KraussMaffei

At a glance
As you would expect of a leading company that offers manufacturing and processing solutions for plastics and rubber, there is more to KraussMaffei than just machines. KraussMaffei is the only company worldwide to offer complete, single-source solutions for the key technologies of injection moulding, extrusion and reaction processing. Under the KraussMaffei brand, the company supplies solutions for injection moulding and reaction processing. Under the new merged KraussMaffei Berstorff brand, we supply the full range of extruders and extrusion systems, including complete lines. Our product portfolio includes modules, machinery and complete production lines. We think in systems and solutions that transcend technological boundaries. Give us the challenge, and together we will develop the best solution from our wide portfolio of machinery and process technologies. You get a customized solution with all the reliability and interoperability that comes from using proven standardized modules.
Based on standard modules and tried-and-tested machines, our solutions deliver quality from day one, giving you the security that comes with mature technology. As your partner, we mentor you from the initial idea, through your application-specific solution and the provision of after-sales service for your machines throughout their long operational lives. We look forward to working with you to develop the most productive solution for your business.

The new KraussMaffei corporate structure
We speak your language

With some 70 KraussMaffei locations around the world, we are never far from you. We speak your language, linguistically and technically. By pooling the global applications experience built up within our organization, we can deliver application-specific solutions for your business. Because we understand your challenges, your markets and your business environment, we can supply the machines and processes that will meet your needs exactly.
Our top-of-the-range injection moulding, extrusion and reaction process technology covers all the major processing methods. We can also supply fully automated manufacturing solutions, foam moulds and innovative post-processing systems. What’s more, KraussMaffei has the in-house expertise to plan and engineer turnkey solutions that integrate different processing technologies. We can put you in a strong position to cover the entire value-adding chain – from raw material to finished product – with a single integrated manufacturing solution.
OUR TECHNOLOGIES

Injection moulding: Scalable performance and processes

Whatever you need – from spin-platen to twin-platen technology, from hydraulic to hybrid or all-electric machines – KraussMaffei offers injection
moulding technology that is unique in both its depth and breadth and covers the clamping force range from 35 to 4000 t. Our modular machine concepts and the scalability within each machine series means that you can configure an application-specific production system. As your single-source system supplier, we can boost your productivity with appropriate automation solutions – right through to complete manufacturing cells.
BROAD SPECTRUM

Injection moulding machines: The right solution for each application

With our three fully modular machine series, KraussMaffei has virtually unlimited ability to configure a customized solution for your business.

The CX series covers small and medium clamp forces (35 to 650 t). Hallmarks are great flexibility, cost-efficiency and high product quality. Central to the CX series is KraussMaffei’s innovative twin-platen technology – a success from the start and continuously improved since. We can select from over 200 combinations of clamp and injection units to supply you with a highly-customized machine.

The EX series is a new, all-electric machine concept with clamp forces between 50 and 240 t. It combines high availability and minimal maintenance with low power consumption and high productivity. Minimum dry-cycle times and high injection rates make the EX extremely fast. The heart of the all-electric KraussMaffei injection moulding machine is the unique Z-toggle clamp, which makes for short cycle times and high precision.
The MX series represents the state of the art for large injection moulding machines. These machines, which are fastest in their class, are based on KraussMaffei’s twin-platen technology, with clamp forces from 800 to 4000 t. On offer here are compact injection moulding units featuring basic levels of automation through to highly complex manufacturing cells, as well as a complete factory planning package.

**Modular system for free choice of drives**

Every type of drive has its strengths and weaknesses. For maximum productivity, you need the right combination for the right application. KraussMaffei’s modular approach gives you the freedom to choose between hydraulic, hybrid and all-electric machines. We will gladly work with you to devise a custom solution for your needs.
PROCESS EXPERTISE INCLUDED

Process solutions for higher productivity

KraussMaffei offers more than standard injection moulding solutions. Our solutions achieve a perfect balance of machinery, software and process know-how. The benefit to you is lower manufacturing costs and higher-quality products. Your business can benefit from our process solutions:

**Multinject**
KraussMaffei is the leading innovator in multicomponent technology.

**In-Mould Labelling**
Significant quality improvements through integrated injection and labelling.

**DecoForm**
Eliminating process steps through back-injection of film inserts.
**TwinForm**
Innovative stack technology using standard moulds.

**SpinForm**
Spin-platen technology reduces investment and manufacturing costs for large or complex parts.

**CleanForm**
Unique cleanroom standard (up to ISO 5) for particle-free and aseptic production.

**CoverForm**
Eliminates processing steps and handling effort in producing parts with an integrated < 50 µm scratch-resistant protective coating.

**SkinForm®**
Cost-competitive, one-shot production of substrates with high-quality surfaces through a unique synergy of injection moulding and polyurethane technology.

**IMC**
Cuts material costs by integrating compounding and injection moulding in a single machine.
KraussMaffei Berstorff offers customized extrusion solutions spanning the entire value-adding chain from raw material to finished
product. Innovative modules and increasingly differentiated processes help us score top marks for boosting productivity and cutting costs for our customers.

While we work closely with our clients to develop complete production lines, we also gladly supply individual extrusion line components and modules.
TURNKEY SOLUTIONS

From the initial idea to quality testing

KraussMaffei Berstorff has all the modules, machinery and complete solutions you’ll ever need for extruding plastic and rubber.

The KraussMaffei Berstorff product range

For plastics processing, we offer:

- Single-screw extruders with screw diameters from 250 to 800 mm for degassing LDPE at rates of up to 74 t/h.
- Twin-screw extruders with screw diameters from 25 to 324 mm for compounding all kinds of polymers and base materials.
• All the components for making plastic pipe from 12 to 2000 mm diameter, including automation components for maximizing material savings. Extrusion lines for the production of standard and complex specialty pipes. Conical twin-screw extruders, parallel twin-screw extruders from the 32D series, single-screw extruders and coextruders for integrated extrusion systems (piggyback and tandem solutions).
• Customized solutions for flexible output of window-profiles, and production of small and medium technical profiles.
• Systems for economical production of plastic film and panels. Entire lines tailored to customer requirements, from raw material handling to film wind-up and panel stacking.
Foam extruders for physically foaming PS, PE, PP and other heat-resistant polymers, such as PET, PEI and PES. Optimal combinations of single- and twin-screw extruders. Calenders for producing PVC-U and PVC-P sheet and film.

For rubber processing, we offer:

- Extruders and extrusion lines for making tyre profile components and technical rubber articles
- Profile-manufacturing lines consisting of high-performance extruders, plus curing expertise and downstream equipment for continuous production of rubber, TPE and silicone profiles.
- High-pressure hoses and tubing: Customized, continuous and fully automated production lines – from formulation recommendations to quality assurance.
- Roll-covering machinery for quick and easy coating of rolls, sleeves and pipes with all kinds of rubber blends.
- AUMA rotary presses for simultaneous doubling and curing of several rubber sheets.
- V-belt production lines, complete lines for manufacturing sheathed and open-flank V-belts and V-ribbed belts
OUR TECHNOLOGIES

Reaction Process Machinery: New dimensions in plastics processing

Reaction Process Machinery has been the fastest-growing division of KraussMaffei in recent years. Our traditional portfolio of mixing heads,
metering machines, and polyurethane processing lines was expanded in late 2005 with a full range of foam moulds and post-mould trimming and cutting systems. KraussMaffei can now serve customers as a full-system supplier. While our customer base is wide, our main focus is still on the automotive and construction industries, and on the white goods/insulation sector.
KraussMaffei brings the vast reaction processing expertise of a global player and a preferred development partner for major companies to bear on developing customized solutions with you.

LFI-PUR®
Precise localization of glass-fibre reinforcement for lightweight high-strength parts.

Spray technologies
In polyurethane processing, spraying into the open mould or directly onto semi-finished goods has many technical advantages, including wide design freedom and easy implementation of complex geometries, constant layer thickness and high-quality surfaces.

Clear Coat Moulding
Production of high-quality components with scratch-resistant surfaces in a single process.

Slush Moulding
A major advantage of slush moulded skins is the freedom to design parts with undercuts and deep, narrow ribs.
RTM Resin Transfer Moulding
Processing of fast and low-emission resin systems combined with short cycle times and easy handling.

Skin technology
Cast skins with high-quality surfaces are produced in a fully automated process, and with constant wall thickness.

SkinForm®
Unique synergy of injection moulding and polyurethane technology for cost-effective one-shot production of high-quality surfaces.

Flexible foam
Dependable, high-productivity processing of high-quality blends of hot and cold flexible foam systems to yield high-quality moulded parts.

Tooling
By combining our intensive expertise in polyurethane processing with the newly-created business areas of foam moulds and post-mould cutting technologies, the division is driving ahead as a system supplier capable of providing customers with innovative, customized solutions.
KraussMaffei has combined its own expertise with that of renowned research institutes and industrial partners in the plastics and rubber industries to form a unique network for innovation. Its clear focus is the development of sustainable process solutions that conserve resources and protect the environment. KraussMaffei is promoting the use of renewable raw materials and developing production processes for lightweight parts with a view to cutting energy consumption and reducing CO₂ emissions.
KraussMaffei has bundled development resources across technical disciplines to set up the PRIMUS (Process Integrated Machinery for Unique Solutions) Network for Innovations. PRIMUS brings together developers, scientists and industrial partners to focus on topics that offer vast potential for the future. In so doing, KraussMaffei is transcending technological limits in order to deliver sustainable process solutions from a single vendor.
SERVICE

Your life-cycle partner

Wherever you are, KraussMaffei will provide a comprehensive life-long service package for its machinery and equipment. Over 70 locations around the world ensure closeness to customers and fast response to their needs.

Service means more to us than fast trouble-shooting. We have tele-servicing and condition
monitoring concepts in place that can increase machine uptime and boost your productivity. Our retrofitting and refurbishing specialists can give your system a new lease of life. We can show you how saving energy can save operating costs and we work with you to re-jig your machines for new tasks.

Our full range of services is only just a phone call or an e-mail away. We look forward to hearing from you.
Whether you are in Asia or in America, Scandanavia or southern Italy, our 70 locations around the world mean that you are never far away from KraussMaffei and KraussMaffei Berstorff. You have direct access from anywhere in the world to our unique applications expertise and our closely meshed service network.
Visit us at www.kraussmaffei.com to find out your nearest KraussMaffei office. You’ll also find the latest information on our comprehensive solutions for the plastics and rubber processing industries.
KraussMaffei is a premium partner for the rubber and plastics processing industries worldwide. KraussMaffei machines and systems are used wherever plastics and rubber are converted into products. As a knowledge-driven technology company, we build on many decades of experience and a strong commitment to research and development.

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