INJECTION MOULDING FACTORY

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FUTURE IN SHAPE



screw and plug cans with tamper evident closure · measuring spoons and beakers · thick side cans · cans with snap lid

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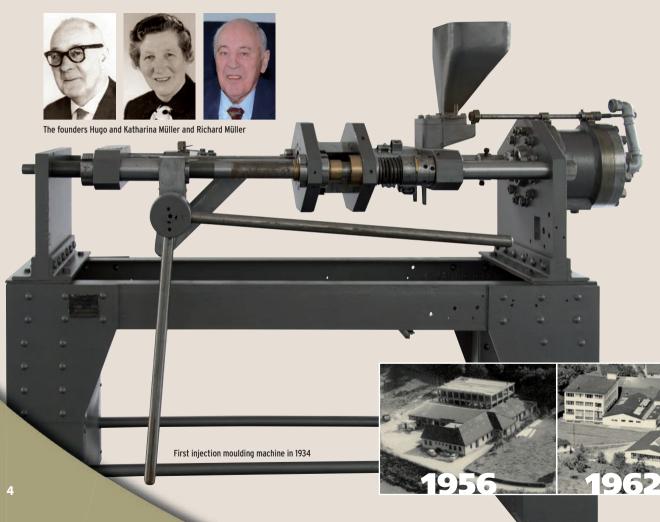
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and plug lid · sliding boxes · square cans · base packaging · tubes · advertising · technical parts



FROM

In 1934, Hugo and Katharina Müller founded the company. The plastics industry was still in its infancy and pioneering spirit was required. Packaging for the local dental drill industry as hygienic substitute for wood packaging used until then, were the beginning. Production started with hand-operated piston injection moulding machines.

H&K MÜLLER IN FORMER TIMES



TRADITION AND EXPERIENCE

In the following years, the new malleable synthetic substance became more and more successful showing many material advantages, too. The manufacture of plastic products in only one production process replaced materials difficult to process such as wood, metal and glass. The electrically non-conducting material had advantages in weight and was resistant to water and many chemical influences. It offered many options for the design regarding colour and surface and was printable, too. H&K Müller kept up in a rapidly growing market and was led to its current market position under the direction of Richard Müller in the second half of the 20th century.

Our customers benefit for decades from the extensive experience in the processing of different thermoplastic

materials and the production of complex injection moulds in our own tooling. They get products from one single source starting from development and design to tooling, injection moulding processing up to the packed finished part.



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H&K MÜLLER TODAY



With the establishment in 1934 H&K Müller is one of the first plastics processors in Germany. The privately held company in the third generation continuously developed further. New machines, materials and technical procedures were tested and integrated into the manufacturing process.

The permanent focus on technical progress led not only to the use of commercially available technology but also

to the conception and construction of own machinery, equipment and devices. According to the needs, they increase the efficiency of production.

The steady growth of the business was accompanied by an increasing need for space that finally required a complete rebuilding of the manufacturing facility in Engelskirchen.

TIME FOR GENERATIONS

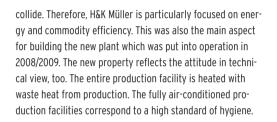


A balance between economic success and social responsibility has been the basis of our actions for decades. Durability is the principle of our economic activity. Long-lasting economy and its long-term effects allow us to be recognized as an innovative and forward-thinking company on the market. It is important to develop new strategies for the future, where demand and resource consumption

FORWARD-LOOKING DUE

STATES.

PHILOSOPHY



Rooms, machinery and moulds are cooled with deep ground water. The roof is equipped with photovoltaic and achieves a capacity of more than 400kwp. The production plant whose buildings were built in thermally insulated solid construction (reinforced concrete) works almost emission-free. Energysaving and fully-electric injection moulding machines are used in production.



TO LONG-LASTING TECHNOLOGY













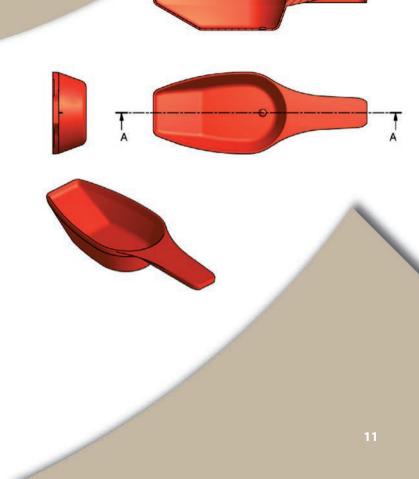
INTO SHAPE

CONSTRUCTION AND TOOLING

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All injection moulds are designed and manufactured in our Technical Department and own Tooling. Our clients profit from more than 70 years of extensive experience. Today, the latest technology is available to realize the requirements of the customer graphically or with help of prototypes. With the view of what is possible, we support our clients in realizing their wishes and bring ideas into shape.

WITH KNOW-HOW





PLASTIC INJECTION

The processing of different plastics has always required a good deal of instinctive feel. Regularly trained mechanics for plastics technology operate over 50 modern injection moulding machines and peripheral equipment. A qualified staff checks and packs the products after a hundred percent visual inspection. Additional samples are examined and analyzed in the Quality Department. This guarantees a permanent reproducibility, dimensional accuracy and preservation of colour. The maintenance and care of machines and tools is particularly important.

The traceability of the production data and parameters, as well as a batch control concerning raw material, production order and tool are guaranteed and documented.



PLASTIC INJECTION

Appearance and design but also technical and legal requirements dictate the choice of material and colour. Due to the continuous development plastic can be used almost everywhere and the unlimited variety of colours increases the attractiveness of the products.

COLOURED PLASTICS SUITABLE

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CHOICE OF MATERIALS AND COLOURS

This development requires an intensive analysis of the components. Many tests are necessary to recognize the advantages and disadvantages. Adjustments to machines and feeders are necessary to work out all the advantages. In close coordination with the suppliers of materials and colours, food and pharmaceutical safety is guranteed. With product specifications and declarations of conformity we support our customers in meeting their obligation of proof.

FOR FOOD CONTACT APPLICATION



Obtaining a specific article from a specially made injection mould is the highest form of individuality and exclusiveness. A standard product can be upgraded with an exclusive screen printing or film stamping.

Suppen-Saste PRINTED ACCURATELY

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Wertige Bass

Durch Ibe Ken

EV 300 EWG

Basis für Suppen,

Saucen und

Tunken

Gourmet-Paste

STAMPING AND PRINTING



Apart from necessary information also the look of the entire packaging can be changed. Screen print and stamping always cohere with the plastic product and present a decoration form of high quality.





IMPRINTED FOREVER

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PERFECTLY

DECORATION AND ASSEMBLY



We mostly use automation when complying with the individual requirements for assembly and packaging of the products. At the same time the transport protection is an important feature. The balance of costs and profit requires our technical creativity and the courage to get down to new solutions. All these challenges are recognized and implemented.

MATCHED



CREAM, MAKE-UP, ETC.

$\mathsf{C} \ \mathsf{O} \ \mathsf{S} \ \mathsf{M} \ \mathsf{E} \ \mathsf{T} \ \mathsf{I} \ \mathsf{C} \ \mathsf{S}$



Different applications require individual adaption of the standard programme to meet the legal requirements and the client's requirements for the design. These high standards are noticeable in the field of cosmetics packaging.

STERILE & HYGIENIC

A hygienic strictly controlled production guarantees the required product protection for a packaging of high quality.

The product, its application and the design is decisive for the type and form of the packaging. Special requirements for pharmaceutical products reagarding the commodities have to be considered. The base material is chosen in close coordination with the client and in accordance with the legal requirements. Depending on the application we choose



TABLETS, PILLS, ETC.

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SHIP

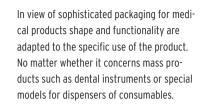
PHARMACEUTICS



the appropriate material which can also be modified in cooperation with the raw material supplier if required. To protect the contents and for the proof of an intact packaging screw and plug cans can be equipped with tamper evident closure.



SEALED AIRTIGHT



DENTAL INSTRUMENTS AND DRILLS



MEDICINE

Apart from a qualitative perfect production the hygienic apects has to be taken into consideration. The new production plant has optimal conditions. For H&K Müller it is also an opportunity for developping modern and sophisticated solutions.

ARRANGED READY TO HAND

Freshness, perishability and cleanness: concerning foodstuff these requirements are very important for the contents as well as for the packaging. In the year 2009 H&K Müller was certified for the first time according to ISO 22000 for food safety and hygiene. The integrated management system under ISO9001/ISO22000 is the basis of our activities. Daily care and the fulfillment of quality requirements as well as regular

SWEET, SALTY AND SPICY FOODSTUFF

FOODSTUFF

training and control is routine for all our employees. At the same time it is motivation and identifiction with the products of our customers, too.

Whether liquid, gel or powder, we offer an extensive standard range for food packaging and furthermore the possibility to create individual solutions for unique packagings.

APPETIZINGLY PACKED

CARE AND CLEANSING AGENTS FOR

CHEMISTRY

Safety of the product and the environment are the most important criteria for the packaging of the chemical industry. Multiple functions are often required. The item is not only just a packaging. It should also be suitable for measuring into doses, if required. This can often be achieved easily by modifying an item from our standard range or by using additives.

HOUSEHOLD AND BUSINESS

Concerning production H&K Müller traditionally puts the main stress on technical parts. Development, mould construction and the injection moulding of mounting supports, shades, fitted boxes and displays for control technology, indicators for chemical technology, conductive

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VARIETY

TECHNOLOGY

trays for microelectronics are everyday challenges for us. We feel obliged to meet the individual requirements of our clients and to develop efficient and innovative solutions. In collaboration with the client our Quality and Technical Department elaborates solutions

PERFECTLY FORMED

that profit from the latest developments in mould construction, raw material and injection moulding, automation included if necessary. This special part of the production is an addition and counterpart to our standard range of packaging.



AND DESCRIPTION OF THE OWNER.

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LOGON SOL plus







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TRANSPORT, LOGISTICS AND SERVICE



Protection of the products through functioning packaging, safe storage, transport on schedule and flexible reaction to modified requirements. We fulfil all these elementary aspects and also organize specific transport and logistics solutions as a service to our clients. We have an approx. 4.000 m² warehouse for finished products with shelf storage. Thanks to the good infrastructure of our region, our direct access to the motorway and the short distance to the Freight and Logistic Centre Cologne we fulfil the best conditions for national and international shipment either by truck, rail container or, in special cases, by air freight.

SUPPLY MANAGEMENT









QUALITY ASSURANCE AND CERTIFICATES

Zertifikat

THE SIGHERHEITSMANAGEMENTSYSTEM - ISO 20000-1

integration gemält 1915 20800-3905 für den Reigenden Ge

gen, Werkseug-celstruktion und Werkseughau, Her

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Industry the Partition of PEAK SATISATION





The assurance of constant quality under strict conditions with defined and documented procedures has always been self-evident in our production whose solutions have to be absolutely correct when reproduced. Since 1998, we successfully meet the requirements of the certification according to DIN ISO 9001. With the move to our new location we have established building and production technology to the highest standard. As a result, we were able to fulfill the requirements for a certification according to ISO 22000 (management system for food regulations) from 2009 and implement them successfully.





FUTURE IN SHAPE **H&K Müller**

GmbH & Co. KG Injection Moulding Factory since 1934

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