion still to come.

1988

Tests with activated carbon filters to limit the emission of fuel vapors from the vehicle and when filling the tank

CEREMONY / Georg Essig (right) is congratulated by Mayor Rosskopf at the ceremony to mark the inauguration of a new plant building in Speyer.

1989

After nine years of development, large-scale testing involving particulate filters gets underway

Georg Essig

Experienced master of figures and dedicated cigar smoker. His choice of career was based solely on what the circumstances at the time permitted. Having started out as a trained fitter, he had become a recognized expert in finance and taxation during the Second World War. This made him a key figure in the newly founded Filterwerk Mann + Hummel, in which he soon became Director and General Manager.

He played an instrumental role in the return of the textile plant to the Bleyle family.[10] In 1953, he joined Filterwerk Mann + Hummel. A short time later he became Head of Financial Accounting as well as General Manager of FILAP in Speyer, which was still an independent affiliate at the time. Worldly, open-minded, and communicative, Georg Essig was made a Director in 1960 and took over responsibility for Finance and Accounting, first as Deputy General Manager, then later as full General Manager.

Georg Essig, who worked closely with Dr. Erich Hummel, also looked after the establishment of foreign affiliates and the security of the company pension scheme. He loved cigars and would often smoke in his office – something which would be unthinkable today. His secretary, Waltraud Schuh, with whom he shared an office, was just the same – smoking two packs of cigarettes at work every day. Unsurprisingly, those who were around at the time have mixed feelings when recalling the smoke-filled office of Georg Essig.[11]

Georg Essig retired in 1970, but continued to act in an advisory capacity for the company for many years afterward. He died in 1988, shortly before his 84th birthday.

DIRECTOR AND GENERAL MANAGER / Georg Essig

Georg Essig was born in 1904. It is not clear what prompted his transformation from trained fitter to financial expert. One thing that is certain, however, is the fact that he began his career with Bosch and by the 1930s was working at the Bleyle textile plant. Because he also worked for the Reichsbank during these years, he was imprisoned for two months immediately after the war and was later tried during the denazification process. Classified as a "fellow traveler IV", he was ordered to pay compensation of 200 deutschmarks in 1948. Georg Essig subsequently appealed for clemency, which was granted by the court in November 1948. The "proceedings were stopped, and all costs borne by the treasury".[12]

1989

Development of ventilation filters for the passenger compartment

Karl-Heinz Knorpp

From young apprentice to international production specialist.

He began his career at Mann + Hummel as an unskilled worker at the age of 13. He then became a mechanic and trainer. Later, in his capacity as work planner, he was responsible for ensuring seamless production processes at the expanding plant in Marklkofen. He traveled the globe almost nonstop, helping to establish new sites. The unusual career path of Karl-Heinz Knorpp reflects half a century of company history.

Karl-Heinz Knorpp began his apprenticeship on September 1, 1957 – though only for half-days at first, as he was not yet 14 years of age. He remembers well how manageable the company was in terms of size at the time, and how he felt that he was part of a family. “Someone looked out of the window and said that Mr. Mann was outside. Everyone knew nearly everyone else.”[13]

After passing his examinations, he was taken on in 1961 and worked as a toolmaker in Plant 2. When the company was looking to replace a retiring trainer in 1966, Karl-Heinz Knorpp was chosen as the man for the job. He took evening classes, and in 1967 earned the title of master craftsman. He then went on to work in the training workshop, where he spent 15 years in charge of equipment training. This was often a challenging task, particularly given the varied backgrounds of the apprentices. “They came from many different types of secondary schools. We therefore had to act almost like a mediator between the different groups.”[14] His experience led to him being appointed to the board of examiners of the Chamber of Commerce and Industry for many years.

At the start of the 1980s, Karl-Heinz Knorpp took on a new challenge. He was to provide production planning support from Ludwigsburg for the ever-expanding plant in Marklkofen. “Every four to six weeks we traveled to Marklkofen for two or three days, where we discussed everything with the local team.”[15] When the task of production planning was eventually transferred permanently to the Marklkofen plant, Karl-Heinz Knorpp became involved in a much broader field of activity in the truest sense. As he was already responsible for supplying technical documentation and for machine procurement for subsidiaries and licensees, he now applied his knowledge to internationalization, which was progressing rapidly at Mann + Hummel.

1989

Use of an environmentally friendly, contaminant-free impregnating agent for curing filter paper

THE PRODUCTION SPECIALIST / Karl-Heinz Knorpp

The career path of Karl-Heinz Knorpp was decided on a football pitch. This is where his father regularly met a trainer from Mann + Hummel and decided that his son should train to be a mechanic. Although the young Knorpp would have been just as happy to become a gardener, he sat the admission test and secured one of the sought-after apprenticeships. Because the 13-year old was on school vacation following his confirmation, his father gave him permission to work as an unskilled worker in the company where he was set to become an apprentice.

His new role took him to many locations around the world. His job was to plan and establish the production lines required for the respective products. His previous role gave him an advantage: "Whenever I needed anything, I was always bound to find one of my former apprentices in the company. This meant that I always had a point of contact or at least knew someone whom I could ask."[16] The constant traveling had its downsides, however. There were years when Karl-Heinz Knorpp barely had a single day off. He often had to call his wife while on the road and ask her to pack another case for the following day. It should therefore come as no surprise to learn that he decided to take early retirement after nearly 50 years of service. When Karl-Heinz Knorpp began his well-earned retirement in 2005, he could look back proudly at an extremely varied career, not to mention his involvement in the transformation of Mann + Hummel from a midsize company into a global group. A success story to which he contributed a great deal during his trips around the world.

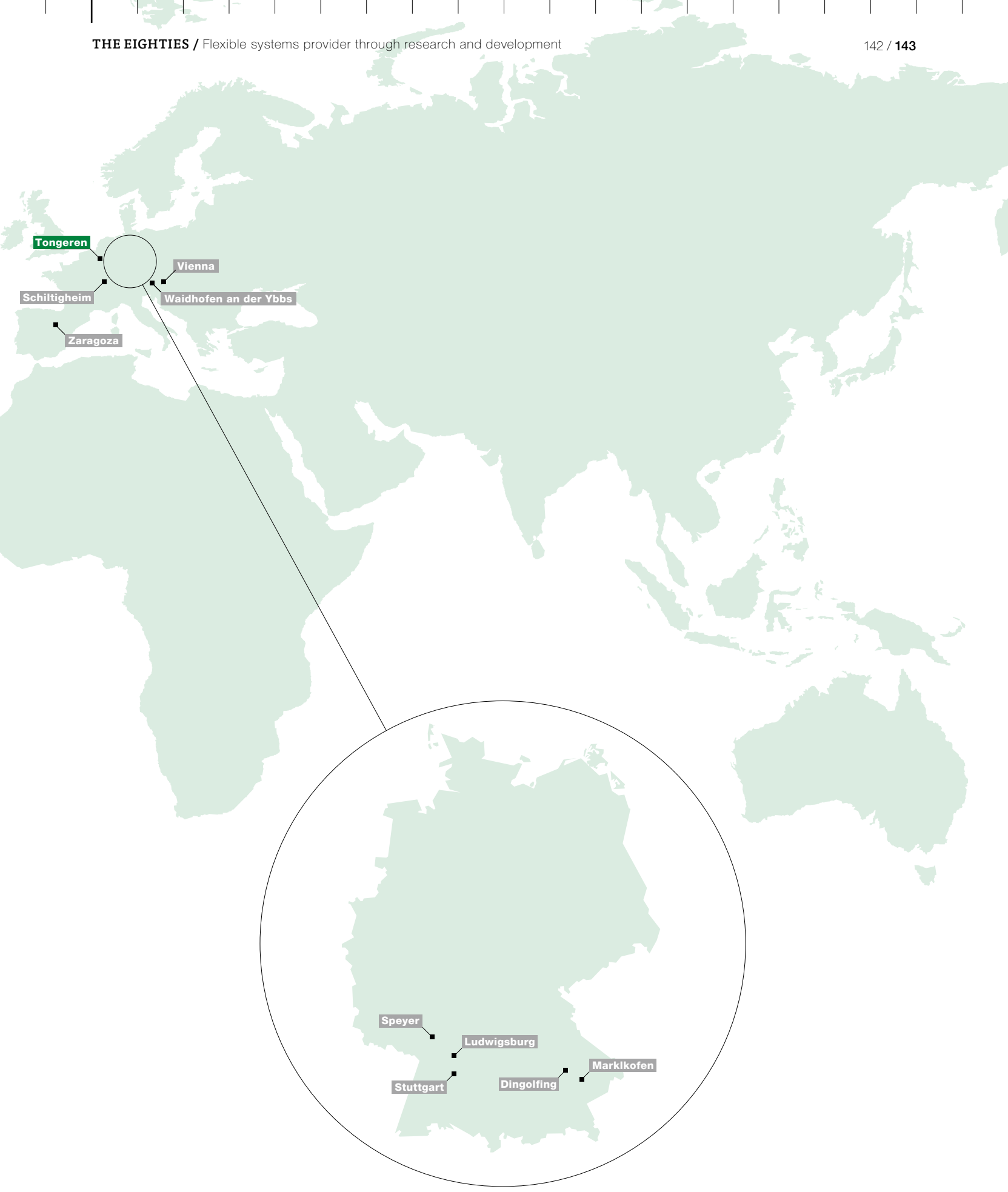
WELL-TRAVELED PRODUCTION SPECIALIST / In the almost half a century that he spent at Mann + Hummel, Karl-Heinz Knorpp traveled around the globe on behalf of the company.

Locations

BELGIUM / Tongeren At the end of 1988, Mann + Hummel acquired the company Hydromation N.V. based in Tongeren, Belgium. Founded in 1954, the company had subsidiaries in Germany and France and specialized in the manufacture of filter systems for industrial customers. Trading as Hydromation, the company developed, produced, and installed primarily fully automatic large filtration systems for the cleaning and processing of processing emulsions and cooling lubricants, such as those used in metal cutting. The company also produced filter systems for cold and hot rolling mills and for wire drawing machine manufacturers. Mann + Hummel Hydromation later acquired subsidiaries in Brazil (1995) and China (2003), and became the leading global supplier in its industry. This success was thanks in no small part to the fact that Hydromation supported customers at every stage of the process from design to commissioning, and was thus able to offer complete solutions. In 2011, Mann + Hummel made the decision to withdraw from this business segment and Hydromation was sold off.

HYDROMATION N.V. / Hydromation N.V. based in Tongeren, Belgium, specialized in the manufacture of filter systems for the metalworking industry.

HYDROCYCLONE SYSTEM / Section of a MANN hydrocyclone system for the cleaning and recooling of the cooling emulsions of wire drawing machines.


Tongeren
Vienna
Schiltigheim
Waidhofen an der Ybbs
Zaragoza
Speyer
Ludwigsburg
Marklkofen
Stuttgart
Dingolfing

The nineties

"Suppliers must become systems developers if they want to rely on more than price and cost leadership to remain competitive."

Winfried Witte, General Manager, in an address to managers in 1990

New structures, greater efficiency, global market

IN 1991, FILTERWERK MANN + HUMMEL CELEBRATED ITS 50TH ANNIVERSARY. While this milestone provided an opportunity for reflection, the company also had to look ahead and break free from certain traditions. Political and economic upheaval as well as changing requirements from automotive manufacturers demanded a new corporate strategy with a stronger international focus, internal restructuring, and significant investment in research and in the modernization of production facilities. By the end of the decade, the newly formed MANN+HUMMEL Group was a global player – ready to meet the challenges of the 21st century.

German reunification in 1990 and the collapse of the Soviet Union one year later marked an historic turning point. Political scientist Francis Fukuyama spoke somewhat prematurely of "the end of history" in his bestselling book. On the contrary, political and economic processes took on an unprecedented momentum. The economic integration of the European Union progressed rapidly, new free trade areas were created around the world, and there was a dramatic increase in the global movement of goods. These factors made it crucial for companies in all sectors to establish an international presence in order to remain competitive. In 1992, the laying of the foundations for a revolution that would change the world beyond recognition went virtually unnoticed, as EUnet became the first provider to open up the World Wide Web for commercial and private use.

AUTOMATED PRODUCTION / As part of the drive to improve efficiency and quality, robots became an increasingly familiar sight in the 1990s.

1990 – 1999

SYSTEMATIC RESEARCH ESTABLISHES THE COMPANY AS A RELIABLE SYSTEMS PARTNER TO THE AUTOMOTIVE INDUSTRY / The decade saw Mann + Hummel develop its expertise as an innovative systems supplier in automotive engineering. Intake systems in plastic multi-shell and lost core technology as well as thermo-optimized intake systems were just some of the new areas of development, along with engine compartment and sound design. Environmentally friendly oil, air, and gasoline filter elements as well as cabin filters continued to grow in importance. Complete function modules for industrial filtration were developed for the first time.

NEW TECHNOLOGY FROM THE NEW GERMAN STATES / In the Thuringian town of Sonneberg, intake manifolds were produced using highly efficient multi-shell technology.

A CHANGED POLITICAL AND ECONOMIC LANDSCAPE DEMANDS NEW STRATEGIES

The new decade began with two key personnel changes at Mann + Hummel. Winfried Witte was the first General Manager who was not appointed from within the company. Manfred Bär also took over from Walter Vogt as Chairman of the Works Council.

The Japanese automotive industry continued to exert heavy price pressure on European and American manufacturers, and in turn on their suppliers. One of the biggest challenges facing the industry was closing the gap with Asian competitors through productivity increases and cost reductions. Many automakers passed on much of the ongoing cost pressure to their suppliers. The fall of the "Iron Curtain" also created an entirely new set of economic opportunities and challenges. For Mann + Hummel, the aim was not so much to open up new sales markets, but to establish production sites in the new German states or in Eastern European countries. This was made all the more critical by the fact that key customers from the automotive industry had already taken this path and were also planning to establish new production facilities worldwide. In line with this strategy, Mann + Hummel acquired Thuringian company Plasta Sonneberg, a manufacturer of plastic parts for the automotive and engineering industries, in 1991 (see "Locations", page 168).

Along with internationalization, another pressure point for suppliers were the demands of the automotive industry, whereby suppliers were now being expected to provide development and logistics services. For Mann + Hummel, the long-pursued strategy of seeking proximity to customers and investing in its own research and development began to pay off, particularly at a time when recession was about to set in and increase cost pressure even further.

Winfried Witte considered all of these challenges and compiled his thoughts and ideas in a strategy paper for management. In his strategy paper, he clearly laid out the weak points of Mann + Hummel: "Outside of Europe, the biggest filter supplier is not represented in the economic blocs of North America and Japan or the Far East, which are so crucial for the automotive industry."[1]

1990

Reduction in the amount of harmful substances in synthetic resins for filter production

PICTURE WITH A HIDDEN SIGNIFICANCE / The anniversary celebration at FILTROS MANN S.A. in Argentina in 1991 saw the presentation of a preliminary version of the new brand logo, long before it was introduced.

PACKED AUDITORIUM / The ceremony to mark the company's 50th anniversary in June 1991 was attended by many guests of honor (Forum Ludwigsburg).

ZEMA / Controversial starting point for change

The extensive structural changes introduced in the company in the early 1990s were part of a strategic process initiated under the motto "ZEMA" (zeitgemäß erfolgreich miteinander arbeiten – timely and successful cooperation). ZEMA incorporated a wide range of measures aimed at establishing new business areas and restructuring the work and process organization. The central idea behind ZEMA was the integration of all employees in the change process. >>>

However, the new General Manager also recognized ways in which Mann + Hummel could use the challenges that lay ahead as an opportunity. Reducing the vertical range of manufacture among automotive manufacturers was one such challenge, whereby he concluded: "Suppliers must become systems developers if they want to rely on more than price and cost leadership to remain competitive."[2] Many of his suggestions were later implemented or at least considered, albeit following intense debate. The first steps included the setting up of the Corporate Planning and Financial Controlling departments as well as the hiring of management consultants to guide the company through the strategic realignment process.

Other measures aimed at improving competitiveness included numerous construction and modernization projects, some of which had already been started in the 1980s (see "Record investment / State-of-the-art production facilities", page 164).

1990

New, high-performances filters for fuel filtration

CELEBRATION IN A PERIOD OF UPHEAVAL

In June 1991, during a period marked by economic uncertainty and upheaval, Mann + Hummel celebrated its 50th anniversary. The company marked the event with an open day and a ceremony at the Forum am Schlosspark in Ludwigsburg. The Mann + Hummel foundation for the promotion of youth exchanges with Ludwigsburg's twin cities, which was founded on the occasion of the anniversary, was very well received by the public and was praised by Mayor Henke as an "extremely welcome gesture".[3] Another gesture that was warmly welcomed by the workforce involved the payment of an anniversary bonus based on years of service with the company. Loans for owner-occupied housing construction and the bonuses for marriage and for the birth of a child were also increased. The Works Council, under its new Chairman, Manfred Bär, succeeded in persuading management to increase the anniversary fund from 2 million to 2.5 million deutschmarks.

THE MANN+HUMMEL GROUP CREATES NEW STRUCTURES – AND A NEW LOOK.

The company underwent several restructuring phases as part of the strategic realignment process in response to the changed global economic landscape. Having allowed the organizational structure to develop somewhat organically over the course of half a century, the company now set about systematically adapting structures to prepare for future challenges. At the very heart of these changes was an event that took place in 1992, when Filterwerk Mann + Hummel GmbH said farewell to a long tradition and became part of the "MANN+HUMMEL Group organization".[4] The new organization initially included the three Group functions of Chairmanship, Human Resources and Social Affairs, and Accounting. The Controlling department was added in 1993. Below this were the Automotive Engineering and Industrial Engineering divisions, which were in turn divided into various business units.

The restructuring process was accompanied by comprehensive organizational and personnel development measures initiated under the motto "ZEMA" (zeitgemäß erfolgreich miteinander arbeiten – timely and successful cooperation). At the same time, rapid expansion of the international production and sales network in order to improve customer retention through close proximity and short delivery times was a major priority (see "Locations", page 168). To communicate the company objectives at internal level as well as to the outside world, and to provide orientation for employees, a series of four visions for the future were formulated in 1994. Within a decade,

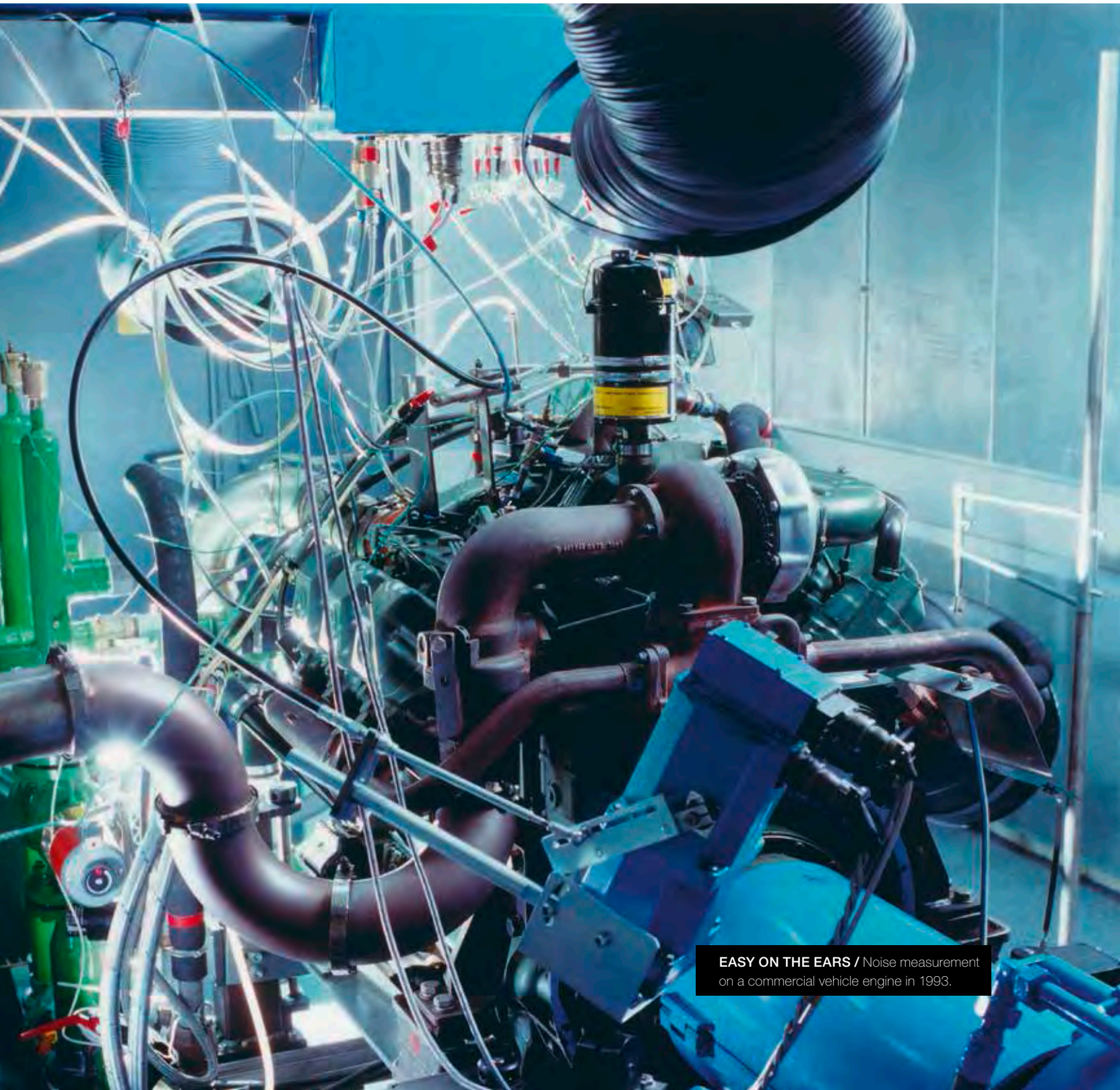
>>> Selected process managers, including current General Manager Markus Wolf, were given intensive training for their new role by external coaches.

The project kicked off with big launch events in Ludwigsburg, Speyer, and Marklkofen. In Ludwigsburg, employees were taken in special buses to Forum am Schlosspark, where they were introduced to the new changes with the Scorpions' song "Wind of Change". In the period that followed, many employees received special training in areas such as presentation techniques, interpersonal skills, personal appearance, and team development. ZEMA was accompanied by a series of inventive communication measures, which even included an advertising pillar and comic strips.

Inevitably, the pace and scope of the changes were a source of irritation to some, particularly older members of the workforce. Management worried about such influences, as many employees felt that long established and valued traditions of the family business were at risk, not to mention the fact that the process also involved staff cuts. ZEMA therefore underwent numerous reorganization phases, and in many areas of the company employees gradually fell back into old habits. Nevertheless, it is undeniable that despite all of the criticism and setbacks, ZEMA was of critical importance to MANN+HUMMEL. Optimized processes, improved interfaces, and more efficient working methods created the conditions that would allow the company, which by now had grown from a family business into a large group, to face the challenges that lay ahead.

1991

Development of filter media low in harmful substances, better environmental compatibility and disposal of spin-on lubricating oil filters, sophisticated plastic part in the engine intake system with modular design



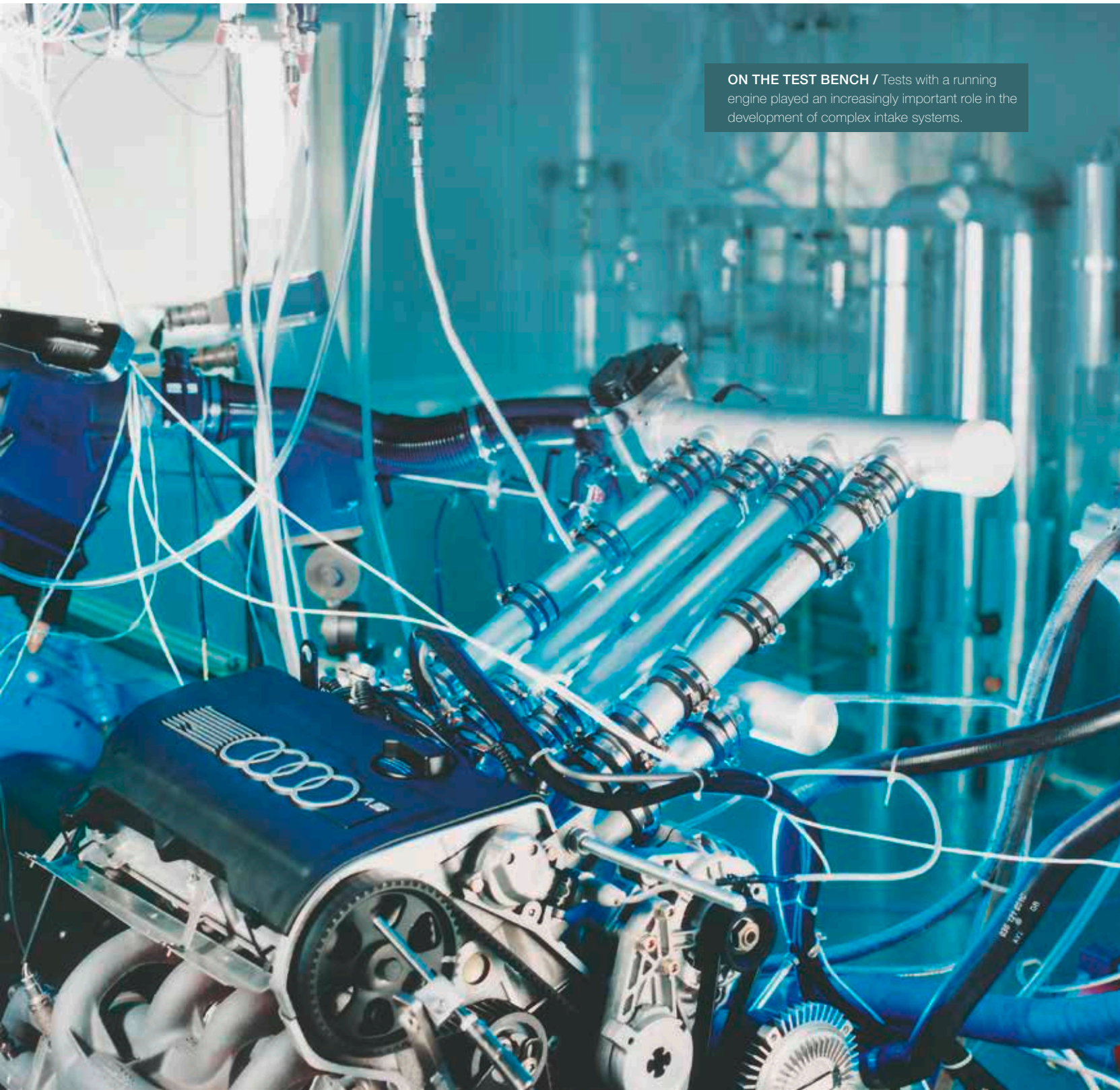
EASY ON THE EARS / Noise measurement on a commercial vehicle engine in 1993.

1992

Development of systems technology and intake manifold technology, dry air cleaner with plastic housing and metal free filter element, large filter with backflushing

1993

New handling equipment and volumetric color feeders up to 50 kg/h



ON THE TEST BENCH / Tests with a running engine played an increasingly important role in the development of complex intake systems.

1994

Engine intake systems for increased power and torque, oil filter concepts with metal-free filter elements that burn without leaving residues, complete function modules for industrial filters, oil-water separator, automatic pipeline inspection machine, integration of the air filter in the cylinder head cover, cylinder head cover made from plastic, particle cabin filter

MANN+HUMMEL Group aimed to be established in the global market, be a leading systems supplier, expand its activities in areas other than the automotive supplier business, and be operating worldwide with a strong market-oriented service and aftermarket organization.

The ever increasing demands of the automotive industry necessitated the restructuring of the Research and Development division in 1995. The focus in this case was on clearer product orientation, improved teamwork, greater use of customer expertise, and the restriction of development work to the core competencies of the company. These efforts soon paid off. In 1995, an intake module with variable resonance tube length and intake pipes using plastic multi-shell technology, which had been developed and tested entirely by MANN+HUMMEL, went into production.

A clear signal of the many internal changes taking place was communicated to the outside world in 1996, when MANN+HUMMEL was introduced as a word and figurative mark. This not only clearly illustrated the group organizational structure, but made both company founders the main focus.

In July 1996, there was a change in personnel at management level. Following the retirement of Winfried Witte, Dr. rer. nat. Roland Kankowsky, who up to now had served as Management Board Spokesman with Magna Europe, took over as Chairman of the Management Board. Under his leadership, the ProTec segment was hived off one year later from Filterwerk Mann + Hummel GmbH – which remained in existence – and continued to operate under the name MANN+HUMMEL ProTec GmbH following a merger with SOMOS GmbH. There were also changes in the Automotive Engineering division. In 1999, the Air Filter Systems, Intake Manifold Systems, Liquid Filter Systems, Cabin Filters, and Filter Aftermarket Business Units were established.

AMBITIOUS BUSINESS AREA / Cabin filters play an increasingly important role – not just in expensive premium vehicles.

1995

Engine intake manifolds in plastic multi-shell technology, active intake manifolds in lost core technology, environmentally friendly, metal-free filter element for oil filtration, plastic analyzer, telecommunications system for monitoring conveyors and drying systems

SUCCESS STORY / Plant 6 in Ludwigsburg celebrates production of the two millionth plastic intake manifold manufactured using lost core technology in 1997.

Within just a few short years, the company had successfully implemented an extensive and often difficult program of restructuring and realignment. The tendency to look too far back into the past that existed at the start of the decade had now been replaced by structures equipped to deal with the challenges of the 21st century.

FROM COMPONENT SUPPLIER TO SYSTEMS DEVELOPER

The environmental compatibility of filter products became an increasingly important issue in the 1990s. A new series of dry air cleaners with plastic housing and metal-free filter element was developed with the aim of achieving a low-cost, recyclable complete solution. Similar innovations included oil filter concepts with metal-free filter elements that burn without leaving residues, tests with recycled plastics, and new connections for joining metal

1995

Start of charge filling simulation

A PICTURE IS WORTH A THOUSAND WORDS / This advertising photo from 1993 shows how much air filter dust a bus accumulates over 10,000 kilometers.

and plastic. Improved filter papers with a longer service were another sign of greater environmental awareness. At the end of the decade, MANN+HUMMEL broke new ground with the innovative filter media Multigrade for oil and fuel filters and Micrograde for air filters, as well as with the development of the PreLine and VarioLine fuel filter systems.

In the Industrial Engineering division, along with more efficient filters, three new innovations attracted a great deal of attention. In 1994, an automatic pipeline inspection machine was patented for the automatic cleaning of material conveyors. This was followed in 1995 by a plastic analyzer, which could detect material properties during the production process and therefore improve process reliability. Finally, a telecommunications system was developed for the monitoring of conveyors and drying systems, thus opening up significant rationalization potential for customers.

In line with the corporate strategy, the company undertook the systematic development of its competencies as a systems developer and supplier. MANN+HUMMEL took an important step in this direction with the development of a highly complex plastic part for the engine air intake system in 1991. Other developments followed, focusing on areas such as noise reduction, increased engine power, and lower emissions. Computer simulation processes became an increasingly important feature of research and development after 1993. It was now possible to make statements about resistance, noise radiation, and aerodynamics without the need for costly sample parts.

1996

Start of new centrifuge development

RECOGNITION AT THE HIGHEST LEVEL / In 1996, General Manager Gerhard Brenner receives the Environmental Award of the Federation of German Industries from Federal Environment Minister Angela Merkel and BDI President Hans-Olaf Henkel.

Development times and costs were slashed as a result. The increased effort and investment in systems technology helped MANN+HUMMEL to produce many pioneering innovations. These included integration of the air filter in the cylinder head cover, the thermo-optimized intake system topsys, and an active intake manifold with motor drive. At the same time, the Industrial Engineering division turned its attention to the development of complete system modules after 1994 (see "Systematic research establishes the company as a reliable systems partner to the automotive industry", page 147). The fact that MANN+HUMMEL managed to file patents for no fewer than 165 developments in 1999 is testament to just how quickly and decisively the former filter plant had made the move from supplier of mass-produced products to innovative developer of complex modules and systems.

AWARD-WINNING COMMITMENT TO ENVIRONMENTALLY FRIENDLY PRODUCTION METHODS

Another key area of interest was environmentally friendly production. This involved ensuring the environmental compatibility not just of the products themselves, but also of their manufacture. Having used a contaminant-free impregnating agent for the manufacture of filter inserts for the very first time in 1989, the company was now able to gradually reduce the proportion of harmful components in the synthetic resins used in plastics production by 90 percent, and it did so without any impact on filter functionality. The new quality objectives defined by MANN+HUMMEL in 1993 included the environmental compatibility of products as well as their manufacture. Environmental protection had therefore become an integral part of corporate policy. This philosophy was institutionalized with the decision to introduce an environmental management system at the end of 1996. The consistent environmental focus of MANN+HUMMEL did not go unrecognized. In 1996, the company won the Environmental Award of the Federation of German Industries (BDI) for "oil filter concepts of the future" – receiving the award from the then Federal Environment Minister, Angela Merkel. This was followed one year later by the Volkswagen Environmental Award. Another important step was obtaining DIN EN ISO 14001 certification for the company's environmental management systems. This was achieved in Ludwigsburg, Marklkofen, and Sonneberg in 1998, followed a year later by FILTROS MANN S.A. in Spain, the first foreign subsidiary of Mann + Hummel. More would soon follow.


MANN+HUMMEL
MANN FILTER
MANN FILTER
Continental
Continental
Continental
5B 33968

MERCILESS / The VW New Beetle is subjected to extreme conditions in an endurance test in 1998. The many MANN+HUMMEL components on board are put through their paces.

1997

Active intake manifolds in multi-shell technology, topsys (thermo-optimized intake system), advances in CAE through dynamic strength

THE FALL OF THE BERLIN WALL / Prelude to the reform of the global economy

After 1990, the global economy experienced a number of far-reaching changes. The first of these changes were the fall of the Berlin Wall and German reunification. The collapse of the Soviet Union in 1991 and the political reorientation of Eastern European countries that followed opened up new economic areas stretching eastwards far beyond the newly reunified Germany.

The European Community, which became the European Union with the signing of the Maastricht Treaty in 1992, stepped up the pace of economic integration. The European single market was completed in 1993, and one year later the Agreement on the European Economic Area entered into force. The third phase of the European Economic and Monetary Union saw the introduction of the euro in eleven member states in 1999, though initially not as a general means of payment.

Parallel to this development, all American countries and Asia-Pacific Economic Cooperation (APEC) members decided independently to establish free trade areas in 1994. >>>

NEED FOR ADJUSTMENT – EMPLOYEE BENEFITS AND STAFF NUMBERS REDUCED IN THE AGE OF GLOBALIZATION

Increasing rationalization and automation in production, greater use of computer-aided development tools, and the streamlining of administrative structures meant that the MANN+HUMMEL Group was able to reduce staffing levels. The company was, in fact, forced to reduce staff numbers on account of the decision to hold on to its German locations – and therefore to production in a high-wage country – despite the changed conditions due to advancing globalization.

Those affected were primarily industrial employees in production, for example in Plant 6 and in toolmaking in the Main Plant 1 in Ludwigsburg, as well as in Marklkofen. Severance packages were worked out with the Works Council. These provided generous compensation to make redundancy as bearable as possible for those affected. Wherever possible, the job cuts were implemented by not replacing staff when they retired. Between 1990 and 1999, the number of employees in the MANN+HUMMEL Group fell by 8.8 percent – from 8,550 to 7,800. The effects of the decline were particularly dramatic in Ludwigsburg, a site that had such a long association with the company. Over the course of the decade, the number of employees here fell by almost half.[5]

The company also had to make cutbacks in its pioneering employee benefits. The cutting of travel allowances and the reduction in the Christmas bonus to the collectively agreed rate in 1992 were followed in early 1993 by the abolition of the employee savings scheme. The company pension scheme that evolved from the former pension fund was also adapted to the new conditions. Employees who joined the company after January 1, 1997, could now expect around half of the previous normal pension payments. The era of above-average employee benefits at the MANN+HUMMEL Group had come to an end. Although the then Works Council Chairman Manfred Bär spoke of a “series of significant cuts”[6], which would put the social partnership between management and employees under great strain at times, everyone involved was convinced that the measures were both necessary and correct, even with hindsight.

Many employees also welcomed the opportunity to take the option of semi-retirement introduced by MANN+HUMMEL in 1998 as part of a company agreement – long before this regulation was concluded in a collective agreement and adopted by other companies – and with an exceptionally generous allowance from the company, which increased the payments into the pension fund to 100 percent.

1998

Start of flow simulation

CONSISTENT STEPS TOWARDS THE GLOBAL MARKET

One of the strategic objectives defined at the start of the decade – the focus by the MANN+HUMMEL Group on the global market – was implemented with the same consistency as the internal structural changes. This involved expanding the company's presence in North America and the Far East. The next phase of internationalization began in 1992 with the foundation of FILTROS MANN S.A. DE C.V. in Tlalnepantla in Mexico (since 2003: MANN+HUMMEL MEXICO S.A. de C.V.) and MANN FILTR JIPAP S.R.O in the Czech town of Okříšky / Přibyslavice.

The sales company MANN+HUMMEL PTE LTD. in Singapore was involved in the Processing Engineering division after 1994. It was also responsible for expanding the activities of the MANN+HUMMEL Group in Asia. This strategy proved successful, and by 1996 there was a second sales company in Singapore – MANN+HUMMEL FILTER TECHNOLOGY (S.E.A.) PTE LTD. – as well as a sales office in Shanghai.

>>> These economic policy developments were accompanied by increasing globalization in large multinational firms and the relocation of production facilities to low-wage countries. Global production and procurement strategies therefore led to the rapid internationalization of supply chains. A major contributing factor in this case were advances in container logistics, which significantly reduced transport costs.

The huge potential offered by another technological advance – the Internet – was first recognized in the 1990s. Although rather limited from today's perspective, it nonetheless facilitated and accelerated global communication. It also contributed to an unprecedented increase in the pace and scope of globalization in the last decade of the 20th century.

OUTDOOR ADVERTISING / Advertisements for "MANN FILTR JIPAP" appeared on buses in the Czech Republic in 1998.

1998

Cabin filters for gas/particle filtration, evo-top (screw-on spin-on oil filter), multi-layer filter medium

STRONG BRAND IMAGE / At the 1999 Detroit Motor Show, the new MANN+HUMMEL image helped the company in its strategy to increase market share in the United States.

BY THE WAY / MANN+HUMMEL didn't just develop cabin filters …

… for vehicle air conditioning systems. The company also developed filters for ventilation systems, including high-quality range hoods, just like those you would find in a kitchen.

1999

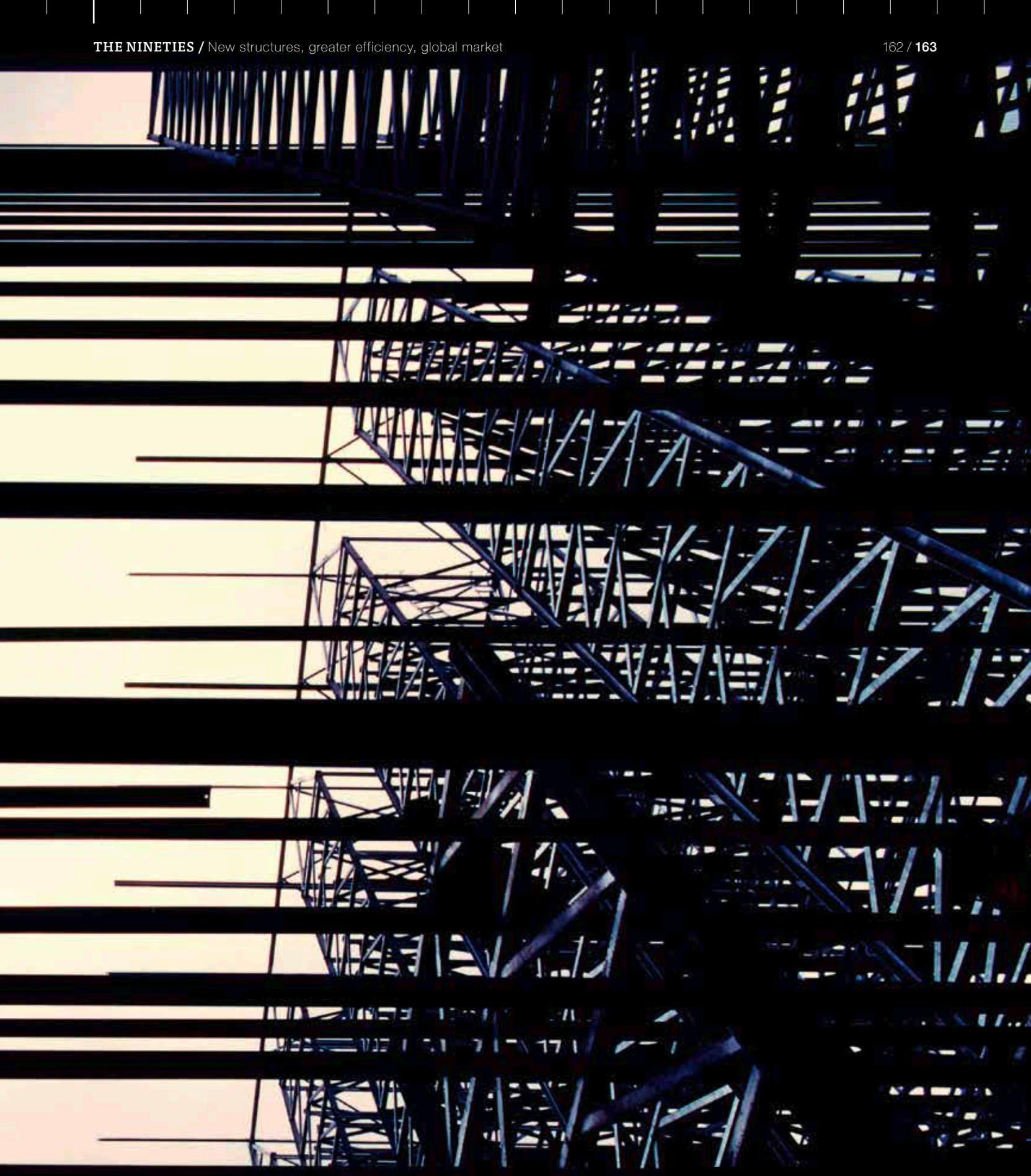
New filter media Multigrade (oil and fuel) and Micrograde (air)

GLOBALIZATION IN ACTION / A shipping crate from Chile arrives in Ludwigsburg.

SQUARING THE CIRCLE / The new MANN+HUMMEL Group logo introduced in 1996 combined modernity and tradition by visualizing the names of the two company founders in a contemporary style.

Following the previous failed attempt at expansion in the US market with the stake in filter manufacturer Aero-Mobile, the company made sure that it was extremely well prepared from an organizational perspective when MANN+HUMMEL INC. was founded in the US state of Delaware in 1994. The aim was to consolidate the company's position in the US market by acquiring stakes in US filter manufacturers. The strategy was successful. Within just a few years, MANN+HUMMEL had gained a permanent foothold in North America. The acquisition of a stake in Universal Dynamics Inc. in Woodbridge, Virginia was followed by the foundation of MANN+HUMMEL FILTER TECHNOLOGY INC., based in Chicago. In 1996, all administration, sales, and design functions in the Automotive segment for the North American market were transferred to the new US headquarters MANN+HUMMEL AUTOMOTIVE INC. in Bloomfield Hills, Michigan. The acquisition of Geiger Technic Inc. in Portage, Michigan, in 1997 created the ideal conditions for the development and production of air filters and intake systems in close proximity to the big automotive manufacturers. Expansion in the United States was completed for the time being with the acquisition of Advanced Filtration Concepts Inc. in Louisville, Kentucky, which provided the Hydromation business segment with access to the US market.

The foundation of MANN+HUMMEL (UK) LTD. in the UK city of Wolverhampton and MANN+HUMMEL FRANCE S.A.R.L. close to Paris in 1999 facilitated expansion of the internationalization strategy to the key European export markets. The increasingly important Japanese automotive market was served by the MANN+HUMMEL JAPAN LTD. sales office in Yokohama, which was founded the same year. By the end of the decade, the MANN+HUMMEL Group had nine locations in Germany and 19 worldwide, with sales of 1.63 billion deutschmarks (see "Locations", page 168).



IMPOSING / The fully automated high-bay warehouse in Plant 6 was one of the most modern of its kind in 1991.

1999

Prototype oil filter for sports cars for Aftermarket and development of the PreLine and VarioLine fuel filter systems

GEOGRAPHICAL CUSTOMER FOCUS / The path to becoming a global player

The globalization strategy of MANN+HUMMEL can be summed up simply as follows: "We are wherever our customers are." This was a principle dating back to the 1950s, which was implemented with the first international production facilities in Argentina and Brazil. Increasing globalization as well as new strategies adopted by automotive manufacturers gave the trend towards internationalization an unprecedented boost after 1990. Vehicle manufacturers reduced their vertical range and the number of suppliers. Suppliers thus played a more important role as module and systems suppliers, although this meant that they also had to increase their range of services in the areas of logistics, development, and assembly. And all of this had to be done just-in-time at the site where the vehicles were produced.

As a consequence of the decision to consolidate the position of MANN+HUMMEL as a systems supplier, the company had to follow the lead of automakers and progress with internationalization. In a corporate strategy drawn up in the 1990s, the globalization of development, production, and sales was the top priority. Like many other suppliers to the automotive industry, MANN+HUMMEL implemented this strategy by buying companies in related sectors, establishing its own subsidiaries, and creating joint ventures. This process gained considerable momentum and continues unabated to this day.

Germany continues to be a key location for the MANN+HUMMEL Group. It is and shall always be the nucleus for innovation and services. Sophisticated products are often developed and produced in Germany before manufacture is transferred to another country. There is, however, one major exception. Plant 4 in Marklkofen is still the largest MANN+HUMMEL production facility – and the world's biggest filter plant.

RECORD INVESTMENT / State-of-the-art production facilities

Research and development and internationalization were not the only areas in which the MANN+HUMMEL Group invested large sums of money. In the 1990s, the company also pressed ahead with an expansion and modernization program for its sites in Germany. In 1990, the testing department commissioned three state-of-the-art engine test rigs in the old boiler house at Main Plant 1 in Hindenburgstraße, Ludwigsburg. To cope with the growing price pressure in the mass market for filter elements, the expansion of Plant 4 in Marklkofen also continued. The inauguration of hall 12 in 1990 gave production capacity another major boost. In 1965, annual filter element production in the Vils Valley in Lower Bavaria was around 9 million units. Output was now over 74 million units annually.

A new electroplating building was constructed in Speyer in 1991. Particular emphasis was placed on an innovative wastewater plant that complied with strict environmental criteria. In the same year, the fully automated high-bay warehouse in Plant 6 was completed. It became the central element of a logistics center for the Product Division for Plastic Filters, in which the material flow for more than 5,500 different parts was organized using state-of-the-art technology.

In 1997, a new distribution and logistics center was established at Plant 2 in Ludwigsburg. In the same year, the MANN+HUMMEL Group, under its new General Manager Dr. Roland Kankowsky, invested a record sum of 126 million deutschmarks in the modernization of the company's infrastructure.

1999

MB 12-cylinder design air filter system, engine compartment and sound design, active intake manifold with motor drive, topsys 2

ANOTHER NEW PRODUCTION HALL / Plant 4 in Marklkofen in 2002.

AIMING HIGH / The high-bay warehouse in Plant 6 in Ludwigsburg has dominated the skyline at this site since 1991.

Roland Hagmann

Head chef in the company cafeteria. He began his career working at fine dining establishments. He then joined MANN+HUMMEL, where he transformed a functional company cafeteria into a company restaurant that set high standards. In his four decades as a chef, satisfied customers were what mattered most to him.

Roland Hagmann was born with a talent and a passion for cooking. His parents ran a restaurant in Talheim near Lauffen am Neckar. Roland followed in his father's footsteps and trained as a chef at the Hotel Zum Elefanten in Heilbronn. He then decided to spread his wings and explore the world of top-class gastronomy. His first stop was the Parkhotel Adler in Hinterzarten. Here he not only learned about fine cuisine, but also got to meet great names such as Olympic medalist Georg Thoma and boxing legend Max Schmeling. After spending some time in Baden-Baden, Roland Hagmann moved on to Bad Schinznach in Switzerland, to a spa frequented by the Duke of Windsor. His travels next took him to Zermatt, where he learned to ski and met his future wife, with whom he eventually moved to a large hotel near Geneva.

His subsequent return to Germany was motivated by purely romantic reasons, as the couple could not marry in Switzerland due to bureaucratic obstacles. The wedding therefore took place in his home town of Talheim. Roland Hagmann could now take over his parents' restaurant.

ALL FIRED UP / When Roland Hagmann joined the company as a chef in 1963, all food was prepared by the workers themselves in the company cafeteria.

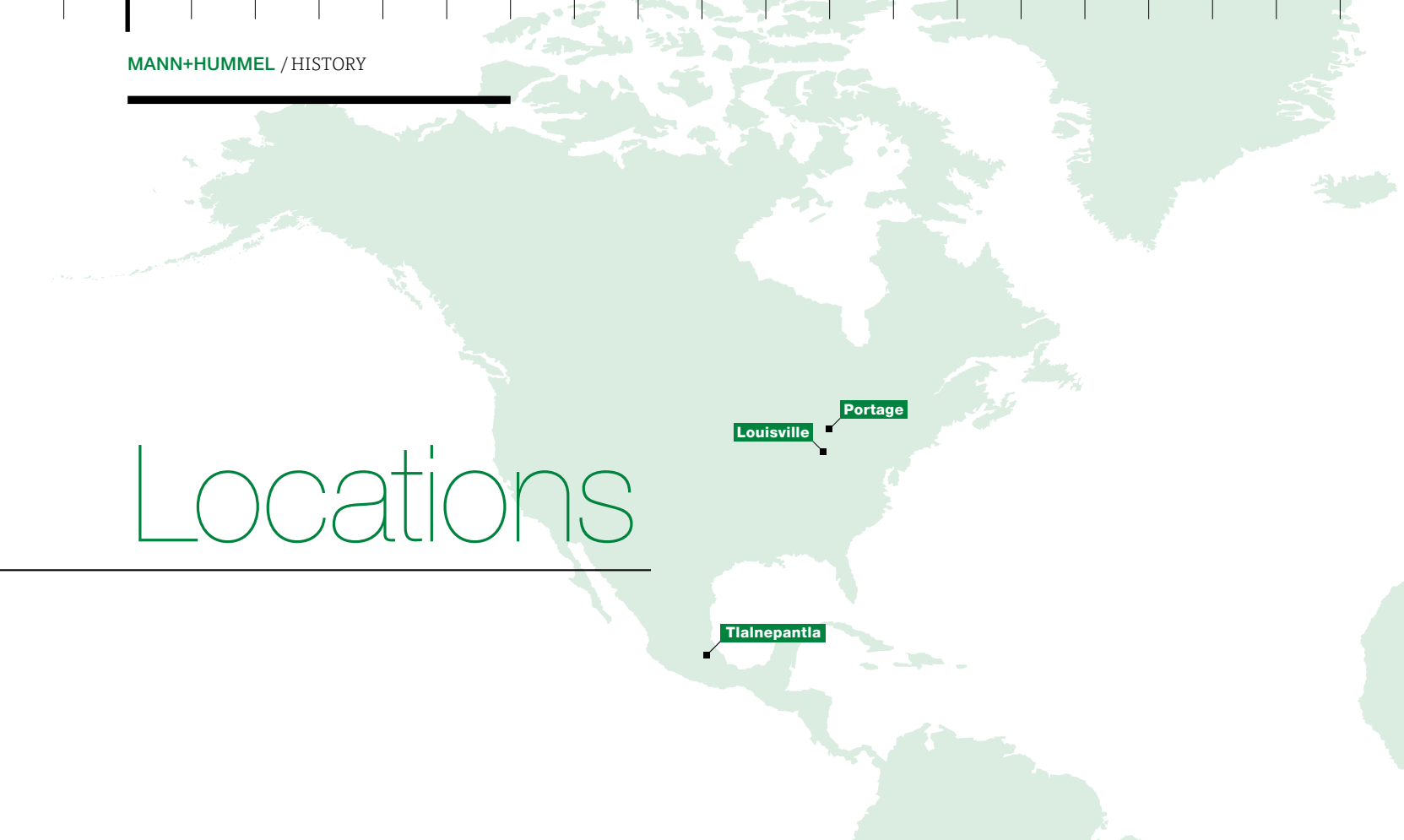
"But times were bad. We would have had to undertake construction and renovation work. It just wouldn't have worked out in such a small village."[7] His former teacher gave him some good advice, however, telling him that MANN+HUMMEL were looking for a chef for the company cafeteria. "I couldn't imagine it at first," recalls Roland Hagmann.[8] But he asked around and heard a lot of good things about the company: "MANN+HUMMEL would be a super place to work. Anyone who gets a job with MANN+HUMMEL is extremely lucky. You would be very well looked after, which would be a good thing."[9] And so Roland Hagmann began working at the company as a chef in 1963. He quickly learned that his cooking skills weren't the only requirements for the job. "There was so much to learn – kiosks, selling snacks, drinks, cooking, many different plants and locations – I had to know it all. It was an enormous organization."[10] The cafeteria kitchen in Ludwigsburg even supplied the FILAP plant in Speyer with food for an entire year. The reason for abandoning this practice had nothing to do with logistics, however. The workers from the Palatinate didn't like the Swabian food and ate frozen dinners instead.[11]

At the time, around 900 meals were freshly prepared every day, the company even had two in-house butchers. The company cafeteria had its own accounts and was run like a business within the company. Roland Hagmann brought his experience from top-class gastronomy into the company cafeteria, which was renamed as a restaurant soon thereafter. He also acted as an advisor in gastronomic and organizational matters to the Marklkofen, Speyer, and Sonneberg sites. His involvement in activities outside of the workplace were further proof that he was the ideal man for the job. Roland Hagmann took his master chef exam and achieved top marks, became Chairman of the Examining Board of the Association of Master Chefs, and won several gold medals for his legendary cold platters.

When Roland Hagmann retired in 2002, having worked as a chef for almost 40 years, he was happy with what he had achieved: "I really enjoyed my time at MANN+HUMMEL and I am still very proud of the company."[12]

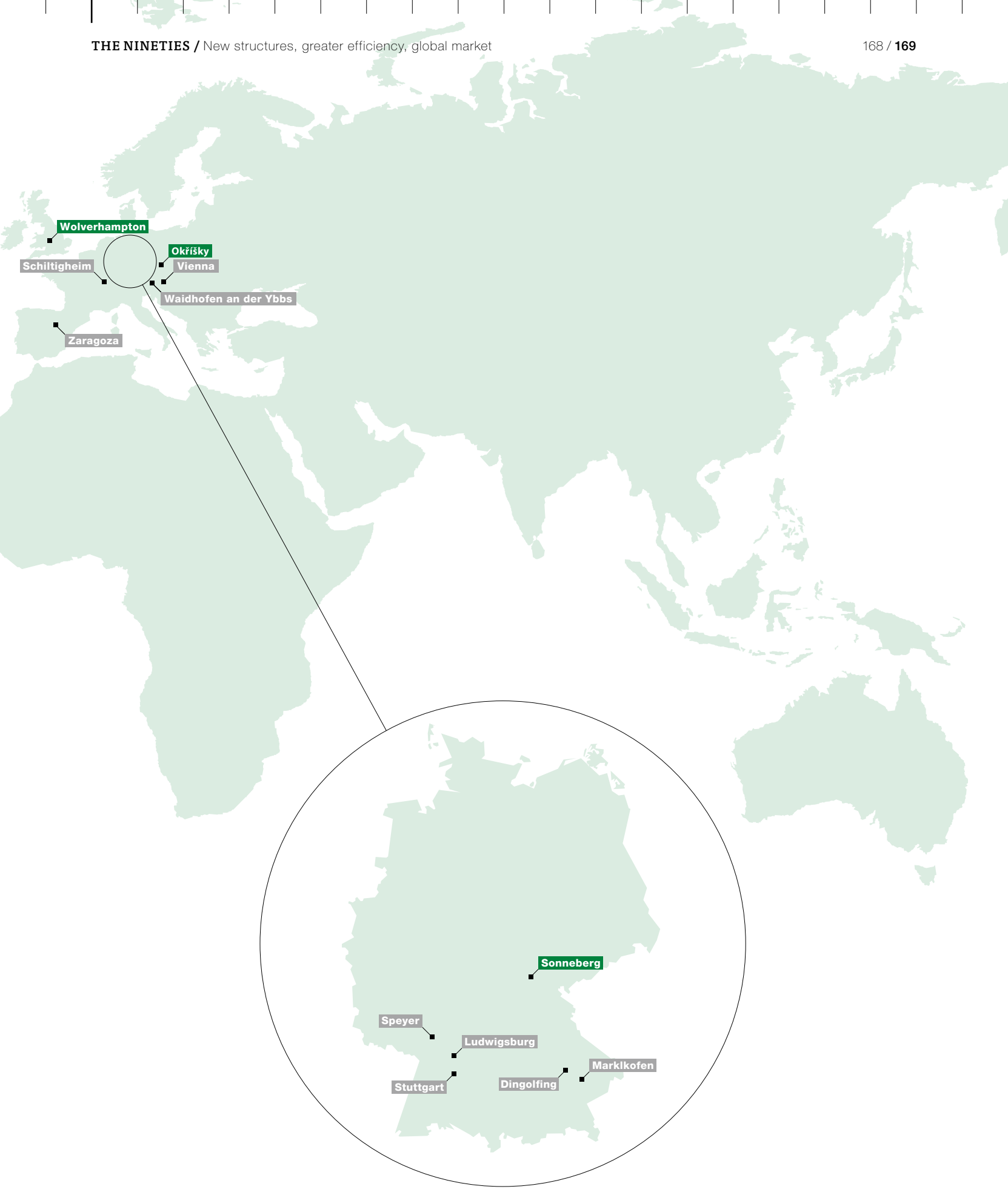
ROLAND HAGMANN 2015 / At home, his favorite dish is traditional Swabian roast beef.

Locations



UNRECOGNIZABLE / Major investment transformed the former Plasta Sonneberg GmbH plant into a state-of-the-art production site. This photo shows the plant in 1995.

GERMANY / Sonneberg Plasta Sonneberg GmbH, a state-owned enterprise in the former East German town of Sonneberg, was taken over by the Treuhand in 1991 and renamed MANN+HUMMEL KUNSTSTOFFTECHNIK GMBH + CO KG. The favorable geographical location offering proximity to key customers, skilled workers, and technical inventory were decisive factors in this move. With investment to the tune of 43 million deutschmarks, the plant was expanded over the next three years into a center for non-filter plastic parts. Of the more than 60 buildings that originally stood on the site, some of which were completely dilapidated, only three factory halls and one storage building remained. Two modern production halls and an administration building were constructed. The 10-year anniversary of the Sonneberg site was certainly a cause for celebration given what it had achieved: “Working conditions in the new workshops had changed beyond all recognition from the ‘Plasta’ days.”[13] The Sonneberg site quickly became an international leader in the Product Division for Non-Filter Plastic Parts within the MANN+HUMMEL Group. Consequently, sales grew from 15 to 145 million deutschmarks in the first decade following the takeover, while the number of employees rose from 180 to 460. Today there are around 450 people working in Sonneberg, producing mainly intake manifolds, air filters, acoustic components, cylinder head covers, and crankcase ventilation systems in a three-shift operation.


Wolverhampton
Okříšky
Schiltigheim
Vienna
Waidhofen an der Ybbs
Zaragoza
Sonneberg
Speyer
Ludwigsburg
Marklkofen
Stuttgart
Dingolfing

Locations

FOLLOWING THE CUSTOMERS TO THE MARKETS / Filtros MANN S.A. DE C.V., founded in Mexico in 1995, is a reflection of this strategy.

GREENFIELD SITE / In the UK city of Wolverhampton, MANN+HUMMEL (UK) LTD. moved into a newly constructed plant building in the year of its foundation, 1997. The photo shows the laying of the foundation stone in the fall of 1996.

MEXIKO / Tlalnepantla Together with the former Mexican licensee, MANN+HUMMEL founded FILTROS MANN S.A. DE C.V. in the Mexican city of Tlalnepantla in 1992. This move was prompted by the growing importance of Mexico as a location for automotive production and the possibility of gaining a foothold in the NAFTA (North American Free Trade Area) region. Following a complete takeover and renaming as MANN+HUMMEL MEXICO S.A. de C.V. in 2003, the company relocated to Santiago de Querétaro, where it now employs over 800 people and produces mainly air filters, air lines, reservoirs, oil filters, cabin filters, transmission oil filters, oil separators, air filter elements, and oil filter elements.

CZECH REPUBLIC / Okříšky To access the markets of Eastern Europe, MANN FILTR JIPAP S.R.O. was founded in the Czech town of Okříšky / Přibyslavice in 1992. Later renamed MANN+HUMMEL (CZ) s.r.o., the company employs almost 1,000 people and produces intake manifolds, air filters, oil filters, fuel filters, air filter elements, transmission oil filters, and crankcase ventilation systems. In 2014, more than 7 million fuel and oil filter elements were dispatched from the 125,000 square meter site.

EASTWARD EXPANSION / After the fall of the Iron Curtain, MANN+HUMMEL expanded into Eastern Europe, setting up its own production facilities. The expansion process began in 1996 with MANN-FILAP JIPAP Okříšky in the Czech Republic, now MANN+HUMMEL (CZ) s.r.o.

UNITED KINGDOM / Wolverhampton The foundation of the wholly owned subsidiary MANN+HUMMEL (UK) LTD. in Wolverhampton in 1997 was consistent with the company strategy of going where the customers are. The company operates out of a production facility that was constructed in 1997 and currently employs around 230 people, producing air filters, air lines, intake manifolds, oil filters, and reservoirs for the UK automotive industry.

USA / Portage, Michigan MANN+HUMMEL gained access to the crucial US automotive market with the acquisition of established automotive supplier Geiger Technic Inc., based in Portage, Michigan, in 1997. Now trading as MANN+HUMMEL USA, Inc., the company currently produces more than two million intake manifolds annually, along with air filters and reservoirs.

USA / Louisville, Kentucky The Hydromation business segment made the big leap across the pond in 1998 with the acquisition of Advanced Filtration Concepts Inc., based in Louisville, Kentucky. Operations at this site were discontinued with the sale of Hydromation in 2011.

The 2000s

"We are wherever our customers are.

Internationality

is the only way forward."

General Manager Alfred Weber,
Interview on November 6, 2014

Concentration, restructuring, systems supplier

CUTTING COSTS AND ENSURING FUTURE VIABILITY. In order to remain competitive in the face of advancing globalization, MANN+HUMMEL once again stepped up its efforts in the areas of innovation, the streamlining of processes, and internationalization. The subsequent financial and economic crisis necessitated a difficult balancing act between cutting costs and ensuring future viability. Having successfully met both of these requirements, the company emerged from the crisis stronger than before, ready to face the future with clear strategies, new international locations, and new business units.

The new millennium dawned without incident despite the many fears of what might happen on January 1, 2000. However, in September 2001, a completely unexpected terrorist attack shook the world to its core. 9/11 marked the beginning of a new era. Other big changes were also happening around the world. China, the sleeping giant, woke up, and so began a period of unprecedented economic growth that spread throughout Asia. The launch of the iPhone in 2007 revolutionized communication around the globe. A revolution of a different kind was the “Arab Spring”, which brought not only democracy, but also civil war and terrorism to many countries in the Arab world. By 2010, a growing debt crisis was affecting a number of countries in Southern Europe, most notably Greece. And we cannot forget the events that saw unrest in Ukraine develop into violent clashes. Since the new millennium began, our planet has become a more unstable and unpredictable place.

LOGISTICS CENTER IN NIEDERAICHBACH / 75 million parts are handled here every year.

2000

Development of fully synthetic nonwoven-based air filter elements (Micrograde N)

2000

Active Noise Control

CONTINUED EXPANSION UNDER NEW MANAGEMENT

The new decade – and the new millennium – began in much the same way as the last, with personnel changes at management level. On November 1, 2001, Dr. Dieter Seipler succeeded Dr. Roland Kankowsky as President and CEO. One year earlier, the new Chairman of the Works Council, Walter Mugler, replaced Manfred Bär on the Supervisory Board. A further change came in 2002 when Thomas Fischer, who represented the interests of the Mann family, succeeded Dr. Gerhard Wacker as Chairman of the Supervisory Board, a position that he still holds today.

It wasn't long before the new management team faced its first big challenge. Advancing globalization, the associated consolidation process in the automotive sector, and greater transparency with regard to pricing further intensified competitive pressure on suppliers. MANN+HUMMEL had to once again face the challenge of cutting costs and increasing efficiency.

The first step toward this goal was taken in 2002 with the opening of a new logistics center in the Lower Bavarian town of Niederaichbach. The center currently supplies mainly the global aftermarket with filters from nearby Marklkofen. In 2014, around eight million units were stored on a site covering more than 34,000 square meters, and annual throughput exceeded 75 million units.

The new Management Board continued the strategy of expansion in Asia. In 2001, SHANGHAI MANN+HUMMEL FILTER CO LTD was established in China as a joint venture with Shanghai Automotive and Industrial Corporation (SAIC). In 2002, production of air filter systems and filter elements began, making it the first MANN+HUMMEL manufacturing company on Asian soil. MANN+HUMMEL FILTER TRADING (Shanghai) CO LTD looked after sales. Local customers at the time were VW and General Motors. Not long afterwards, General Manager Dr. Dieter Seipler explained the underlying strategy during a speech at IAA 2003: "With just one filter change a year and a market share comparable to that in Europe or South America, the market potential is enormous. MANN+HUMMEL intends to and indeed must unlock this enormous potential. As a first step, we are following our traditional customers into these markets and manufacturing the same products locally that we produce in Europe or the United States."[1] This strategy also led to the establishment of a sales company in Australia. By the end of 2002, the MANN+HUMMEL Group had 38 locations in 16 countries. This was just the start of more intensive internationalization activity over the years that followed, which saw the addition of many more locations (see "Locations", page 192).

DEPENDABILITY, CONTINUITY, AND IDENTIFICATION / MANN+HUMMEL as a family-led company

The decision to establish MANN+HUMMEL as a family-led company 75 years ago did not result from a lengthy discussion about strategy. Circumstances and conditions at the time meant that there was no other alternative. However, the fact that the company has remained in family ownership to this day is very much due to the will of the company founders and their descendants. During their lifetime, Adolf Mann and Dr. Erich Hummel had put wide-ranging and prudent measures in place to ensure that this would be the case. The Mann and Hummel families therefore still each own half of the company. They vote at regular general meetings. The two family representatives play a crucial role in this arrangement, which has worked for many decades. They speak on behalf of their respective family with one voice. Management and the Supervisory Board deal with only two individuals, whose opinions are both representative of and binding for all partners. >>>

2001

Development of a multicyclone component for crankcase ventilation systems and of a module for the complete air intake system in the commercial vehicle sector

The balance sheet for 2002 showed that the Mann+Hummel Group was still in good shape despite the challenging global economic environment. Sales broke through the billion euro barrier for the first time (1.128 billion euros), representing an increase of 12.1 percent over the previous year. These good results were partly due to the biggest acquisition in the company's history with the purchase of the Air Induction Systems and Technical Parts (AIS/TP) business from the Belgian Solvay Group.

GROWTH THROUGH EFFECTIVE EXPANSION

Solvay Automotive, which had locations in Belgium, France, Germany, the United Kingdom, Spain, Brazil, and the United States, was involved primarily in the area of intake systems. For MANN+HUMMEL, it was extremely important that the customer structure and market presence of both companies complement rather than conflict with one another. In Europe, this acquisition strengthened the company's presence in the key markets of Spain and France. In the United States, the company was able to further develop business relations with existing Solvay customer, General Motors.

Both companies also benefited from a technological perspective. The acquisition of Solvay gave MANN+HUMMEL access to blow molding technology. This technology is ideally suited to the manufacture of air conveying plastic parts or of brake fluid and water reservoirs. With an expanded product range, MANN+HUMMEL now covered the complete air intake system from the air intake to the engine. This represented an important step on the company's continuing journey to becoming a systems provider.

CLEAR GOALS AND NEW STRUCTURES ACCELERATE THE PACE OF INNOVATION

The company management pursued a dual strategy, which Dr. Dieter Seipler summarized as follows: "We are consistently pursing the strategy of becoming a qualified module manufacturer, with a view to positioning ourselves at the next level in the supplier hierarchy. At the same time, we need to retain and strengthen our competence in our core market."[2] In pursuit of this objective, a new corporate strategy was drawn up in 2002. The "Success through filtration – attractive, competent, dynamic" mission was centered around three objectives – innovation in the sense of a competitive edge, globalization in the sense of growth, and focus on results in the sense of increasing the value of the company.[3] A system of three development stages was introduced to further accelerate the pace of innovation. Innovation management, advanced development, and product development channeled development activity and thus contributed to better efficiency. Special competence centers for specific segments were set up at a number of locations, including Marklkofen. It is here that cabin filters were developed for series production – in the immediate vicinity of the production line.

MANN+HUMMEL has since introduced a host of new innovations to meet increasing demands in the area of environmental protection. Noteworthy in this respect are new filter technologies for biofuels as well as electric and hybrid vehicles, high-performance particulate filters, and entry into the water filtration segment (see "Leadership in Filtration", page 182).

PROMISING BUSINESS AREA / Plants like this ultrafiltration plant for water filtration will help to provide sufficient life-saving, clean water.

›››Although stock corporations have faster access to borrowed capital, as a family-led company, MANN+HUMMEL benefits from dependability and continuity. All stakeholders, owners and employees, customers and suppliers, local communities and banks, can rely on the fact that the short-term profit expectations of anonymous stockholders will never be the main focus of the company's philosophy and policy. Preserving the family business is what matters most. "For the owner families, MANN+HUMMEL is a legacy to which they are committed," explains Thomas Fischer as he describes the family motto, adding: "The current partners see themselves as trustees for future generations, just as their forebears did."[4]

This conviction is borne out by a strong personal connection with the company on the part of the owners. It is also evident in the marked restraint when it comes to the taking of profits, which are essentially used to pay taxes. This attitude was of critical importance after 2008 during the economic and financial crisis, when the partners made a valuable contribution to the company's survival of the crisis by not taking profits.

As far as Thomas Fischer is concerned, there is no question that MANN+HUMMEL will be able to meet future challenges as a family-led company. "The owner families will remain reliable partners and will safeguard the future of the company."[5]

HITTING THE BRAKES BEFORE TAKING OFF / Emerging from the crisis stronger than before thanks to a dual strategy

The financial and economic crisis had a major impact on the automotive industry after 2009. MANN+HUMMEL was also affected. Between the fall of 2008 and the summer of 2009, sales declined by around 12 percent, while profits fell by 30 percent. Nobody could predict if and when the economy would recover. The situation forced management to take quick and decisive action. The result was the development of a dual strategy for dealing with the crisis. On the one hand, MANN+HUMMEL had "switched to crisis mode"[6] and examined all areas of the company with respect to their savings potential. The LEO (Lean and Efficient Organization) optimization project helped the company to reduce material costs, capital costs, personnel and nonpersonnel costs in production and in indirect areas. Planned mergers and takeovers were also postponed. The reasons for and objectives of these measures were communicated to an anxious workforce in an open letter from management and in special pages in FILTERMEDIA.[7] On the other hand, the dual strategy also focused on the aftermath of the crisis. In his open letter, Dr. Dieter Seipler wrote: "Our highest priority is to maintain liquidity and have a positive cash flow. […] We must then focus on the period following the crisis and be ready to work with our customers in order to take full advantage of the recovery."[8] A key pillar of this strategy was to continue with the intensive research and development activity. Expenditure in this area remained high. The globalization strategy to access new markets outside Europe and the efforts to gain a foothold in other filtration business areas also continued apace. For these reasons, General Manager Manfred Wolf announced right in the middle of the crisis that MANN+HUMMEL intended to increase investment in the growth area of water filtration.[9] The company recovered from the crisis faster than many had expected. In 2009, Dr. Dieter Seipler had declared another objective: "MANN+HUMMEL intends to be one of the first companies to have the strength and the employees to grow after the crisis."[10] By 2011, his successor, Alfred Weber, announced Group sales of 2.47 billion euros. This represented an increase of around 35 percent compared with 2008.

SOCIAL RESPONSIBILITY / In 2001, MANN+HUMMEL donated a Smart car to the Ludwigsburg Diakonie- und Sozialstation, a welfare organization.

2002

Secondary air charger, air filter with welded on clean air duct, cabin filter, and anti-snow system for commercial vehicles

SELECTIVE CATALYTIC REDUCTION / Urea filters for commercial vehicles reduce emissions by up to 80 percent and allow compliance with increasingly stringent emission limits.

BY THE WAY / Electric vehicles ...

... require more than just cabin filters for an ideal climate. An ultracompact degassing unit from MANN+HUMMEL protects high-voltage batteries, for example in the BMW i3, as pressure compensation, water protection, and emergency degassing to prevent explosions.

THE INEVITABLE DOWNSIDE OF GLOBALIZATION

Continuing cost pressure, investment in new products and markets, and the rationalization of production processes once again necessitated an examination of staffing costs. In 2003, management terminated an agreement for the payment of anniversary bonuses to employees with many years of service. This move led to a bitter dispute between the Works Council and company management. A company-wide petition organized by the Works Council eventually led to the anniversary bonuses being retained – albeit at a reduced rate. The almost simultaneous announcement of plans to relocate production of sheet metal air filter housings from Ludwigsburg to Brazil and South Africa, which would result in the loss of 250 jobs at the company's headquarters, led to intensive discussions. After months of negotiations, acceptable solutions were worked out with the Works Council. However, this could not conceal the fact that MANN+HUMMEL was finally having to face the harsh reality of the globalized 21st century. In another significant move, the company legally changed its name from Filterwerk Mann + Hummel GmbH to MANN+HUMMEL GmbH, ending a tradition that had existed since 1941.

2003

Charge air ducts made from plastic, electromagnetic swivel drive for fast switching flap, first oil module made from plastic goes into production, intake module with active intake manifold and Continuous Variable Tumble System (CVTS), Toyota Yaris intake manifold, ProVent oil separator (Industrial Filters)

THE MANN+HUMMEL MANAGEMENT SYSTEM AS PART OF A RENEWED CORPORATE STRATEGY

A change of an entirely different kind was introduced in 2003 with the launch of the MANN+HUMMEL Management System MMS. The Continuous Improvement Process (CIP) that was already in place was expanded, adapted to the needs of the company, and implemented under the name MMS. The stated objective was increased efficiency and effectiveness through a greater focus on employees, customers, and competitors in all areas of the company. What made MMS different was the fact that it included not just production, but all business processes. It led to the launch of the Office Excellence project for process optimization in administrative areas. Studies had shown that 70 percent of customer complaints were due to administrative processes. The objectives of "Office Excellence" were therefore improvements in punctuality, speed, and quality in administration, stronger customer focus, a reduction in waste, and improved transparency.

Pilot projects with the MANN+HUMMEL Production and Logistics Management System (MPLS), which now incorporated more knowledge gained from the Toyota Production system (TPS), were started in Marklkofen, Speyer, Sonneberg, Wolverhampton, and Okříšky.

An increasing number of divisions were integrated in MMS as a result. Employees received regular updates about current projects in the employee magazine FILTER-MEDIA, and were encouraged to submit their own ideas. The program was updated in the years from 2010 to 2012. Particular emphasis was placed on quality, which was integrated in the continuous improvement process more strongly than before. More and more employees were trained as quality management specialists. In development, the Design for Six Sigma method was introduced with the aim of developing products and processes that were as free from defects as possible. An important change implemented with the MMS update was the development of six main modules as well as 22 global standardized core procedures. These were used to create 100 procedures, replacing over 1,000 existing guidelines and work instructions. Two years later, company management found itself having to once again make adjustments and concessions: "It quickly became clear that MANN+HUMMEL was too complex to be represented in just six modules. However, this model had already required extensive resources and a lot of patience and was therefore eventually restructured into an MMS with a process landscape."[11] The new and improved MMS was subsequently rolled out worldwide. As a key element of the Group strategy, it controls all essential processes at MANN+HUMMEL worldwide.

SIGN OF COMMITMENT / Reunions for retired employees

When Adolf Mann held the first reunion for retired employees in 1961, neither he nor anyone else had any idea that he was establishing what would become a lasting tradition. 68 former employees, from machine operators to master craftsmen and managers, attended the gathering in the company cafeteria. The retired workers were told about current developments in the company and had a chance to catch up over a meal and a few drinks. Since then, the annual reunion for retired employees has been a permanent fixture in the company calendar. In Ludwigsburg, the event is now held at Forum am Schlosspark and is regularly attended by hundreds of former employees. One of the Management Board members is usually present along with the President of the Supervisory Board, Thomas Fischer. Just like the first reunion back in 1961, the event isn't just about providing information, but is an opportunity to share knowledge and personal experiences, and demonstrates the continuing bond with MANN+HUMMEL beyond retirement. The concept was enthusiastically taken up by other locations. Reunions for retired employees are now held at all MANN+HUMMEL Group locations in Germany and have proven to be very popular.

2000 – 2016

LEADERSHIP IN FILTRATION. IMPROVING THE TRIED-AND-TESTED AND DEVELOPING NEW BUSINESS AREAS /
MANN+HUMMEL further intensified its efforts in the area of innovation at the start of the new millennium. In the automotive sector, the focus was on filter solutions that would support increasingly powerful engines with lower consumption and reduced environmental impact. Complex intake systems with a modular design were ideally suited to these requirements. Cabin air filtration became just as important as filter elements for electric vehicles. In the Industrial Filtration Business Unit, MANN+HUMMEL also focused on innovation in the area of building filtration. A new area of development was water filtration.

Another element of the Group strategy was the systematic formulation of corporate goals. From 2007 onwards, this was implemented in the Global Leadership with Filtration in Liquid and Air Systems vision and expressed the Success through Filtration corporate mission in concrete terms. Strategic steps aimed at fulfilling the mission were formulated in 2008. For example, the entire business was to "… double EBIT (earnings before interest and taxes) by 2015 and focus attention on continued globalization".[12]

BANK COLLAPSE WITH GLOBAL CONSEQUENCES

The fact that even the best strategy can be taken down by factors beyond a company's control became painfully clear in September 2008, when the collapse of US investment bank Lehman Brothers triggered a global financial and economic crisis. The main reason for the collapse was a speculative bubble in the US housing market, which had prompted a sharp rise in interest rates for interbank loans a year earlier. The Lehman Brothers bank was the biggest and best known casualty of these developments. It is thanks to quick and prudent action by many governments that the Lehman collapse did not lead to a global meltdown on the scale of the 1929 crash. Many banks were bailed out with state financial aid, with some even being nationalized or wound up. It was hoped that low central bank interest rates would ensure that companies could continue to secure adequate financing. However, the impact on the global economy could not be avoided. Many companies fell victim to the economic downturn, among them General Motors. This long-established US company was forced to file for bankruptcy in 2009.

In Germany, the Federal Government introduced a stimulus program. The most high profile element of this initiative was the scrappage program. Anyone who scrapped their old car would receive a government bonus when buying a new car. Extensive short-time working arrangements were also introduced. These allowed companies to respond quickly to the crisis without the need for any redundancies. These measures proved to be successful. By 2010, there were clear signs of recovery in the German economy. By 2011, sales and earnings had returned to pre-crisis levels.

However, the financial crisis was not yet over. In 2009, Europe was hit by yet another problem – the sovereign debt crisis. A number of Southern European countries, most notably Greece, were no longer able to service their debts. Measures such as the establishment of the European Stability Mechanism (ESM) – better known as the bailout – along with interest rate reductions and the purchase of government bonds by the European Central Bank stabilized the situation, which had by now developed into the eurozone crisis. The one exception was Greece, which continues to struggle to avoid national bankruptcy.

Like all companies in the automotive sector, MANN+HUMMEL was badly affected by the financial and economic crisis. However, quick, consistent, and strategically well thought out action helped the company to minimize the effects of the crisis and prepare for its aftermath (see "Hitting the brakes before taking off", page 178).

GLOBAL FAMILY-LED COMPANY / The MANN+HUMMEL Group today employs around 16,000 people at over 60 locations worldwide.

UNIFORM RULES AND CLEAR VALUES UNDERPIN THE COMPANY'S SUCCESS

Before the outbreak of the financial and economic crisis, MANN+HUMMEL had been working on a measure that took on an even greater significance in the face of increasing internationalization – the formulation of internal and external essential values and a code of conduct. Serious corruption allegations against other companies made this quite an explosive issue. A detailed code of conduct that was to be applied across the entire Group was therefore drawn up in 2008. The set of guidelines comprised two parts – the Code of Conduct and the Social Charter. In 2009, the Code was communicated in detail and management worldwide was provided with training to give them a better understanding of the new rules. This process kicked off with a comprehensive article in FILTERMEDIA and stated unequivocally, with reference to the ongoing media debate: "It is therefore crucial that we are resolute in implementing the Code. MANN+HUMMEL takes this issue very seriously."[13] The fact that the MANN+HUMMEL Code remains a central pillar of our corporate strategy and identity to this day illustrates just how seriously this issue was taken by management. While the Code of Conduct covers mostly general topics such as conduct and leadership principles, environmental, health, and safety issues as well as antitrust and anti-corruption regulations, the Social Charter deals mainly with issues in relation to labor law and the principles of social responsibility. In the event of a query or infringement, employees can consult their line manager as well as an external ombudsman or the local employee representative organization. Our stated objective with this Code – "to set a global standard that unites everybody at MANN+HUMMEL"[14] – has been met.

2004

World's first full plastic charge air duct with MANN+HUMMEL Adiun coupling, world's first urea filter with compensating elements for exhaust gas aftertreatment system (SCR system), world's biggest commercial vehicle plastic air filter with dust preseparator

REASON TO CELEBRATE / In Brazil (Contagem City, Betim), a milestone anniversary was celebrated in 2014. 60 years earlier, MANN+HUMMEL had awarded its first licenses in Brazil and thus laid the foundations for the later establishment of MANN+HUMMEL Brasil Ltda.

At the beginning of 2010, Alfred Weber took over as President and CEO of MANN+HUMMEL. He had spent many years as President and General Manager of a US automotive component supplier. As a graduate of Harvard Business School's Advanced Management Program, he was the ideal person to take the reins in difficult economic times. Apart from steering the company through the economic crisis, he had another long-term goal: "How can we achieve a balance between short-term improvements in earnings and shaping the long-term future of the company?"[15]

The answer to this question came in the form of further development of the corporate strategy. The result was a clearly defined vision: "Global Leadership in Filtration – we want to become the number one in our markets." The strategy encompassed all divisions, products, customers, and regional markets. It was based on a reformulation of the traditional values of the family business – Focus, Integrity, Leadership, Teamwork, Excellence, and Respect, or FILTER for short. The aim of the strategy was to define a vision for the next eight years and to implement it in action plans for today. Strategy 2018 described a means of doubling sales to 3.4 billion euros compared to the crisis year of 2009 by increasing activity in growth markets.

2006

MANN+HUMMEL symposer for sound design in turbocharged engines, world's first modular intake manifold, first plastic injection molded cabin filter

STRATEGY FOR THE FUTURE. SECURING FURTHER GROWTH THROUGH ACQUISITIONS AND NEW BUSINESS AREAS

An important step toward this objective was taken in 2013 with the takeover of the Bosch stake in the Purolator joint venture, which had been operated jointly since 2006. The business continued to operate under the well-known Purolator brand name. This acquisition strengthened the presence of MANN+HUMMEL in the North American Free Trade Area (NAFTA). The production and aftermarket offerings of both brands for vehicle and industrial filters complemented one another perfectly.

Preparations for the entry into a promising new business area – water filtration – had already been made. Water filtration had become a hugely important issue on account of pollution and climate change, and presented MANN+HUMMEL with both a challenge and an opportunity, particularly in Asia. MANN+HUMMEL FILTER TECHNOLOGY (S.E.A.) PTE. LTD, Singapore, which is also headquarters to the Water Filtration Business Unit, did pioneering work in this area with the development and production of ultrafiltration membranes. The General Manager explained their role in 2009: "We have a sociopolitical as well as a commercial responsibility to apply our technical and financial expertise in this area and establish a market position in this important additional field."[16] A further step toward achieving this objective was taken in 2014 with the acquisition of a 50 percent stake in MICRODYN-NADIR GmbH in Wiesbaden, which is responsible for the marketing of water filtration systems. In 2015, MANN+HUMMEL increased its stake in MICRODYN-NADIR to 100 percent.

2014 saw the expansion of the Industrial Filtration Business Unit with the acquisition of Swedish-based Vokes Air, which specializes in filtration solutions for indoor and process air. MANN+HUMMEL thus gained not only expertise in this area, but also access to another global growth market, in line with the corporate strategy.

WAY OUT OF THE CRISIS / In July 2009, FILTERMEDIA provided detailed information about the strategy for managing the crisis and safeguarding the future.

HIGH-PERFORMANCE SYSTEM / This intake manifold has been supplying Audi and Volkswagen 2.0 liter TFSI engines with air since 2014.

2007

First diesel fuel filter made from plastic, first cabin filter (OE) with internally manufactured combination medium, world's first intake plenum with concealed weld seam, design of cyclone cell dust preseparator integrated in the intake manifold for commercial vehicles

Thomas Fischer

Guardian of the family tradition. During his childhood in Ludwigsburg, Thomas Fischer's grandfather was already an institution. And MANN+HUMMEL was a flourishing company on its way to becoming a global player. The company was a regular topic of discussion at his grandparents' house, particularly as his father was General Manager at the time. Nevertheless, Thomas Fischer, grandson of Adolf Mann and son of Dr. Hermann Fischer, decided to strike out on his own at the start of his career. The experience that he gained served him well when he later returned to the family business as representative of the interests of the Mann family and Chairman of the Supervisory Board of the MANN+HUMMEL Group.

Thomas Fischer still has fond childhood memories of his grandfather. "He was always there, but more as a family icon than a playful grandfather."[17] He always had a deep-rooted sense of responsibility toward the company and of the high standards to be followed by the entire family. After leaving school, Thomas Fischer took his father's advice and trained as a bank employee before earning a degree in business administration from the University of Mannheim. His education in numbers and balance sheets also taught him a great deal about himself: "I learned that I enjoy working with people and am good at facilitating discussions, finding compromises, and bringing the right people together."[18] He then went on to hold managerial positions in the automotive and supplier industry in countries including Korea and the United States. Armed with this experience, Thomas Fischer joined the Supervisory Board of MANN+HUMMEL in 1997. Three years later, he was appointed as representative of the interests of the Mann family, a role in which he acts as a vital link between management and the owners. At the beginning of 2002, he was appointed as Chairman of the Supervisory Board.

2008

First broadband silencer for two-stage turbocharged engines, world's first metal-free oil filter element with integrated return stop membrane

Since then, Thomas Fischer, who is a full-time director with a number of midsize companies, is usually in Ludwigsburg every two weeks. His schedule involves meetings with management as well as discussions with advanced development engineers, auditors, and banks. Just as important to him, however, are the meals that he shares with people from all areas of the family-led company during his visits, which have earned the nickname "Fischer dinners". "These intensive discussions covering a wide range of issues keep me up to date with developments in relation to employees, technology, culture, and day-to-day operations at MANN+HUMMEL. I don't get involved in operational issues."[19] Thomas Fischer, in his capacity as Chairman of the Supervisory Board and representative of the family interests, sees himself as more of an advisor, helping to define the strategic direction of the company. As a well-connected mediator, committed business partner, and outspoken sparring partner of management, he follows his grandfather's tradition in the pursuit of one primary objective: "Our aim is to ensure that MANN+HUMMEL remains a financially sound family-led company that is entirely independent from banks and that puts people first."[20]

FREQUENT VISITOR / Thomas Fischer visits MANN+HUMMEL Brasil Ltda. in 2014 to mark the 60th anniversary of MANN+HUMMEL's presence in the largest country in South America.

THOMAS FISCHER GIVES THE MANAGEMENT BOARD A FACE AND VOICE / As Chairman of the Supervisory Board and representative of the interests of the family, he attends factory visits, reunions for retired employees, trade fairs, and family days, as well as company dinners.

2009

World's first air-exhaust mixer on the suction side made from plastic

2010

Oil module for commercial vehicles with integrated highly efficient oil separator and synthetic filter element

CHOICE AND OBLIGATION

Awards Certificates

The extraordinary achievements of MANN+HUMMEL in a wide range of areas have been recognized with many awards and prizes. Since the company was named "Supplier of the Year" by General Motors in 1993, many more awards have followed. In the last five years alone, MANN+HUMMEL has won the following awards:

VOLVO CARS QUALITY EXCELLENCE AWARD 2014 / PIKE OF CZECH BUSINESS / Triple A Award OES delivery performance, Nissan **/ MANNFILTER LEADING BRAND AWARD OF THE AFTERMARKET,** Environmental Production Award **/ MANNFILTER SUPPLIER OF THE YEAR,** GAU Netherlands **/ CARS AWARD OF EXCELLENCE & QUALITY EXCELLENCE AWARD,** Volvo **/ MOTOPROFIL AWARD / HR EXCELLENCE AWARD / PRIVATE PUBLIC AWARD, MANN+HUMMEL / BEST BRAND OF PROFESSIONAL WORKSHOP / SUPPLIER QUALITY EXCELLENCE AWARD 2013–2014,** General Motors **/ MANNFILTER BEST BRAND / SUPPLIER OF THE YEAR AND OVERDRIVE AWARD,** General Motors **/ MOST UNIQUE SERVICES PROVIDER / SUPPLIER EXCELLENCE AWARD / QUALIFIED SUPPLIER / ENVIRONMENTAL**

2013

World's first diesel fuel filter with highly efficient three-stage water separation

2014

Hot gas welded active intake manifold with vacuum actuator with position detection, world's first orifice flap (electrically switched)

2014

PRODUCTION AWARD / LEADING BRAND AWARD / 100 BEST HRM COMPANIES OF 2014 / OUTSTANDING PERFORMANCE FOR BEST FRONTLINE STAFF MANAGEMENT OF 2014 / 2014 GM SUPPLIER QUALITY EXCELLENCE AWARD / 2014 BREAKTHROUGH EXCELLENT PERFORMANCE, General Motors **/ ARAGON COMMITTED TO THE PREVENTION AWARD / RECOGNITION IN THE PILOT PLAN OF DUAL PROFESSIONAL TRAINING / EXCELLENCE'S SEAL / AWARDS SUPPORTIVE ONCE ARAGON 2014 / SUPPLIER QUALITY EXCELLENCE AWARD 2013–2014,** General Motors

The awards serve, on the one hand, as recognition for outstanding performance. On the other hand, they provide motivation not only to preserve what has been achieved, but also to do even better in the future.

All MANN+HUMMEL production sites comply with the ISO TS-16949 quality standard, which bundles the various requirements of most European and North American automotive companies with respect to the quality management of their suppliers. The requirements of ISO TS-16949 are based on the general European quality standard ISO 9001, to which the majority of MANN+HUMMEL sites are also certified.

With just a few exceptions, most plants are also certified in accordance with the international environmental management standard ISO 14001. This defines globally applicable requirements for an environmental management system and incorporates numerous environmental standards, including standards for life cycle assessments and environmental indicators. A number of MANN+HUMMEL sites also comply with country- and customer-specific standards such as Ford Q1, GM Target for Excellence, or Chrysler self certification.

NEW BUILDING WITH BRIGHT PROSPECTS / In 2011, MANN+HUMMEL Innenraumfilter GmbH & Co. KG 2011 built a state-of-the-art plant in Himmelkron, which produces around 20 million cabin filters annually.

Locations

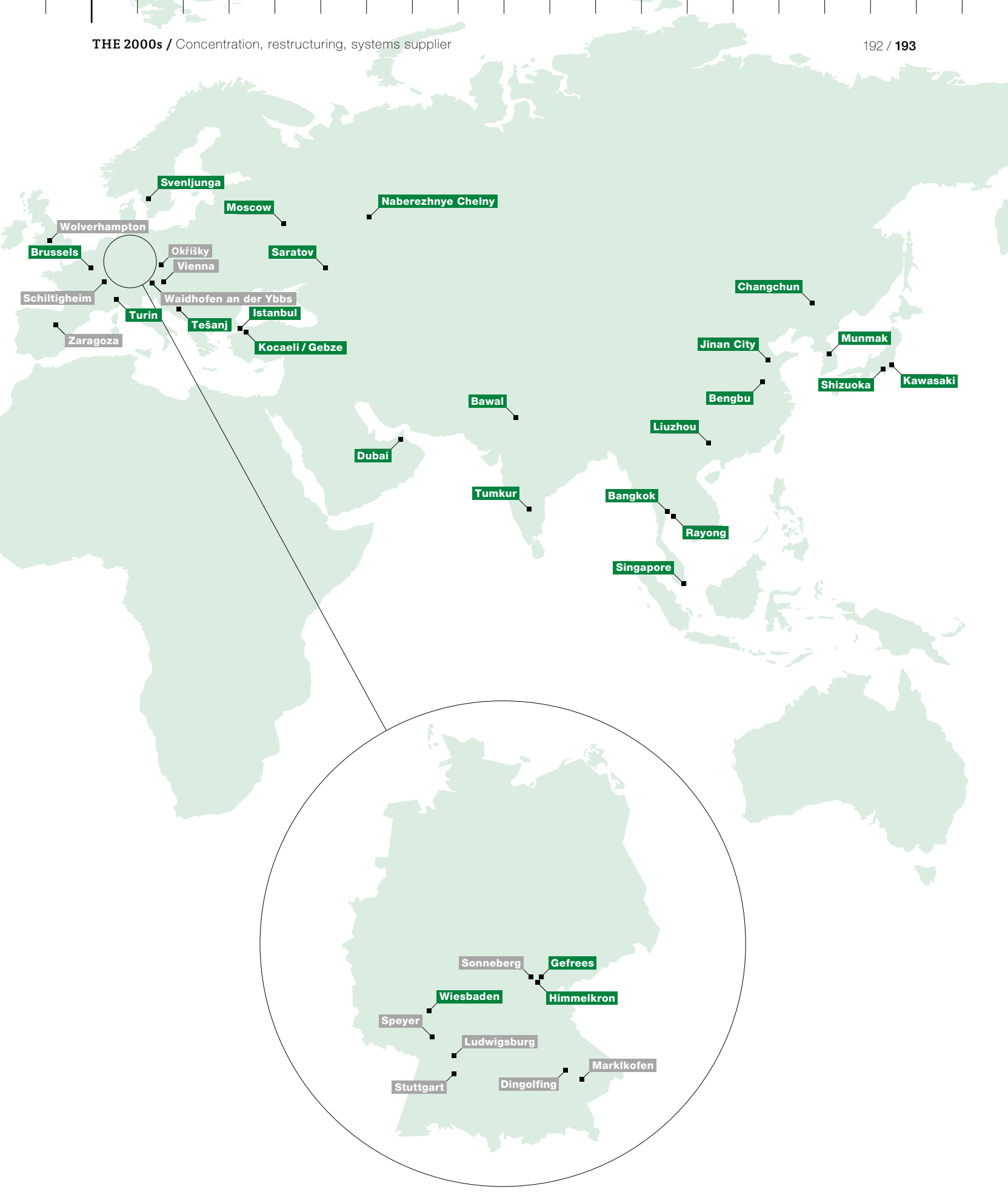
BELGIUM / Brussels, Solvay AIS/TP The Solvay Group, which was founded in Belgium in 1863, is among the top ten chemical companies in the world and employs over 30,000 people. Around the turn of the new millennium, the company decided to concentrate on its core competencies of chemicals and pharmaceuticals. A buyer was sought for the intake systems business (AIS/TP) with locations in Belgium, France, Germany, the United Kingdom, Spain, Brazil, and the United States – and the eventual buyer was MANN+HUMMEL. This acquisition strengthened the company's presence in important core markets. Furthermore, blow molding technology provided MANN+HUMMEL with new production technologies for air conveying plastic parts. It was also the biggest acquisition in the company's history, and the integration of around 1,200 employees presented an enormous challenge.

CHINA / Changchun CHANGCHUN MANN+HUMMEL FAWER FILTER CO LTD was established in 2002. The company today produces air filters, air filter elements, cabin filters, spin-on oil filters, spin-on fuel filters, fuel filters, and crankcase ventilation systems for numerous automotive manufacturer with production facilities in China.

JAPAN / Shizuoka and Kawasaki As part of its Asian expansion strategy, MANN+HUMMEL established a joint venture with WAKO INDUSTRIAL CO LTD in 2004. Founded in 1952, WAKO produces air, oil, and fuel filters for automotive manufacturers and the aftermarket, as well as commercial vehicle and industrial filters. The joint venture was subsequently terminated.

INDIA / Tumkur MHB FILTER INDIA PRIVATE LTD was established in 2006 as a joint venture with the Bosch Group. Now a wholly-owned MANN+HUMMEL subsidiary and trading as MANN+HUMMEL FILTER INDIA PRIVATE LTD, the company produces air filters, air ducts, intake manifolds, spin-on oil filters, oil separators, air filter elements, and fuel filters for customers on the Indian subcontinent in a three-shift operation.

USA / Raleigh, North Carolina The establishment of the North Carolina Innovation Center (NCIC) on the campus of North Carolina State University in 2013 represented an important milestone in the MANN+HUMMEL strategy for a number of reasons. It pooled research and development expertise in an innovation-friendly environment thanks to its proximity to a renowned university. Furthermore, it is set to become the headquarters for the US aftermarket and industrial filters business of MANN+HUMMEL and for the sales and marketing activities of the Purolator brand in the future.


Svenljunga
Moscow
Naberezhnye Chelny
Wolverhampton
Brussels
Okříšky
Vienna
Saratov
Schiltigheim
Waidhofen an der Ybbs
Turin
Istanbul
Tešanj
Zaragoza
Kocaeli / Gebze
Changchun
Jinan City
Munmak
Shizuoka
Kawasaki
Bengbu
Bawal
Liuzhou
Dubai
Tumkur
Bangkok
Rayong
Singapore
Sonneberg
Gefrees
Himmelkron
Wiesbaden
Speyer
Ludwigsburg
Marklkofen
Stuttgart
Dingolfing

Locations

RUSSIAN FEDERATION / Moscow, Saratov, and Naberezhnye Chelny MANN+HUMMEL OOO was established as a sales office in Khimki near Moscow in 2007. A production facility was established in Saratov in the same year. It is now based in Naberezhnye Chelny and produces mainly fuel filters for Russian OEM customers.

GERMANY / Gefrees MANN+HUMMEL took over Upper Franconian company helsa-automotive GmbH & Co. KG, including its Czech location Uhersky Brod, at the beginning of 2008. The company specialized in cabin filters. It was renamed MANN+HUMMEL Innenraumfilter GmbH & Co. KG, and increased development and manufacturing expertise in the area of cabin filtration.

GERMANY / Himmelkron In 2011, MANN+HUMMEL Innenraumfilter GmbH & Co. KG relocated from Gefrees to a completely new, state-of-the-art plant in Himmelkron. Here, over 300 employees on a site covering over 88,000 square meters produce almost 20 million cabin filters annually.

KOREA / Munmak In 2008, Korean filter specialist Dongwoo GmbH was taken over and renamed MANN+HUMMEL Dongwoo GmbH. In addition to the headquarters in Munmak, the company has a sales office in PyeongChon and a manufacturing facility in Ulsan.

SINGAPORE / Singapore The takeover of membrane specialist Ultra-Flo in Singapore in 2010 was in line with the strategy of acquiring expertise and market share in the new business area of water filtration through acquisitions.

BRAZIL / Contagem City, Betim The Contagem plant was established in 2009 as the third Brazilian MANN+HUMMEL site. The company later relocated to Betim in southeastern Brazil. Today the plant produces air filters and air ducts, primarily for Fiat.

CHINA / Jinan City Based in the eastern Chinese province of Shandong, MANN+HUMMEL FILTER (Jinan) CO LTD, which was founded in May 2009, produces mainly air filters, fuel filters, and oil filters.

CHINA / Liuzhou Part of MANN+HUMMEL Filter (Shanghai) CO LTD, this production site in the southern Chinese city of Liuzhou went into operation in 2012. The plant produces only intake manifolds and air filters.

CHINA / Bengbu With the takeover of filter manufacturer Bengbu Haoye Filter Co Ltd, MANN+HUMMEL acquired important production capacities in China. On a site measuring 53,000 square meters, around 500 employees are involved in the high volume production of mainly air filter elements, fuel filter elements, spin-on oil filters, and spin-on fuel filters.

UNITED ARAB EMIRATES / Dubai MANN+HUMMEL Middle East FZE was founded in Dubai in 2012 to supply aftermarket customers in the region with filters and filter elements. These come mainly from Germany and are based in the Jebel Ali Free Zone. Eleven markets are supported from Dubai, including Saudi Arabia, Kuwait, Qatar, Afghanistan, and Iraq.

THAILAND / Bangkok MANN+HUMMEL (Thailand) LTD, established in Thailand in 2012, started with a sales and development center for IAM (Independent Aftermarket) and industrial filters in Bangkok.

THAILAND / Rayong In 2013, MANN+HUMMEL (Thailand) Ltd established a state-of-the-art production plant in Rayong for the manufacture of air filters, intake manifolds, and air ducts. It went into operation in 2014.

INDIA / Bawal In Bawal, near New Delhi, a new production site for Indian company MANN+HUMMEL FILTER PRIVATE LTD was established in 2012. The plant produces air filters, intake manifolds, and air filter elements in a three-shift operation.

BRAZIL / Manaus Customer proximity in the middle of the Amazon jungle. The production site in Manaus was established in 2011. The plant employs around 50 people and produces air filters and air filter elements for Honda.

BRAZIL / Jundiaí In 2012, MANN+HUMMEL took over water filtration specialist Fluid Brasil Sistemas e Tecnologia LTDA., based in Jundiaí near São Paulo. This was another step toward expansion outside the automotive sector. Renamed MANN+HUMMEL Fluid Brasil, the company is involved in the development and manufacture of filter systems for waster and wastewater treatment. With the ultrafiltration membrane K1060 developed by MANN+HUMMEL ULTRA-FLO Singapore, the company was able to win key customers in Brazil soon after the takeover. MANN+HUMMEL Fluid Brasil has the opportunity to contribute to socioeconomic development in Brazil with innovative water filtration systems.

USA / Dunlap, Tennessee The opening of the production plant was in line with the strategic decision to ensure optimum supply for customers in the southern states of the USA. Since 2012, the Dunlap plant has produced mostly intake manifolds and air ducts. The plant now produces around 800,000 units annually.

USA / Fayetteville, North Carolina Operated as a joint venture with the Bosch Group since 2006, Purolator Filters LLC was acquired in full by MANN+HUMMEL in 2013 and now trades under the name MANN+HUMMEL PUROLATOR. On a 60-hectare site, over 1,000 employees produce air filter elements, cabin filters, oil filter elements, and spin-on oil filters – the latter accounting for 130 million production units annually.

BOSNIA-HERZEGOVINA / Tešanj In 2006, MANN+HUMMEL acquired a majority stake in UNICO FILTER Filterfabrik AG, founded in 1974. Renamed MANN+HUMMEL BA J.S.C. Tešanj, the company manufactures vehicle filters for the OEM market and employs over 500 people.

USA / Portage, Michigan The site in Portage was expanded to include a large plant section measuring over 20,000 square meters – the South Campus – in 2014. Linked to the old plant section via a short road, the South Campus provides the ideal environment for maximizing future growth opportunities. Thanks to its various sites and local production capability, MANN+HUMMEL can now produce its entire product portfolio in the USA.

SWEDEN / Svenljunga The 2014 acquisition of Swedish filter manufacturer Vokes Air, which has locations in many European countries, was another key element of the MANN+HUMMEL strategy of developing new business areas outside the automotive industry. Originally founded in 1927, the company specializes in the filtration of indoor and process air, including energy generators, maritime applications as well as clean and sterile rooms. It currently employs around 500 people.

GERMANY / Wiesbaden In 2014, MANN+HUMMEL acquired a 50 percent stake in water filtration specialist MICRODYN-NADIR , based in Wiesbaden. This cooperation offers numerous advantages. There is virtually no overlap in the product portfolio. The strong market presence of MICRODIN-NADIR in Europe also perfectly complements the activities of MANN+HUMMEL in the area of water filtration in Southeast Asia and Brazil In 2015, MANN+HUMMEL took over the remaining stake.

ITALY / Turin MANN+HUMMEL Italia S.R.L. was established in 2004 as a wholly-owned subsidiary. Based in Turin, the sales company supports customers from the automotive and industrial sector.

TURKEY / Istanbul and Kocaeli / Gebze MANN+HUMMEL Filtre San Ltd Sti has operated a sales office in Istanbul since 2005 and a production facility for air filters, intake manifolds, and air ducts in Kocaeli / Gebze since 2008. In addition to supplying the aftermarket, the company has supplied automotive manufacturers since 2013.

Present and future

"People are the key to the future.
As long as there are dedicated, professional
people who enjoy
working at MANN+HUMMEL,
the family-led company
has a good future."

General Manager Alfred Weber,
Interview on November 6, 2014

75 Years of MANN+HUMMEL – Challenges and incentives

A LOT HAS CHANGED SINCE ADOLF MANN AND DR. ERICH HUMMEL ESTABLISHED FILTERWERK MANN + HUMMEL BACK IN 1941. The world has become a different place. Political and social structures as well as industrial technologies have undergone profound change. The economic landscape has also changed beyond recognition. Industrial consolidation processes, extensive networking structures, and above all the accelerated pace of globalization and digitization shape today's global economy.

These developments have without doubt also transformed MANN+HUMMEL, and the company will continue to change and adapt as it faces further challenges in the future. To deal with future challenges, MANN+HUMMEL must strive not only to follow processes, but also to play a part in influencing and defining them. Just as the company has done for the past 75 years.

Innovation at a technical, organizational, and structural level has been part of the company's DNA since its founding. The decision by textile manufacturers Mann and Hummel to enter the filter business in the first place was a brave, far-reaching, and truly innovative move. Others followed – one need only think of the establishment of the plant in Marklkofen, the first foreign subsidiaries, and the development of new business areas and markets, for example.

Willingness to change has been one of the key success factors of MANN+HUMMEL from day one. This willingness to change was demonstrated at the highest levels of the company in 2015 with the decision to expand the Management Board into a team of four. Emese Weissenbacher became a member of the Management Board with her appointment as Chief Financial Officer (CFO) of MANN+HUMMEL. A graduate in Business Administration with a special interest in technology, she has been with the company since 1994 and held various key positions before her appointment to the Management Board.

Alongside this willingness to embrace new thinking are traditional values and principles, which have also played a significant role in the development of the company and will continue to do so in the future. A perfect example of this is the idea that the company should be there for the people – and not the other way around, which is based on the humanist principles of Adolf Mann and Dr. Erich Hummel. This has been a consistent feature throughout the company's 75-year history. The same is true of the concept of sustainability. Although today used mostly in an environmental context, the company owners have always had a much broader understanding of the concept. At MANN+HUMMEL, sustainability also means continuity with respect to values, strategies and business areas, financial independence, and ownership. The partnership agreement concluded in 1941 is still valid today with just a few subsequent amendments, and will continue to define the direction of the family company in the future.

The history of MANN+HUMMEL detailed in this book is full of examples illustrating how the partners, directors, and Supervisory Board have never taken a short-term view, but instead always considered the long-term viability of the entire company when deciding on a course of action. There is also plenty of evidence to suggest that this will remain the case in the future.

> 16,000 employees worldwide

~ 1,000 employees in research and development worldwide

STRATEGY 2022: DEVELOPMENT OF A PROVEN CONCEPT

Strategy 2022 is the result of the continuous improvement and refinement of the MANN+HUMMEL Management System and Strategy 2018. "Strategy 2018 covered an eight year period," says President and CEO Alfred Weber, "but we should not wait until these eight years have passed before thinking about making changes."[1] Strategy 2022 was therefore developed in 2013, representing an evolution of the existing strategy as well as adaptation to changed conditions. "Strategy 2022 […] builds on Strategy 2018. However, it is sharper and more focused."[2]

The importance of the new corporate strategy was underlined in September 2014, when it was presented to the entire MANN+HUMMEL workforce by Alfred Weber in a worldwide webcast. In 2015 began the process of systematically communicating the content of the agreed initiatives in all divisions and regions. The company's strategic orientation is centered on quality, service, and innovation. Another key element of Strategy 2022 – one which is firmly anchored in the corporate culture – is the continued focus on employees, who remain the "most important capital"[3] of MANN+HUMMEL. By concentrating on operational excellence, customer-focused solutions, and unmatched expertise in filtration, the family company aims to secure further competitive advantages in the future through first-class quality, excellent service, and innovative technologies. However, in keeping with another long-standing tradition, this must not be achieved at any price: "We want to grow, not simply become bigger. We want to grow more lucrative and position ourselves even better in lucrative growth markets."[4] This is clearly defined in the vision for Strategy 2022: "Leadership in Filtration through motivated employees, outstanding products, and excellent results."[5]

MANN+HUMMEL IS WHEREVER ITS CUSTOMERS ARE

There are two elements to this principle, which the company has followed for many decades. On the one hand, it means being close to customers in the geographical sense. This objective is reflected in the continuing internationalization of the company. Alfred Weber sees "simply no alternative" to this development and explains by way of example that "more cars are now sold in China […] than anywhere else on the planet. […] If we want a share of this market, we can no longer supply all of our products from Ludwigsburg. This is simply not feasible from a competitive or a logistical perspective".[6] For MANN+HUMMEL, proximity to customers also means meeting the needs and requirements of customers as effectively as possible in terms of quality, delivery reliability, and service, and above all with a view to future challenges and technologies. In 2014, the company made a significant investment in its future and began two pioneering projects with the construction of a supplier logistics center in Marklkofen and the new technology center in Ludwigsburg.

STRONG COMMITMENT TO GERMANY AS AN INDUSTRIAL LOCATION

In Marklkofen, a 33,000-square-meter hall was built at a cost of around 20 million euros. This building will be used to store all purchased parts and semifinished goods for production. The new supplier logistics center significantly increased not only storage capacity but also flexibility, particularly given the fact that the new hall is connected to the main plant via a driverless transport system. Impressive figures justify the adjacent plant's continued claim to being the biggest filter plant in the world. The quantity of filters and filter elements produced in Marklkofen increased by 4.8 percent to more than 523 million units between 2012 and 2014. At the same time, the Marklkofen plant is proof of how MANN+HUMMEL puts people first, with a staff turnover rate of 0.7 percent out of a workforce of just under 3,000 employees in 2014. This is well below the German national average of 14 percent. In Ludwigsburg, MANN+HUMMEL also remains committed to Germany as a business location. In the company's anniversary year, a brand

> 58,000 products for sale worldwide

16 filters produced per second

new technology center is being constructed directly adjacent to Plant 2. This center will play a key role in meeting the challenge of asserting and extending the company's leadership in filtration technology through innovation. The new building also marks the end of a long tradition. Plant 1 in Hindenburgstraße, where the MANN+HUMMEL story began in 1941, was sold in May 2015 and will be shut down by 2017. This decision was prompted by the extremely limited options that historic buildings offer in terms of creating the ideal conditions for modern, effective research and development. Furthermore, the new technology center provides an opportunity to bring together all Ludwigsburg sites at Plant 2 (see "Birthplace of future innovations", page 204). With their downtown location, the traditional brick buildings of the former Plant 1 will provide ideal office and business premises for enterprises in areas such as media, research, art, and gastronomy. Unfortunately, the anniversary year of 2016 will also see job losses at the company headquarters in Ludwigsburg. Intake manifold production using lost core technology will cease, as modern turbocharged engines require intake modules that are much easier to produce. However, production of the new intake modules will follow customers to other countries. Despite all efforts, follow-up orders for intake manifold production in Ludwigsburg could not be secured. The competencies of the Ludwigsburg production site will therefore in the future lie in complex liquid filtration and, thanks to the new technology center, in the forging of closer links between development and production.

There will also be a major emphasis on sustainability. This was signaled in early 2015, when MANN+HUMMEL was awarded the official registration certificate for voluntary participation in the EU Eco-Management and Audit Scheme (EMAS). EMAS is a joint project of the European Union for environmental management and environmental auditing and is the world's most advanced system for sustainable environmental management.

FIT FOR THE FUTURE

The importance of sustainability for MANN+HUMMEL in another respect must not be overlooked. The current hype surrounding e-mobility raises the question of what it means for the future of a company where filter systems for combustion engines still account for a significant proportion of sales. On closer examination, however, it quickly becomes clear that any concerns in this regard are unfounded. Even the most optimistic estimates on the use of electric vehicles predict that it will be decades before they can completely replace conventional drive concepts. It should also be remembered that electric cars still need a large number of filters, for example to protect the batteries. As has so often been the case in the history of MANN+HUMMEL, this development also presents the company with a great opportunity.

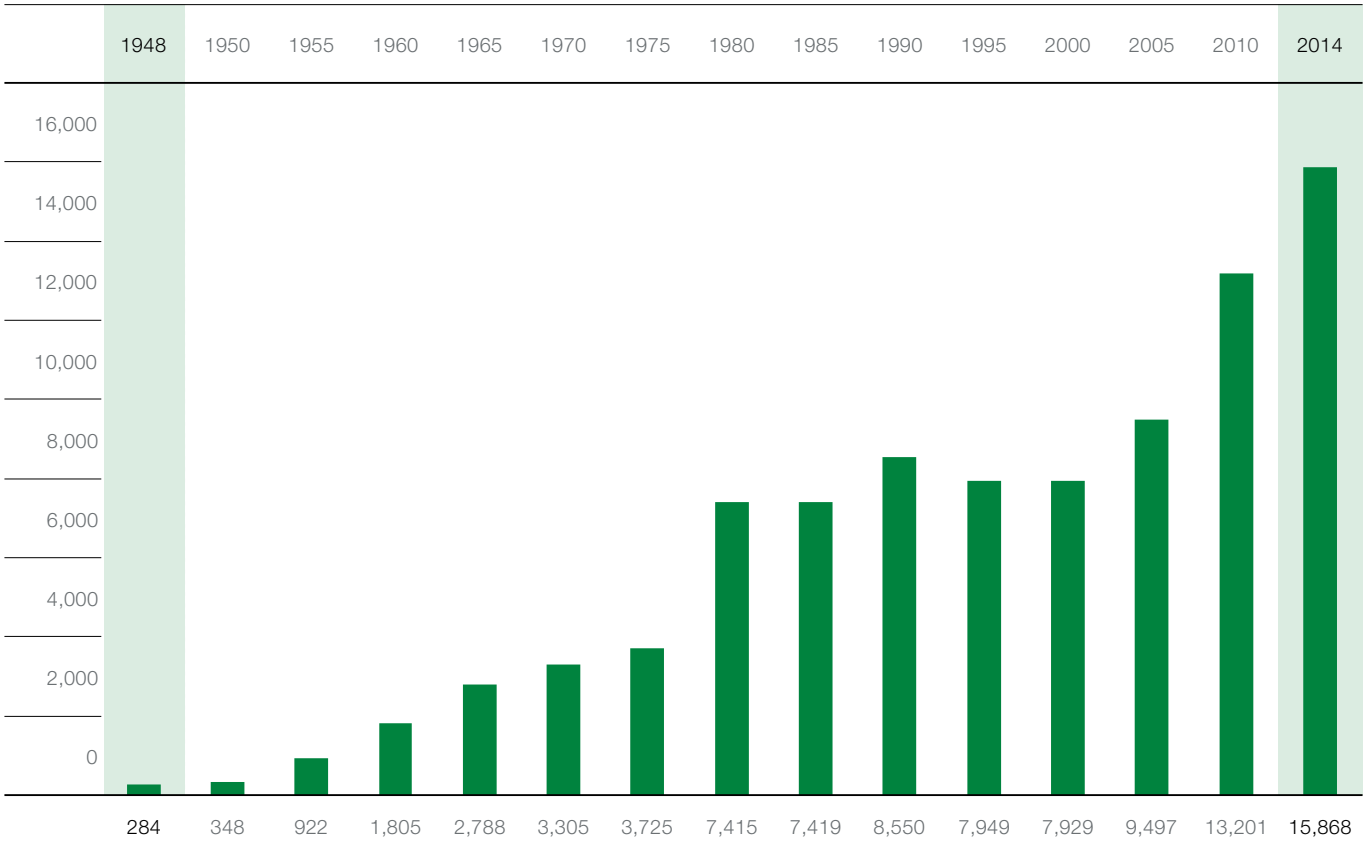
This is an opportunity that the former filter plant will most certainly make the most of using its tradition of exceptional innovative strength. This applies not just to further developments in filter technology for combustion engines and the development of new filter systems for electric motors, but to all areas of filtration. The challenge of achieving "Leadership in Filtration" will also lead to the development of innovative, profitable solutions for cabin filters, industrial filters, and water filtration.

Nobody knows exactly what the future holds. Nevertheless, looking back at the 75-year history of MANN+HUMMEL, there are a number of constants that one can expect to see in the future development of the family company – commitment to the business and human values of the founders, excellence in innovation, production, and customer care as well as retention of ownership by the Mann and Hummel families.

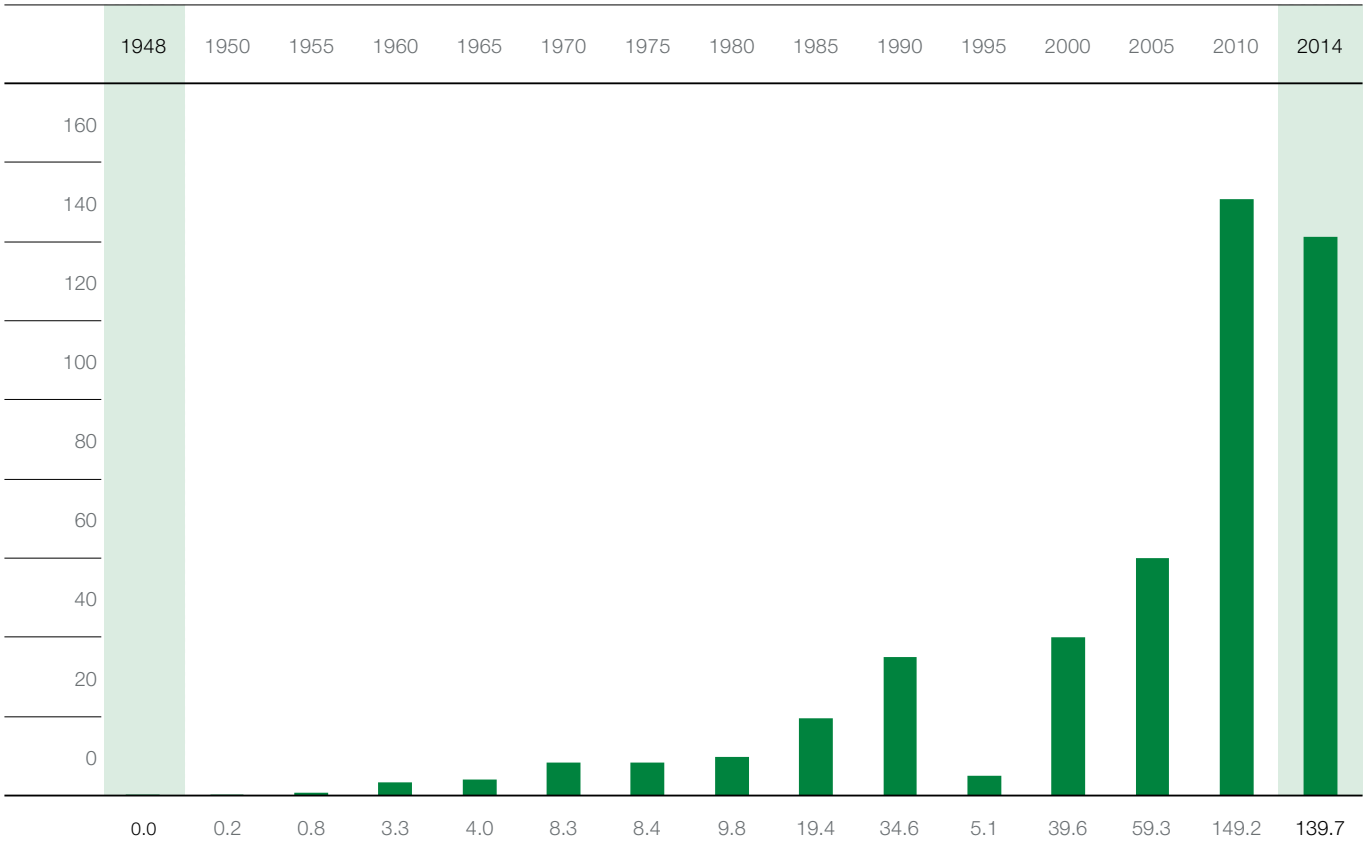
And, of course, the company will continue to pursue the following objective defined by Adolf Mann in 1956: "Only genuine cooperation […] where individual performance contributes to an integrated whole can make the company into a high-performance community. Preserving and maintaining this social community is one of our primary concerns."[7] This sums up perfectly how the company sees itself going forward.

History in figures

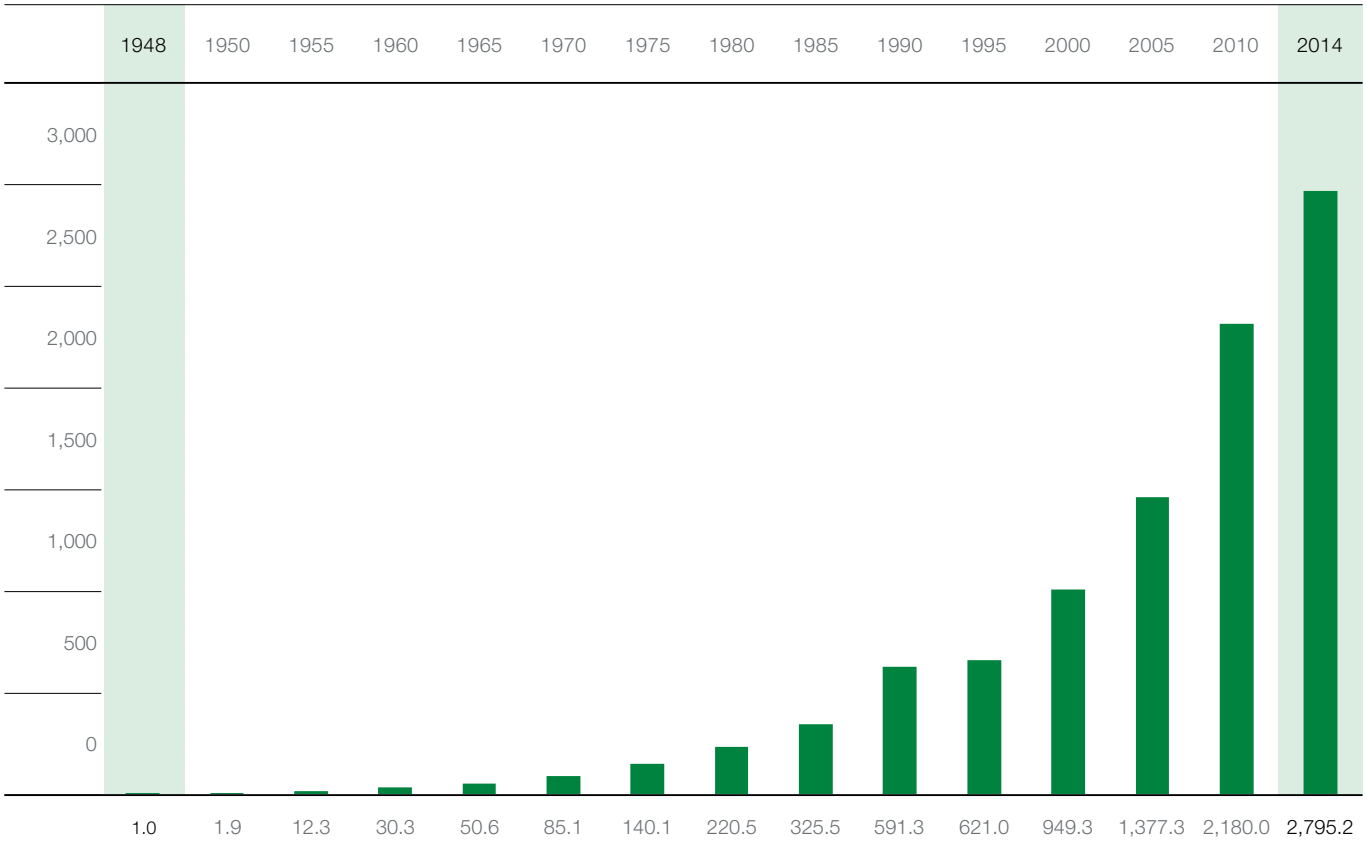
Number of employees 1948–2014 (average annual growth rate: 6.29 percent)



Earnings before interest and taxes 1948–2014 in millions of euros (average annual growth rate: 15.13 percent)



Sales 1948–2014 in millions of euros (average annual growth rate: 12.76 percent)



> 3,000

patent applications, patents, and utility models worldwide

> 60

locations worldwide

MANN-FILTER / The successful aftermarket business brand.

IN BLACK AND WHITE / MANN+HUMMEL is one of the leading patent applicants in Germany

A recurring theme in this book is without doubt the exceptional innovative strength of MANN+HUMMEL, which has been a consistent feature throughout the company's history. It goes without saying that while innovation is mostly about technical development, there are also legal and financial aspects to consider. The protection of intellectual property through patents or utility models is therefore a long-standing tradition. Company co-founder Dr. Erich Hummel was himself actively involved in this area in his capacity as a lawyer. In 1942, he established a patent division at the suggestion of an external patent attorney. In the early years, the main focus was on protecting patents taken over from Mahle with the establishment of FILTERWERK MANN+HUMMEL. After the Second World War, however, the company registered the first of its own patents. The oldest trademark registration still active today does not refer to a technical innovation, but to a creative endeavor. On November 11, 1948, a variant of the "MANN FILTER" brand name based on the "Horaff" from Crailsheim was filed for registration with the German Patent Office (now the German Patent and Trade Mark Office) in Munich. The trademark was registered on August 16, 1951. The trademark document with the number 610 557 is today one of the most valued treasures of the company archive and illustrates how brands and brand names are important and valuable intellectual property. MANN+HUMMEL currently holds almost 2,000 registered trademarks in more than 120 countries (see "Symbolic performance promise").

On the technology side, MANN+HUMMEL holds around 2,000 patents in over 30 countries, with a further 1,800 patent applications pending. The main focus in this case is on Germany, Europe, China, and the United States as well as PCT applications, which can later be pursued in numerous countries. In China and the United States, the Intellectual Property Department, which belongs to the Legal Department, is currently establishing its own branches.

Since 2011, MANN+HUMMEL has been one of the 50 most active applicants with the German Patent and Trade Mark Office every year. In 2014, the company was ranked 24th with 230 patent applications. In the same year, 500 patents applications were filed worldwide. These figures show that MANN+HUMMEL has lost none of its innovative strength even after 75 years. In fact, the company will continue to develop this important pillar of the company's success in the future.


BUNDESREPUBLIK DEUTSCHLAND

URKUNDE

UBER DIE EINTRAGUNG DES WARENZEICHENS

610557

MANN FILTER

DEUTSCHES PATENTAMT

EARLY BRAND AWARENESS / In 1948, the then Filterwerk Mann + Hummel GmbH applied to have the logo based on the Crailsheim "Horaff" registered as a trademark. The German Patent Office, now the German Patent and Trade Mark Office, issued the trademark document on August 16, 1951.

~ 100 million euros

annual investment in research and development

ONE GROUP – MANY BRANDS / MANN+HUMMEL today owns multiple product brands, which are operated and marketed independently.

SYMBOLIC PERFORMANCE PROMISE / The MANN+HUMMEL brand and the product brands

A lot has changed since the "MANN-FILTER" brand name was registered in 1951 – not just in the design of the company logo, which has been continually updated and developed over the years. The MANN-FILTER brand is considered today as the most successful global brand in the aftermarket business and is an important pillar in the brand portfolio of the MANN+HUMMEL GmbH. Internationalization and the ongoing acquisition of other companies also led to the establishment of new brands within the MANN+HUMMEL Group.

With Purolator, one of the best known and most renowned filter manufacturers in the United States is now part of the brand portfolio. Founded in 1923, the company supplied oil filters for the first Chrysler model and is today one of the leading OEMs in the North American market with over 2,000 products under the pureoil label. Swedish-based Vokes Air specializes in filtration solutions for indoor and process air and has provided MANN+HUMMEL with growth opportunities in a new market segment outside the automotive industry. The same is true of MICRODYN-NADIR. As a leading supplier of flat sheet membranes and modules for water filtration, the Wiesbaden-based company has expanded the MANN+HUMMEL offering in the area of water and wastewater treatment.

UNICO FILTER in Bosnia-Herzegovina has been producing oil, air, and gasoline filters since 1974 as well as cabin filters under license for MANN+HUMMEL. Originally founded to supply the market in former Yugoslavia, UNICO FILTER has developed into a key filter manufacturer for the whole of South Eastern Europe.

MANN+HUMMEL Haoye Filter, based in the Chinese city of Bengbu, offers an equally comprehensive product portfolio. Serving mainly the aftermarket and local vehicle manufacturers, the company fits perfectly with the MANN+HUMMEL strategy for expanding its presence in the important Chinese market.

The increase in the number of product brands prompted the company to think about the MANN+HUMMEL brand in terms of both content and design. The objective in this case is clear – by retaining the different product brands, the MANN+HUMMEL corporate brand can convey values such as dependability, trust, and quality in heterogeneous, highly competitive international markets. It can therefore develop a defined and communicable strength that extends beyond the new graphic design of the logo. A strength that has grown organically over 75 years and will continue to have a positive effect on the various product brands in the future.

BIRTHPLACE OF FUTURE INNOVATIONS / The new MANN+HUMMEL technology center in Ludwigsburg

After an intensive planning phase, in which the city of Ludwigsburg was also involved, an architectural competition was opened in 2013. The jury, whose members included the Chairman of the Supervisory Board, Thomas Fischer, and the Mayor of Ludwigsburg, Werner Spec, decided on an unusual concept for a distinctive building with a curved facade to reflect the MANN+HUMMEL image.

The 24,000 square meter ensemble will house the testing center of the research and development department. A separate administration building will provide office space for developers and managers as well as modern conference rooms. The two main buildings will be connected by a lobby, which will also provide access to a bistro and the new company museum. The groundbreaking ceremony for the new technology center took place in September 2014. It should be ready for occupation for around 400 employees in the summer of 2016, the anniversary year. By facilitating close cooperation between development, testing, and design with different production technologies, it will make an important contribution to future innovative strength of the group (see “In black and white”, page 202).

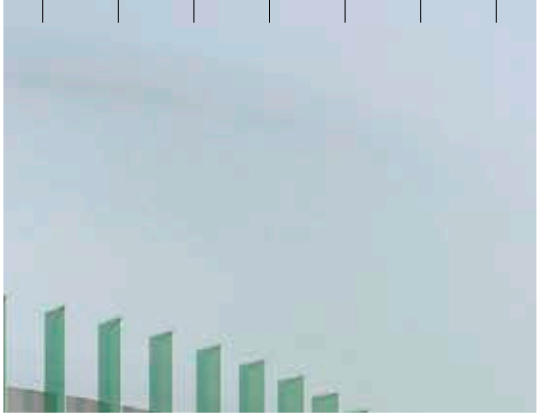
At the same time, the investment of around 30 million euros represents a “commitment by MANN+HUMMEL to Ludwigsburg as business location,” as emphasized by President & CEO Alfred Weber at the groundbreaking ceremony.[8]

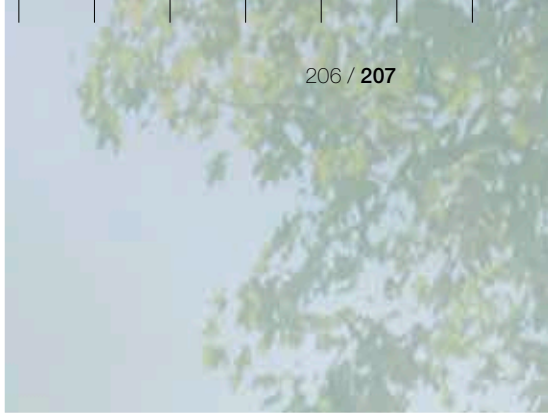
THE FUTURE STARTS HERE / The fortunes of family company MANN+HUMMEL will in future be directed from the new technology center (above), which is currently being constructed at Plant 2.

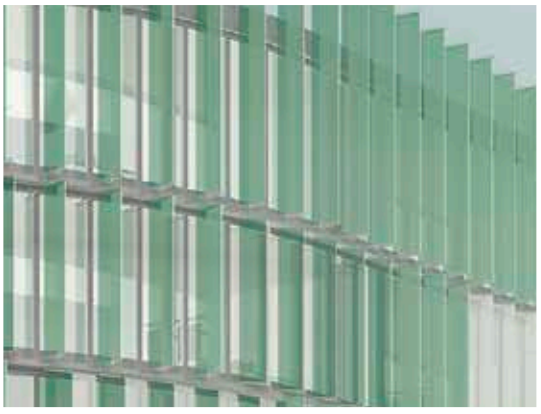
FOUNDATION FOR FUTURE INNOVATIONS / The expanded Management Board of MANN+HUMMEL performed the ground-breaking ceremony for the new technology center in September 2014 (top right).

END OF ERA / Plant 1 in Ludwigsburg, where it all began in 1941, was sold in May 2015 (right).


MANN
FILTER

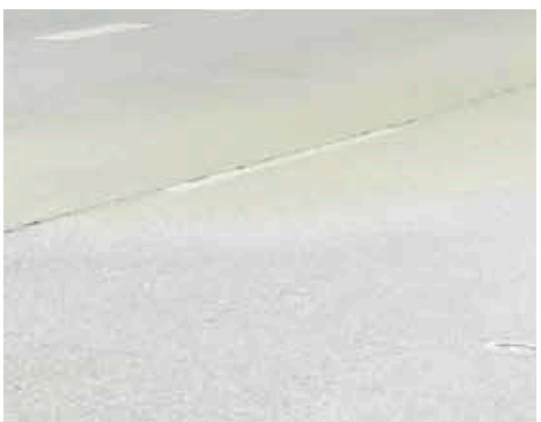







MANN
FILTER
NSU
MANN
MANN schützt MOTOR


MMEL




G.U.D. MANN+HUMMEL
Filter Systems (Pty) Ltd.

Appendix

CHAPTER 01 / The beginning: 1941 – 1945

1 Adolf Mann, transcript of hearing on June 30, 1945; Baden-Württemberg state archives.

2 Dr. Jörg-Dieter Hummel, "Der Name und Ursprung des 'Horaf'" (The name and origin of the Horaff), in: Unser Betrieb 2 / 1980, page 22.

3 Adolf Mann, from a manuscript describing his personal and professional development; private collection of Sibylle Fischer.

4 The company name is based on the entry in the commercial register at the time. The "MANN+HUMMEL" word mark is only used where it was quoted in this form.

5 There is a copy of the agreement in the private collection of Friedemann Hummel.

6 "Der Herold", Issue 7, November 1941, page 79: "Kriegsverdienstkreuze im Filterwerk" (War Merit Cross at the filter plant); MANN+HUMMEL GmbH company archive.

7 "Der Herold", Issue 1 / 2, 1942, page 9; MANN+HUMMEL GmbH company archive.

8 Franz Lipfert, auditor, Stuttgart: "Gutachten über die Frage der Nutznießerschaft nach dem Gesetz zur Befreiung von Nationalsozialismus und Militarismus (Gesetz 104) in der Spruchkammersache Mann und Dr. Hummel (37 / 70 9363/64) der Spruchkammer 10, Stuttgart-Degerloch, ausgeführt in den Monaten Mai bis Juli 1947" (Statements concerning the question of beneficiaries according to the law for Liberation from National Socialism and Militarism (Law #104) from trial 10, Stuttgart-Degerloch, held from May through July 1947), page 16, trial records for A. Mann, Dr. E. Hummel; Ludwigsburg city archives.

9 Estate of Adolf Mann; Stuttgart-Hohenheim economic archives.

10 Chronological biography of Adolf Mann, undated, private collection of Sibylle Fischer.

11 http://www.stuttgarter-zeitung.de/inhalt.liebe-daisy-gaensebluemchen-und-granaten-page1.59671816-a89c-451c-8a2a-a6ac-9b93ad94.html, visited on December 5, 2014.

12 To mark the centenary of the outbreak of the First World War, Stuttgarter Zeitung published a series of letters in its online edition: "Liebe Daisy! Die Feldpost von Adolf Mann" (Dear Daisy: The letters sent from the front by Adolf Mann); www.stuttgarter-zeitung.de/thema/LiebeDaisy, visited on August 13, 2014.

13 http://www.stuttgarter-zeitung.de/inhalt.die-feldpostbriefe-von-adolf-mann-liebe-daisy.de3345fb-1b6b-4abc-b6a0-5983745a5730.html, visited on August 14, 2014.

14 Quoted from: Erik Raidt, "Die Totenglocke läutet. 1914–2004" (The death knell sounds. 1914 – 2004), in: Die Geschichtswerkstatt von Stuttgarter Zeitung und Stadtarchiv (history workshop of Stuttgarter Zeitung and the city archives), http://www.von-zeit-zu-zeit.de/index.php?template=thema&theme_id=207, visited on August 13, 2014.

15 http://www.stuttgarter-zeitung.de/inhalt.die-feldpost-von-adolf-mann-liebe-daisy.b1888a5f-4125-4265-8275-11263ba3ebaa.html, visited on August 14, 2014.

16 Erik Raidt, "Liebe Daisy. Das Leben danach" (Dear Daisy. Life after the war); http://www.stuttgarter-zeitung.de/inhalt.liebe-daisy-das-leben-danach.html, visited on August 14, 2014.

17 Source: Alwine Zehender, January 17, 2003.

18 Source: Sibylle Fischer, August 14, 2002.

19 Source: Prof. Lic. Dr. Dr. h.c. mult. Gert Hummel, February 14, 2003.

20 "Ein Welt-Unternehmen aufgebaut. Gründer von 'Mann + Hummel': Dr. Erich Hummel gestorben" (A global company. Death of 'Mann + Hummel' founder, Dr. Erich Hummel), in: Ludwigsburger Kreiszeitung, February 18, 1984, page 4.

21 "Der Herold", Issues 4 – 6, August – October 1943, page 26.

22 Source: Anneliese Mondry, January 23, 2003.

23 Source: Prof. Lic. Dr. Dr. h.c. mult. Gert Hummel, February 14, 2003.

24 Source: Anneliese Mondry, January 23, 2003.

25 Prof. Dr. Rolf E. Hummel, "Kurzer Lebensabriss von Dr. jur. Erich Hummel" (Brief portrait of Dr. jur. Erich Hummel).

26 ibid.

27 ibid.

28 Source: Magdalene Henzler, February 5, 2003.

29 Source: Prof. Lic. Dr. Dr. h.c. mult. Gert Hummel, February 14, 2003.

Footnotes

CHAPTER 02 / The post-war years: 1945–1949

1 Interview with Alwine Zehender, October 27, 2011.

2 ibid.

3 Interview with Götz, October 27, 2011.

4 Interview with Hermann Dettling, October 27, 2011.

5 Julius Nonnenmacher, "Aus meiner Tätigkeit bei Mann + Hummel" (My time at Mann + Hummel), manuscript, MANN+HUMMEL GmbH company archive.

6 In 1945, Filterwerk Mann + Hummel employed 660 people, by 1946 only 268 employees remained.

7 Letter from the Lord Mayor of the City of Stuttgart to the Chief of the German Police of the City of Stuttgart dated May 12, 1945; denazification hearing records for A. Mann, Dr. E. Hummel, Ludwigsburg city archives.

8 Denazification hearing records for A. Mann and Dr. E. Hummel, Ludwigsburg city archives.

9 Brochure for MANN ARMATUREN, MANN+HUMMEL GmbH company archive.

10 Julius Nonnenmacher, "Aus meiner Tätigkeit bei Mann + Hummel" (My time at Mann + Hummel), manuscript, MANN+HUMMEL GmbH company archive.

11 Fritz Claus, former Head of Sales: "Der Weg vom einzeln gefertigten Filter zur Großserie" (The road from individually produced filters to large-scale production); manuscript, private collection of Hanna Claus.

12 ibid.

13 Source: Paul Gerlach, August 10, 2003.

14 Adolf Mann, transcript of hearing on June 30, 1945; Baden-Württemberg state archives.

15 Julius Nonnenmacher, "Aus meiner Tätigkeit bei Mann + Hummel" (My time at Mann + Hummel), manuscript, MANN+HUMMEL GmbH company archive.

16 Adolf Mann, transcript of hearing on June 30, 1945; Baden-Württemberg state archives.

CHAPTER 03 / The fifties

1 Fritz Claus, "Der Weg vom einzelnen gefertigten Filter zur Großserie" (The road from individually produced filters to large-scale production); manuscript; private collection of Hanna Claus.

2 ibid.

3 ibid.

4 All figures from: H. C. Graf von Seherr-Thoss, "Die deutsche Automobilindustrie" (The German automotive industry), Stuttgart 1974, page 497ff.

5 Interview with Paul Gerlach, October 27, 2011.

6 Herbert Brindöpke, report with documentation on the VE aftermarket sales division and the filter market in West Germany up to end of 1985 , bound manuscript, page 16; MANN+HUMMEL GmbH company archive.

7 Source: Anneliese Mondry, January 23, 2003.

8 Willy Wenzke, "Erziehung zum Eigentum. Eine wichtige Aufgabe der sozialen Mitbestimmung" (Education for ownership. A key task for social participation), in: Die Zeit No. 35, August 27, 1953.

9 "'Human Relations' – Herz oder Fassade" (Human Relations – Heart or facade), in: Ludwigsburger Kreiszeitung No. 22, January 27, 1953.

10 Willy Wenzke, "Erziehung zum Eigentum. Eine wichtige Aufgabe der sozialen Mitbestimmung" (Education for ownership. A key task for social participation), in: Die Zeit No. 35, August 27, 1953.

11 Adolf Mann, Aus der Praxis einer Ertragsbeteiligung (Experiences of profit sharing), page 5.

12 Adolf Mann, "Arbeit und Freizeit in ihrer Bedeutung für die Persönlichkeitsentwicklung" (The importance of work and freedom for personal development), special edition of the August 1957 issue of the German Red Cross Central Organ.

13 ibid.

14 Willy Wenzke, "Erziehung zum Eigentum. Eine wichtige Aufgabe der sozialen Mitbestimmung" (Education for ownership. A key task for social participation), in: Die Zeit No. 35, August 27, 1953.

15 "Eigenheimbau als betriebliche Gemeinschaftsleistung" (Owner-occupied housing construction as joint company effort); manuscript, 1950.

16 Willy Wenzke, "Erziehung zum Eigentum. Eine wichtige Aufgabe der sozialen Mitbestimmung" (Education for ownership. A key task for social participation), in: Die Zeit No. 35, August 27, 1953.

17 Memo dated February 29, 1952 about the meeting between Adolf Mann and the Central Works Council on February 29, 1952 concerning the establishment of a corporate health insurer; Ludwigsburg city archives.

18 Erwin Greiner, "Gründung der Betriebskrankenkasse des Filterwerks Mann & Hummel GmbH" (Establishment of the corporate health insurance company of Filterwerk Mann & Hummel GmbH), in: Unser Betrieb 1 / 1987, page 12f; MANN+HUMMEL GmbH company archive.

19 "Eigenheimbau als betriebliche Gemeinschaftsleistung" (Owner-occupied housing construction as joint company effort); manuscript, 1950.

20 ibid.

21 ibid.

22 ibid.

23 "Unser Betrieb, Jahresthemen 1 / 91, Heide Kiemle (DO): 5 Jahrzehnte MANN+HUMMEL. Ein Rückblick aus der Sicht des Betriebsrats" (Our company, annual themes 1/91, Heide Kiemle (DO): 5 decades of MANN+HUMMEL. A retrospective from the Works Council), page 10 – 15; MANN+HUMMEL GmbH company archive.

24 "Eigenheimbau als betriebliche Gemeinschaftsleistung" (Owner-occupied housing construction as joint company effort); manuscript, 1950.

25 Schlösslesfeld community, letter to Adolf Mann, December 21, 1951.

26 "Meine Lieben Schlösslesfeldsiedler" (My dear members of the Schlösslesfeld community), letter from Adolf Mann, December 27, 1951.

27 Speech by Adolf Mann at the anniversary celebration of Filterwerk Mann & Hummel GmbH on June 14, 1966, page 10.

28 Interview with Manfred Wagner, October 27, 2011.

29 Interview with Paul Gerlach, November 18, 2014.

30 Unser Betrieb 1 / 1980, page 24.

CHAPTER 04 / The sixties

1 Seherr-Thoss, "Die deutsche Automobilindustrie" (The German automotive industry), page 433.

2 http://www.kukuk.com/kukukinfo_aktuell/zulassung.htm, retrieved on January 2, 2015.

3 Otmar Schneiderhan, "35 Jahre Filtergeschichte 1951 – 1985" (35 years of filter technology 1951 – 1985), page 43, MANN+HUMMEL GmbH company archive.

4 Speech by Adolf Mann at the anniversary celebration of Filterwerk Mann & Hummel GmbH on June 14, 1966, page 1.

5 Interview with Antonio Spagnol, October 27, 2011.

6 Interview with Ignaz Agreiter, October 27, 2011.

7 Speech by Adolf Mann at the anniversary celebration of Mann & Hummel GmbH on June 14, 1966, page 6.

8 "Gemeinsame Arbeit führt zum Erfolg" (Joint effort leads to success), in: Stuttgarter Zeitung, June 15, 1966.

9 From the annual report by Adolf Mann for the year-end party in 1967, in: Unser Betrieb, 1967, page 5f; MANN+HUMMEL GmbH company archive.

10 ibid., page 6.

11 "Unser Betrieb" (Our company), in: Unser Betrieb, No. 1 / 1967, page 3.

12 ibid.

13 "Keine Angst vor EDV" (No need to fear EDP), in: Unser Betrieb, No. 1 / 1967, page 6.

14 1988 Annual Report, Supervisory Board Report, page 14, MANN+HUMMEL GmbH company archive.

15 Source: Friedrich Ebertseder, March 29, 2003.

16 ibid.

17 Interview with Alwine Zehender, November 18, 2014.

18 "Textilien: Qualitätsware bevorzugt" (Textiles: preference for quality goods), in: DIE ZEIT, No. 51, December 22, 1955.

19 1992 Annual Report, page 5, MANN+HUMMEL GmbH company archive.

20 Source: Friedrich Ebertseder, March 29, 2003.

CHAPTER 05 / The seventies

1 Interview with Dr. Erich Bracher, October 27, 2011.

2 Speech by Dr. Bernhard Kiefer, in: Ansprachen anlässlich der Verabschiedung Dr. Erich Bracher (Speeches to mark the retirement of Dr. Erich Bracher), page 4; MANN+HUMMEL GmbH company archive.

3 Jörg-Dieter Hummel, "Der Horaf", manuscript; MANN+HUMMEL GmbH company archive.

4 Memorial service for Adolf Mann, July 29, 1971, in: Erich Bracher, "Der Unternehmer in unserer Zeit, Ansprachen und Vorträge aus zwei Jahrzehnten" (The entrepreneur of our day and age; speeches and lectures over two decades), 1989, MANN+HUMMEL GmbH company archive.

5 Betr.: Firmenfarben und Firmenzeichen unseres Unternehmens (Re.: Our company colors and logo), letter to IFE FILTERBAU Ges.m.b.H., November 21, 1974.

6 Interview with Hans Kaiser, October 27, 2011.

7 Interview with Manfred Wagner, October 27, 2011.

8 ibid.

9 "Jubiläum in der Fertigung" (Production celebrates its anniversary), in: Unser Betrieb 1977/78, page 18; MANN+HUMMEL GmbH company archive.

CHAPTER 06 / The eighties

1 Interview with Karl-Heinz Knorpp, November 19, 2014.

2 "Grundsätzliche Zukunftsüberlegungen für das Filterwerk und seine Gesellschaft" (Key considerations for the future of the company), September 1983, page 12, MANN+HUMMEL GmbH company archive.

3 ibid.

4 "Ein Welt-Unternehmen aufgebaut. Gründer von 'MANN+HUMMEL': Dr. Erich Hummel gestorben" (A global company. Death of 'Mann + Hummel' founder, Dr. Erich Hummel), in: Ludwigsburger Kreiszeitung, February 18, 1984, page 4.

5 "Dr. Erich Hummel verstorben" (Death of Dr. Erich Hummel), in: Unser Betrieb, No. 1/1984, page 1.

6 Interview with Manfred Bär, October 27, 2011.

7 ibid.

8 Kurt Möser, "Geschichte des Autos" (History of the car), Frankfurt/M. 2002, page 249.

9 Taiichi Ohno, Just-In-Time for Today and Tomorrow, 1988.

10 Interview with Günther Göckeritz, April 7, 2015.

11 Source: Reinhold Engesser, February 12, 2015.

12 EL 902/20, Spruchkammer 7, Stuttgart, Verfahrensakten 62223 (EL 902/20, trial 7, Stuttgart, case files 62223), Ludwigsburg city archives.

13 Interview with Karl-Heinz Knorpp, November 19, 2014.

14 ibid.

15 ibid.

16 ibid.

CHAPTER 07 / The nineties

1 Winfried Witte, meeting with management on March 19, 1990, page 4, MANN+HUMMEL GmbH company archive.

2 ibid., page 10.

3 Speech by Hans Jochen Henke at the anniversary celebration on June 13, 1991, MANN+HUMMEL GmbH company archive.

4 The organizational structure of the MANN+HUMMEL Group, in: Unser Betrieb 1/92, page 11.

5 In 1990, 3,552 people were employed in Ludwigsburg; by 1999, 1,794 remained.

6 Source: Manfred Bär, November 6, 2003.

7 Interview with Roland Hagmann, November 18, 2014.

8 ibid.
9 ibid.
10 ibid.
11 Unser Betrieb 1970/71, "Die FILAP in Speyer. Moderne Filter aus der alten Kaiserstadt" (FILAP in Speyer. Modern filters from the old imperial city), page 7.
12 Interview with Roland Hagmann, November 18, 2014.
13 "Feste Werte. 10 Jahre MANN+HUMMEL in Sonneberg" (Strong values. 10 years of MANN+HUMMEL in Sonneberg), page 12.

CHAPTER 08 / The 2000s

1 "Zulieferer nutzen den Wachstumsmarkt Asien – die Strategie von MANN+HUMMEL" (Suppliers in the Asian growth market – The MANN+HUMMEL strategy), lecture by Dr. Dieter Seipler, Congress Center Messe Frankfurt, September 17, 2003.
2 "Vom Komponentenhersteller zum Systemlieferanten – neue Anforderungen in der Automobilindustrie" (From component manufacturer to systems supplier – New challenges in the automotive industry), lecture by Dr. Dieter Seipler to the Chamber of Commerce and Industry in Stuttgart, June 2, 2003, MANN+HUMMEL GmbH company archive.
3 FILTERMEDIA 1/2002, page 9.
4 Interview with Thomas Fischer, February 18, 2015.
5 ibid.
6 Dr. Dieter Seipler, open letter to employees, FILTERMEDIA 2/2009, page 3.
7 FILTERMEDIA 2/2009, page 3 and page 19ff.
8 Dr. Dieter Seipler, open letter to employees, FILTERMEDIA 2/2009, page 3.
9 "Bremsspuren: vom Erfolg in die Krise" (Signs of slowdown: from success to crisis). Lecture by Manfred Wolf at Pforzheim University, May 17, 2010, page 47.
10 FILTERMEDIA 2/2009, page 22.
11 FILTERMEDIA 2/2014, page 31.
12 FILTERMEDIA 1/2008, page 19.
13 FILTERMEDIA 1/2009, page 9.
14 The MANN+HUMMEL Code, CoC_DIN-lang_2014_D_Broschuere_Ansicht.pdf.
15 First questions to Alfred Weber, FILTERMEDIA 4/2009, page 5.
16 Ulrich Winter, in: FILTERMEDIA 2/2009, page 11.
17 Interview with Thomas Fischer, February 18, 2015.
18 ibid.
19 ibid.
20 ibid.

CHAPTER 09 / Present and future

1 Interview with Alfred Weber, November 6, 2014.
2 Dr. Patricie Merkert, "Von der Realität lernen" (Learning from reality), interview with Dr. Patricie Merkert and Charles Vaillant, FILTERMEDIA 2/2014, page 6.
3 MANN+HUMMEL, Strategy 2022.
4 Charles Vaillant, "Von der Realität lernen" (Learning from reality), interview with Dr. Patricie Merkert and Charles Vaillant, FILTERMEDIA 2/2014, page 7.
5 MANN+HUMMEL, Strategy 2022.
6 Interview with Alfred Weber, November 6, 2014.
7 Plant regulations 1956, page 38: Der Betrieb als soziale Leistungsgemeinschaft (The company as a social community).
8 "Spatenstich bei MANN+HUMMEL in Ludwigsburg: Neubau eines Technologiezentrums" (Groundbreaking ceremony at MANN+HUMMEL in Ludwigsburg: construction of a new technology center), press release, September 12, 2014.

Picture credits

ALTSHAUSEN / Page 8 (https://de.wikipedia.org/wiki/Altshausen)

D-MARK; AKG / Page 39

VIENNA; AKG / Page 46

SCHILTIGHEIM / Page 46 (https://de.wikipedia.org/wiki/Schiltigheim)

ERWIN GREINER / Page 65

AKG / Pages 75, 79, 110, 132, 133, 158

FOTOLIA / Page 111

STUTTGART CITY ARCHIVES / Page 126

TOYOTA MOTOR CORPORATION / Page 135

MANN+HUMMEL GMBH COMPANY ARCHIVE / All others

Publication details

PUBLISHER / MANN+HUMMEL GmbH / Hindenburgstraße 45 /
71683 Ludwigsburg / Germany / www.mann-hummel.com

CONCEPT AND RESEARCH / Dr. Rainer Lächele, Roman Krüger M.A.,
Yvonne Stanka / D.I.E. Firmenhistoriker GmbH

TEXT / Gerd Heimisch M.A.

PROOFREADER / Dr. Barbara Hammerschmitt

COPY EDITOR / Roman Krüger M.A. / D.I.E. Firmenhistoriker GmbH
Miriam Teige / MANN+HUMMEL GmbH

LAYOUT AND TYPESETTING / Kuhn, Kammann & Kuhn GmbH / com-a-tec GmbH

PRINTER / Gmähle-Scheel Print-Medien GmbH

PRINT RUN / First published 2015 / 5,000 copies / W9 911 16 000 en

FSC www.fsc.org
MIX
Paper from responsible sources
FSC® C023511

In addition to the chronology of the company history, the countless innovations, the historical context, and the many amazing anecdotes, the book focuses on two key factors – people and places. People and their actions still play a pivotal role in the success of MANN+HUMMEL today. The same is true of the many locations around the world where the company is active.

This book documents how and why MANN+HUMMEL has become an internationally recognized specialist in filtration technology over the past 75 years. It also shows how the family-led company is ready to face the challenges of the future thanks to the balance between tradition and willingness to change that has evolved over the years.