

SIMPLE. RELIABLE. FLEXIBLE FOR AUTOMATION.

EXPERIENCE OUR INJECTION MOLDING
MACHINES OF THE POWERMOLDING SERIES



Krauss Maffei
Pioneering Plastics

APPLICATION AREAS OF THE POWERMOLDING



Automotive



Automotive



Consumer goods



Electrics & electronics



White goods



Packaging & logistics

Clamping/injection matrix

Machine/ clamping force in t	Clearance h x v mm	Injection units (screw diameter in mm)														
		SP 2200			SP 3400			SP 5000			SP 8000		SP 11900		SP 17300	
		60	70	80	70	80	90	80	90	100	100	115	115	130	130	150
powerMolding 650	1040 x 910	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
powerMolding 850	1180 x 1000	---	---	---	■	■	■	■	■	■	■	■	■	■	■	■
powerMolding 1100	1260 x 1100	---	---	---	---	---	---	■	■	■	■	■	■	■	■	■
powerMolding 1300	1420 x 1170	---	---	---	---	---	---	---	---	---	■	■	■	■	■	■
powerMolding 1600	1570 x 1285	---	---	---	---	---	---	---	---	---	■	■	■	■	■	■

POWER MEETS COST-EFFICIENCY – YOUR ECONOMIC SOLUTION FOR INJECTION MOLDING

In view of dynamic and fast-growing markets, plastics processors are increasingly requiring faster response times and cost-effective solutions from their suppliers.

The powerMolding hydromechanical two-platen injection molding machine represents a high degree of quality in conjunction with easy operation and fast availability. Through the easy integration of automation solutions and the global service network of KraussMaffei, we offer you the best possible support for increasing your efficiency and competitiveness even more.

Your advantages at a glance:

Simple

- Cost-effective price
- Fast availability
- Easy to operate

Reliable

- High precision and repeatability
- Proven and robust machine design
- Global support from the KraussMaffei Service team

Flexible for automation

- Easy to connect linear and industrial robots
- Digital data exchange and tracking
- Pick-and-place with LRX EasyControl

TRANSPARENT TECHNOLOGY

A FASCINATING TOUR OF THE POWERMOLDING

Stable two-platen technology

Quality and reliability at the highest level.

Optimum accessibility

Short set-up times, easy maintenance.

BluePower servo drive

Best energy efficiency





Flexible for automation

Easy-to-install linear and industrial robots.

Tried-and-tested screws and non-return valves

High melt quality and shot weight consistency.
High wear resistance and long service life.

Powerful injection unit

High precision and repeatability.

MCP1 control system

Easy and intuitive to operate.

Molding
900

900
Molding

IDEAL ACCESSIBILITY TO THE MOLD

The powerMolding injection molding series has good accessibility to the mold, which ensures a perfect media supply. This enables a fast and efficient mold change and reduces your set-up times to a minimum.

Media supply near the mold

With our solutions for media supply near the mold including cascade functions, mold cooling and heat-balancing, as well as core-pulling movement and pneumatic functions, we offer you an optimum interface to the production mold. In addition, short connections minimize pressure losses and ensure that the clamping unit area is always tidy.

YOUR BENEFITS:

- Efficient mold changes
- Minimal set-up times
- Maximum productivity



Easy media supply to the mold fixing platens



EASY & INTUITIVE OPERATION WITH THE MCP1 CONTROL SYSTEM

Due to its user-friendly interface and intuitive operation, the MCP1 control system makes it easy to set up and monitor the entire injection molding process. Furthermore, the MCP1 control system enables seamless integration into manufacturing execution systems (MES) via EUROMAP interfaces to ensure comprehensive monitoring and control of the entire manufacturing process.

YOUR BENEFITS:

- Everything at a glance
- Intuitive operation saves time
- Easy integration of MES systems

BEST ENERGY EFFICIENCY WITH THE BLUEPOWER SERVO DRIVE

The proven BluePower servo drive from KraussMaffei sets standards in regard to reliability and energy efficiency for drive technology. Thanks to its innovative technology, the BluePower servo drive enables an energy-efficient, precise and reliable control system for the sequence of movements during the injection molding process.



YOUR BENEFITS:

- Best energy efficiency
- Low power consumption
- High product quality

The BluePower servo drive features high dynamics and accuracy. Furthermore, the BluePower servo drive is extremely energy-efficient and thus contributes to the reduction of energy consumption and operating costs.

Full insulation for plasticizing barrel

By using the BluePower insulating sleeves, heat losses can be significantly reduced (by up to 40 percent). This is also reflected in the improved energy consumption.



HIGH REPEATABILITY THANKS TO HYDROMECHANICAL CLAMPING UNIT DESIGN

The hydromechanical clamping unit design has established itself as a proven and reliable solution in injection molding technology and demonstrates its value in the powerMolding series with consistently good results.



Locking system

The combination of mechanical locking units and hydraulic clamping force build-up makes powerMolding a reliable injection molding solution for a wide variety of molds.

The high repeatability of this clamping unit design ensures consistently good results during each injection molding process. In addition, the exact positioning during insertion and demolding of the molded parts enables efficient and precise handling.

YOUR BENEFITS:

- Exact opening and closing of the mold
- Consistently good results for each injection molding process

NEW COMPACT INJECTION UNIT FOR OPTIMUM COMPONENT QUALITY

The new compact injection unit regulates both pressure and speed. This ensures high precision in the injection molding process and a consistently high component quality.



The powerMolding plasticizing concept yields excellent melt quality during the melting process for a wide variety of plastics. The screws meet the standards of KraussMaffei and offer various geometries for achieving optimum results depending on the application and material.

Every part is a good part with APCplus

The proven APCplus machine function can reliably compensate for any fluctuations that arise in the material and changes in the production conditions. As a result, the scrap rates drop to a minimum.



Optional:
APCplus (Adaptive Process Control)
for optimal shot weight consistency
and process stability

MORE FLEXIBILITY IN PRODUCTION EASY CHANGING OF THE PLASTICIZING UNIT

Flexibility is everything in modern manufacturing. That is why the powerMolding plasticizing unit can be replaced quickly and easily. This not only minimizes downtime, but also increases the production efficiency.

Symmetric force transmission

Two cylinder units ensure optimal nozzle contact and precise alignment of the nozzle center. That in turn guarantees symmetric force transmission and minimizes the risk of melt leaks on the mold.

YOUR BENEFITS:

- More flexibility
- Minimization of downtime
- More productivity in production

*Easy and safe accessibility to
the plasticizing unit*



**LRX EasyControl, LRX linear robot,
IR industrial robot**



FLEXIBILITY IN AUTOMATION

As a systems partner, KraussMaffei will work out the optimum automation solution for use in the powerMolding together with you. Being focused on user-friendliness and flexibility, our automation solutions can be easily and smoothly integrated into the injection molding process.

The CE-compliant automation solutions are designed for efficiency and maximum productivity. From simple pick-and-place applications to complex automation tasks, from insertion to demolding to testing and fabrication, we offer you the best conditions for decreasing your manufacturing costs and increasing your total productivity.

LRX EasyControl linear robot

- Ideal for simple pick-and-place applications
- Attractive price/performance ratio
- Intuitive operation and programming (up to 30% faster commissioning)
- Easy expansion of functions

LRX linear robot

- Custom solutions for complex requirements
- Turnkey automation cells
- Increase the degrees of freedom through numerous wrist axis combinations
- Flexible gripper solutions
- Quick demolding times

Industrial robot IR

- Optimal positioning in relation to the injection molding machine for the smallest production footprint
- Excellent operating concept
- Integration of various peripherals
- Flexible gripper solutions

YOUR BENEFITS:

- Automation from simple to complex
- CE-compliant system solutions from a single source
- Easy connection
- High level of productivity



OUR WORLDWIDE EXPERTISE IS YOUR ADVANTAGE DIGITAL & SERVICE SOLUTIONS

With your KraussMaffei machine, you have chosen a product that delivers the highest levels of productivity and reliability. In addition to our range of machinery, KraussMaffei focuses on comprehensive and future-oriented solutions, innovative business models and an innovative portfolio of digital products.

Customer service at the touch of a button

The process of digital transformation is becoming faster and easier than ever for the customer. Our Digital & Service Solutions unit makes your production chain even more flexible and efficient with future-oriented solutions. KraussMaffei thus globally provides an all-inclusive customer service package and networks machines and processes with each other. Our global support offers a sound basis for your local long-term success.

Individual challenges in mechanical engineering call for intelligent solutions

With our services portfolio, we support you throughout your machine's lifecycle with a strong focus on your specific needs. In order to satisfy your wishes, we offer you a wide range of solutions in order to ensure maximum availability and optimum productivity of your machines.

Technology³ as a unique selling proposition

KraussMaffei is the only supplier in the world with a product range comprising the most important machine technologies for plastic and rubber processing: injection molding machinery, automation, reaction process machinery and extrusion technology. KraussMaffei is represented worldwide with more than 30 subsidiaries and over 10 production plants as well as about 570 commercial and service partners. Working together with our customers and partners, we are thus in a position to offer vast and unique expertise in the industry.

You can find further information at:
www.kraussmaffei.com

KRAUSSMAFFEI – PIONEERING PLASTICS



Extensive expertise from a single supplier

KraussMaffei is one of the world's leading manufacturers of machinery and systems for producing and processing plastics and rubber. Our brand has been synonymous with cutting-edge technology for over 180 years. Our product range includes all technologies in injection molding, extrusion and reaction process machinery. KraussMaffei has a unique selling proposition in the industry as a result. By drawing on our proven innovative capacity, we can guarantee our customers sustained additional value over their entire value-adding chain through our standardized and individual product, process, digital and service solutions. The range of our products and services allows us to serve customers in

many sectors including the automotive, packaging, medical and construction industries. We also supply manufacturers of electrical and electronic products and household appliances.

At your service all over the world

KraussMaffei is represented all over the world. Subsidiaries provide you with support in the countries shown in light blue. Our sales and service partners take care of you in the regions shown in white.

You can find all contact information at
www.kraussmaffei.com

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