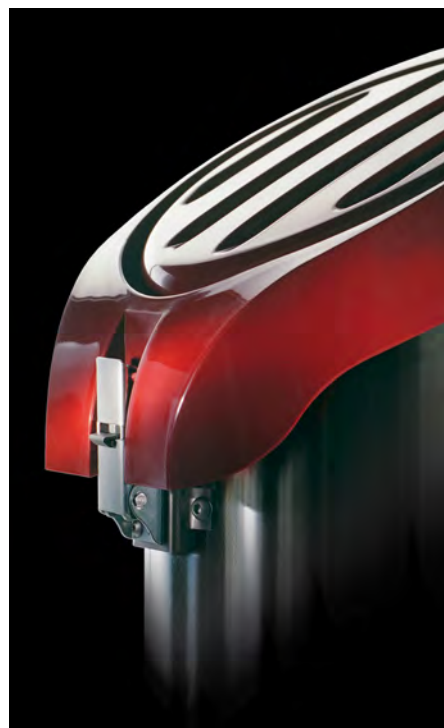
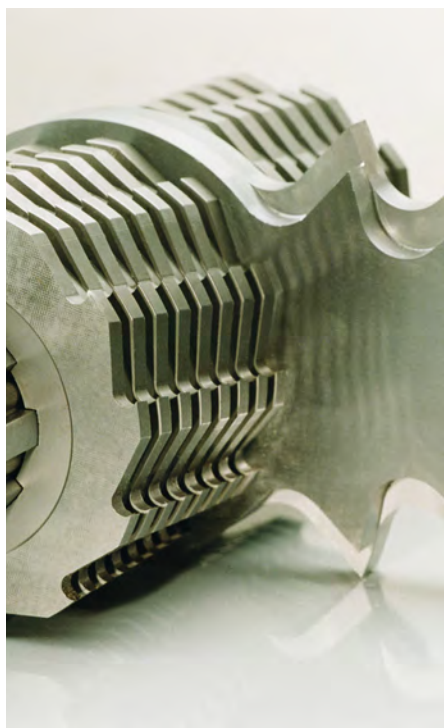


Wittmann



It's all WITTMANN.

Preface

To offer complete solutions as a single source supplier for the benefit of plastics processors and their products: this is the task and promise to which WITTMANN and WITTMANN BATTENFELD have committed themselves.

Today, the WITTMANN Group is the only company worldwide that has made good on this promise; supplying all of the equipment that is needed for the plastics injection molding industry.

This smooth interaction of machine, automation and

peripheral equipment is the key ingredient needed for real energy-efficiency, cost-effectiveness and process safety in injection molding.

No less important for us is the ever-evolving user friendliness of our equipment and the very high quality of the machine build. We live and work in a spirit of permanent innovation – and this spurs the continuous improvement of our products.

The companies of the WITTMANN Group and all employees remain deeply committed to this idea of

permanent innovation – one day at a time – everywhere in the world – and for more than 40 years now.



History of the WITTMANN Group

WITTMANN is one of the leading manufacturers of robots and peripheral equipment for the plastics industry worldwide. WITTMANN's product range includes robots and automation systems, automatic material handling with dryers and plastics recycling, temperature controllers and chillers for machine tools and volumetric and gravimetric blenders.

On April 1, 2008 WITTMANN took over the BATTENFELD Kunststoffmaschinen Ges.m.b.H. at Kottlingbrunn, Lower Austria. This led to the integration of both product lines – WITTMANN auxiliary equipment and injection

molding machines by WITTMANN BATTENFELD – and thus provided the “one stop shop” advantage that the world's plastics processors had been looking for – an absolutely seamless combination of processing machines, automation and auxiliary equipment.

2020: The WITTMANN Group takes over the Austrian company Farrag-Tech based in Wolfurt in the Vorarlberg region.

2019: WITTMANN BATTENFELD France moves to new building.

2017/2018: Further extension of the capacity at WITTMANN BATTENFELD in Kottlingbrunn.

2016: Establishment of WITTMANN BATTENFELD Slovakia and WITTMANN BATTENFELD South Korea.

2015: Opening of the new premises in Taiwan. Setting up of the new production facility of the material handling department in Wolkersdorf near Vienna. Opening of the new sales subsidiary in Hungary. Purchase of BATTENFELD Poland, establishment of WITTMANN BATTENFELD Poland.

2014: Commissioning of the new WITTMANN BATTENFELD assembly hall in Kottlingbrunn, Austria, and increasing the Kottlingbrunn capacity for the production of large injection molding machines.

2013: Extension of the production capacity at WITTMANN Kunststoffgeräte GmbH in Vienna, Austria: start-up of the new metal sheet forming department. Extension of the headquarters of the WITTMANN BATTENFELD subsidiary in Torrington, Connecticut, USA.

2012: Extensions of the WITTMANN BATTENFELD India subsidiary in Chennai, of WITTMANN Germany in Nuremberg, and the WITTMANN BATTENFELD plant in Kottlingbrunn, Austria.

2011: WITTMANN BATTENFELD CZ moves to a new and bigger plant.

2010: Product launches of the new WITTMANN BATTENFELD PowerSeries.

2009: Ground-breaking ceremony for the new WITTMANN BATTENFELD sales and service center in Meinerzhagen, Germany. Establishment of WITTMANN BATTENFELD Romania.

2008: WITTMANN acquires BATTENFELD Injection Molding (now WITTMANN BATTENFELD). Establishment of WITTMANN BATTENFELD Bulgaria.

2007: WITTMANN Mexico and WITTMANN Canada are moving to new and bigger plants. Nucon WITTMANN acquires the M-tek dosing and conveying product line and becomes WITTMANN Canada. Establishment of WITTMANN India.

2006: Acquisition of REGAD, France, manufacturer of high-precision molds for the packaging market. Establishment of the WITTMANN subsidiary in Turkey. Establishment of the WITTMANN USA West Coast Technical Center.

2005: Start of operations at WITTMANN China.

2004: Establishment of WITTMANN Thailand.

2003: Establishment of WITTMANN Czech Republic.

2002: Purchase of Capitol Temptrol, USA, manufacturer of cooling systems for the plastics industry.

2001: Market introduction of the new control with color graphics screens for robot and material handling systems. Expansion of the production areas in Vienna and USA to satisfy the increasing demand. Establishment of WITTMANN Singapore and Malaysia. Establishment of WITTMANN China.

2000: Acquisition of CMB, France, manufacturer of granulators for the plastics industry. Establishment of WITTMANN Brazil.

1999: Acquisition of the Canadian company Nucon, manufacturer of material handling systems.

1998: Start of robot production at WITTMANN Hungary. Establishment of WITTMANN Mexico. Acquisition of Cramer Trocknerbau, Kierspe, Germany, manufacturer of plastics dryers.

1997: Establishment of WITTMANN Hungary.

1992: Introduction of the new revolutionary CAN-Bus control for robots at "K" industrial fair. Establishment of WITTMANN Spain.

1991: Establishment of WITTMANN France.

1989: Founding of WITTMANN USA.

1988: Acquisition of robot manufacturing from Colortronic, Germany.

1986: First representation in the USA.

1985: Production of the first CNC robots.

1983: Founding of WITTMANN Germany.

1979: Manufacturing of mold temperature controllers.

1976: WITTMANN founded by Dr. Werner Wittmann with the manufacture of water flow regulators.



Headquarters and Production



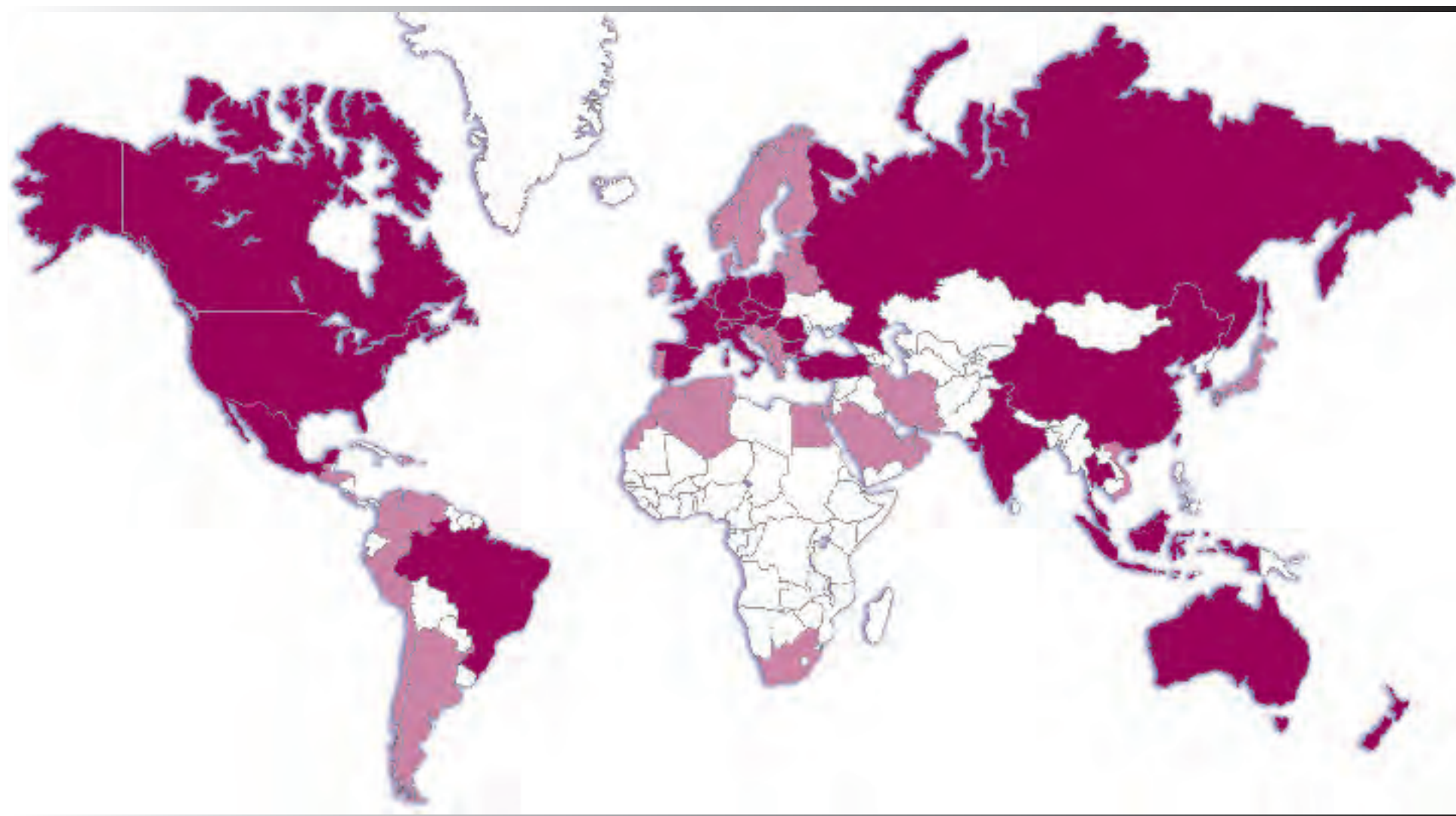
WITTMANN and WITTMANN BATTENFELD operate 10 production facilities in 6 countries: Austria, Hungary, France, USA, Turkey, and China.

The WITTMANN Group's companies are driven by a policy of permanent product innovation and adherence to the highest quality standards.

Specialization in all the various facets of plastics processing technology and a continuing commitment to in-house production help ensure the worldwide competitiveness of the Group and its products.



Austrian headquarters of WITTMANN in Vienna and WITTMANN BATTENFELD in Kottlingbrunn



Global Distribution

Subsidiaries

Australia/New Zealand – Austria – Belgium/
Netherlands/Luxembourg – Brazil – Bulgaria
Canada – China – Czech Republic – France – Germany
Great Britain/Ireland – Hungary – India – Indonesia
Italy – Malaysia – Mexico – Poland – Romania
Russia – Singapore – Slovakia – South Korea – Spain
Switzerland – Taiwan – Thailand – Turkey – USA

Agencies

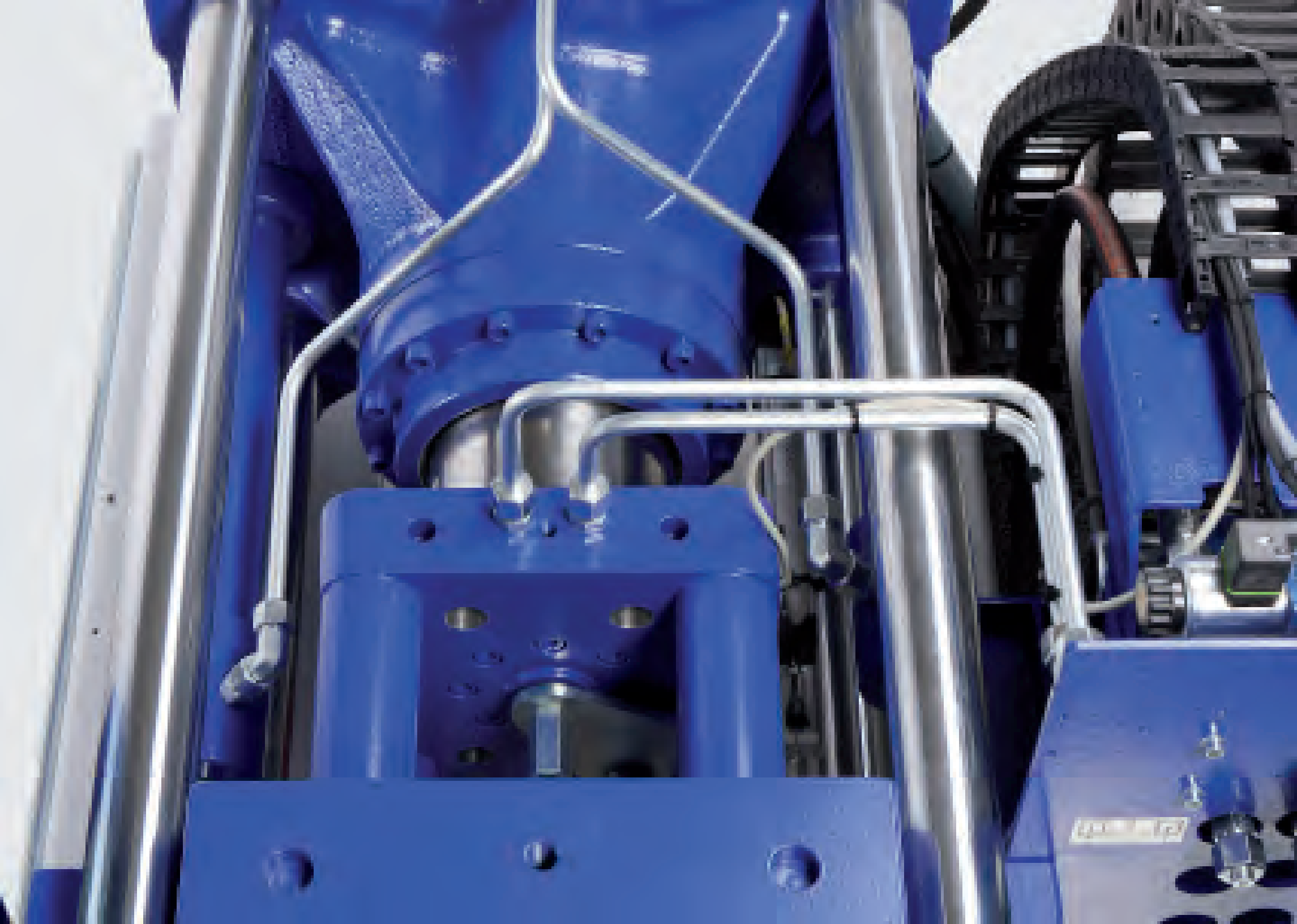
Algeria – Argentina – Chile – Colombia
Denmark – Ecuador – Egypt – Finland – Greece
Guatemala/Honduras/El Salvador – Israel
Latvia/Lithuania/Estonia – Morocco – North Macedonia
Portugal – Saudi Arabia/Emirates/Kuwait/Oman/Qatar
Serbia/Bosnia-Herzegovina/Montenegro – Slovenia/Croatia
South Africa – Sweden/Norway – Switzerland – Tunisia
Ukraine – Venezuela – Vietnam

With 36 additional direct sales subsidiaries, the WITTMANN Group is represented in all major plastics markets around the world.

Business activities include the supply and the start-up of entire plastics processing systems, spare part support, and even upgrading of second-hand machinery.

In addition, 25 regionally active agencies represent the WITTMANN Group's products in the smaller markets throughout the world.





SmartPower



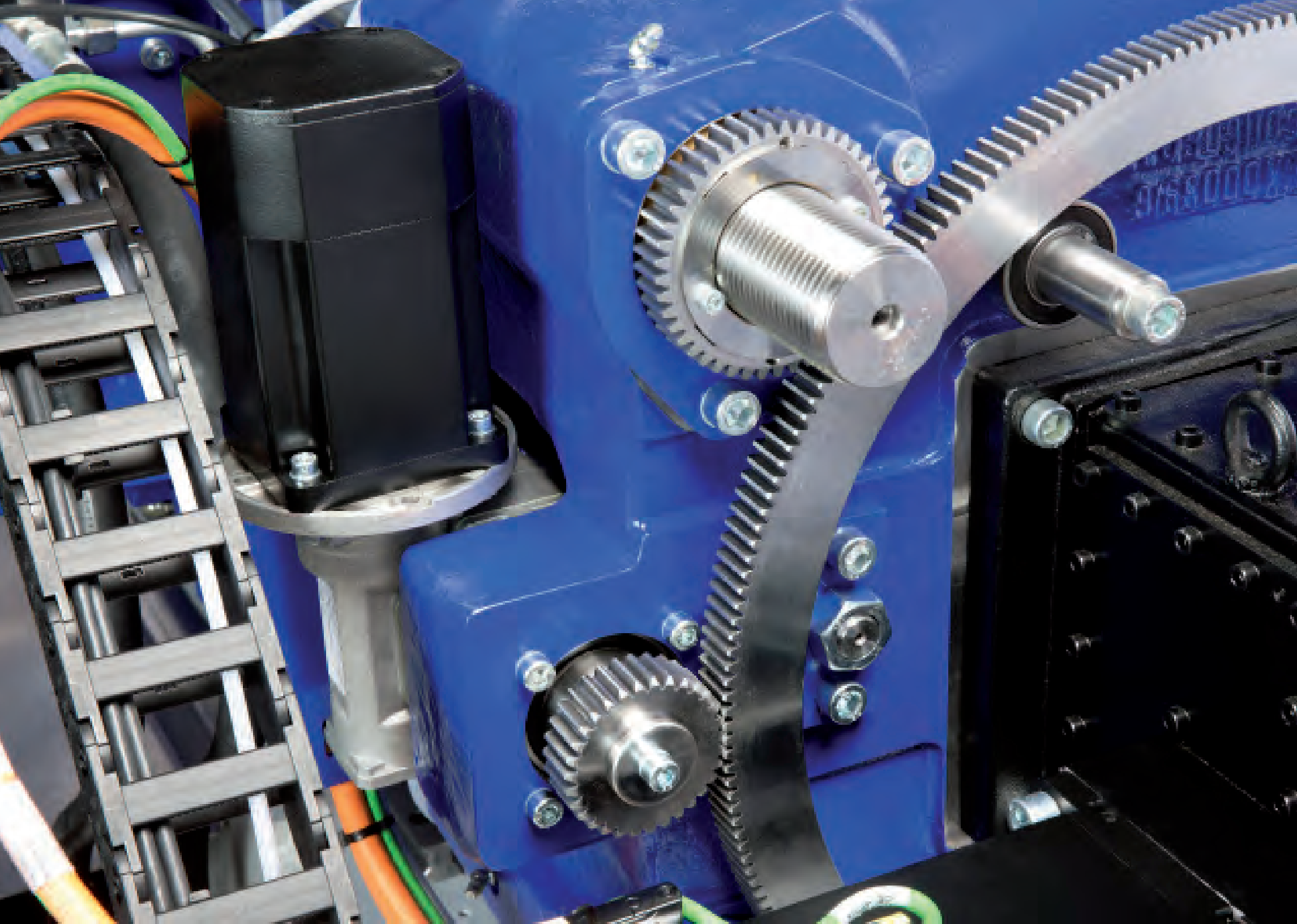
SmartPower 120

Servo-hydraulic machines of compact and modular construction allow for a multifunctional use, and can be optimized for every individual case.

The combination of this machine's intelligent flexible drive concept with the KERS technology provides for the highest energy efficiency.

The SmartPower stands for precision, efficiency, and user-friendliness within a clamping force range of 25 to 400 tons. These machines are ideally suited for standard and multi-component injection molding.





EcoPower



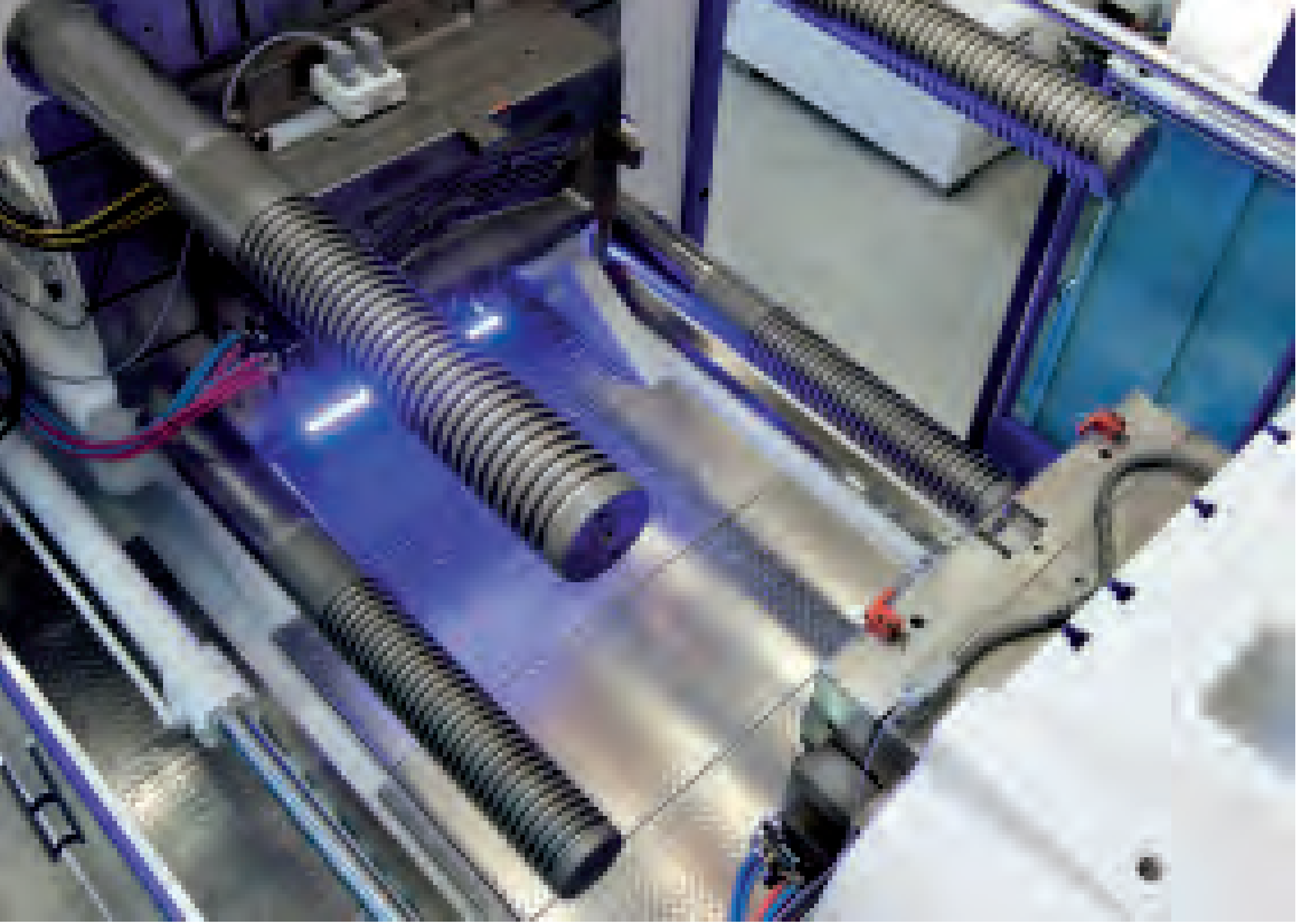
EcoPower 110

The all-electric EcoPower injection molding machine is available with clamping forces ranging from 55 to 550 tons. It also offers the highest energy-efficiency and precision in production.

The compact injection unit and the directly driven clamping unit provide for maximum productivity.

The machine also offers a small footprint and an open modular design at the top and on the injection side for ease of operation.





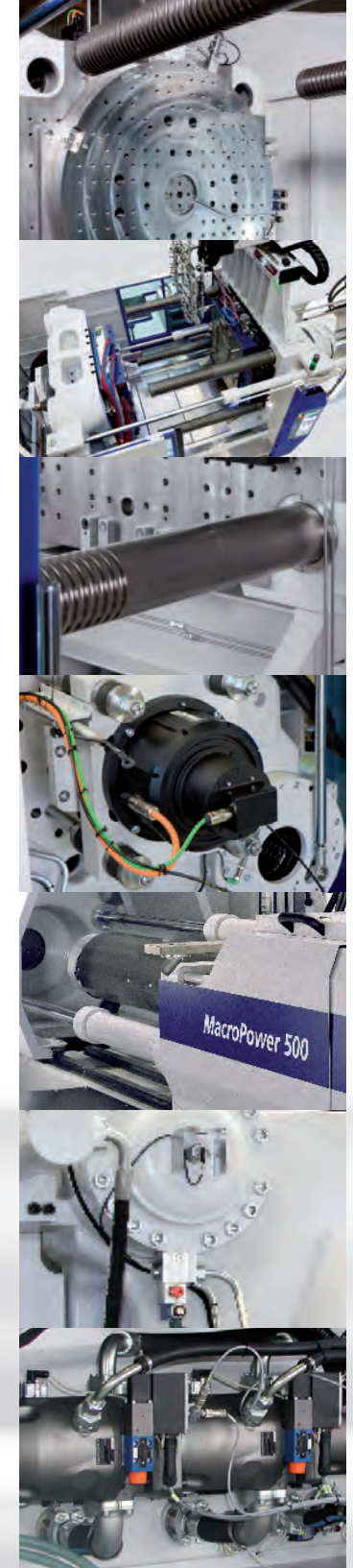
MacroPower

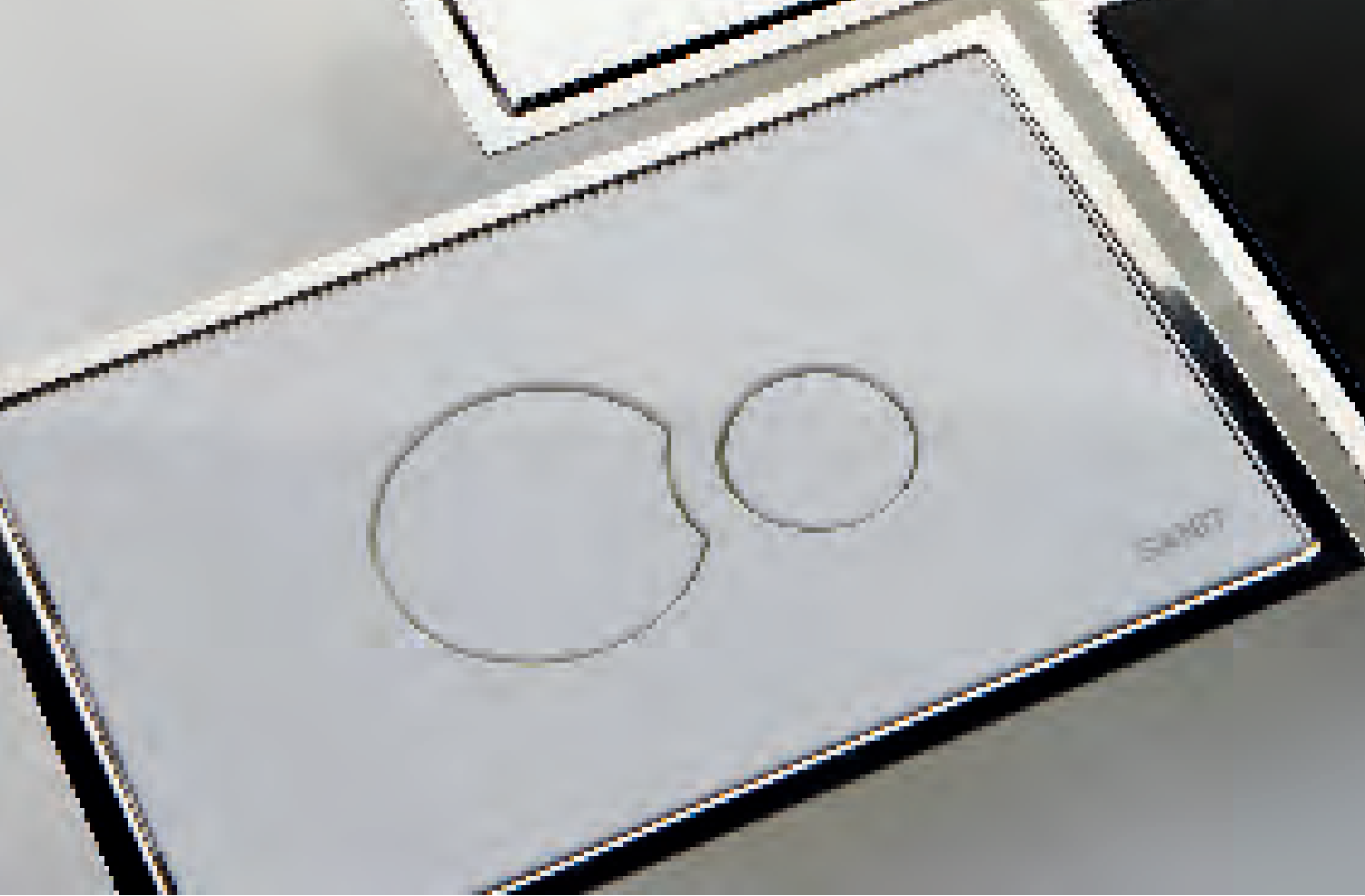
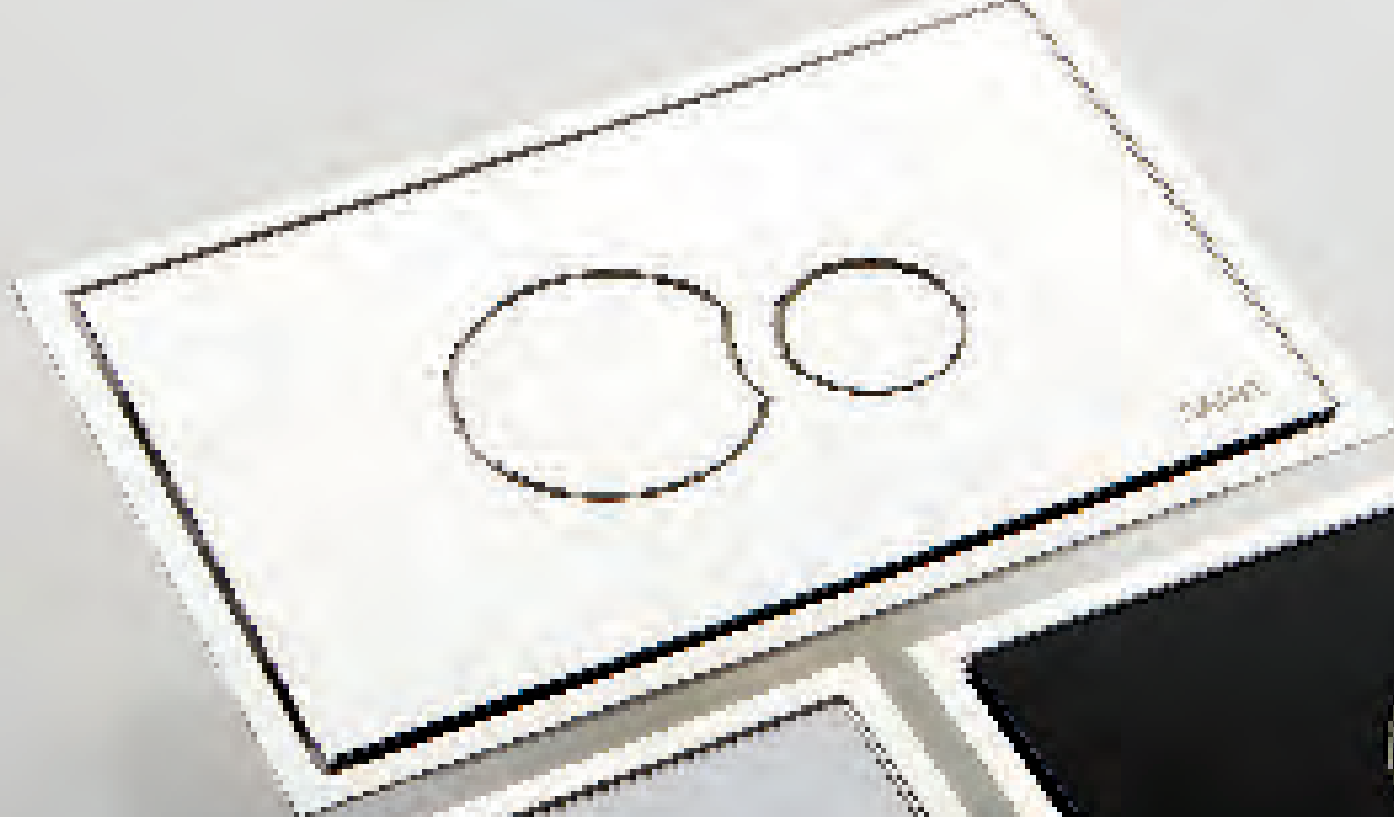


MacroPower 850

Compactness through short overall length, modularity, precision, and high speed: with these advantages, the MacroPower is defining the concept of the large machine in a new manner – with clamping forces ranging from 400 to 2,000 tons.

An extensive range of optional features enables the most different extension alternatives for the application of multi-component injection molding as well as the advanced CELL-MOULD® and AIRMOULD technologies.





AIRMOULD
COMBIMOULD

VARIOMOULD
CELLMOULD®

PIM

LIM

Technologies for the production of high-class parts

Today's plastics processing requires that ideas must be realized in the most cost-efficient way, avoiding any unnecessary complexity.

At this point, choosing the right processing procedure plays a decisive role – and WITTMANN BATTENFELD has process technology to match user needs.

WITTMANN BATTENFELD is a declared specialist in the field of fluid assisted injection molding, and for processing liquid silicone, for powder injection molding, multi-component and vario-therm technology – and also for productive combinations of all these methods.





Robot Technology

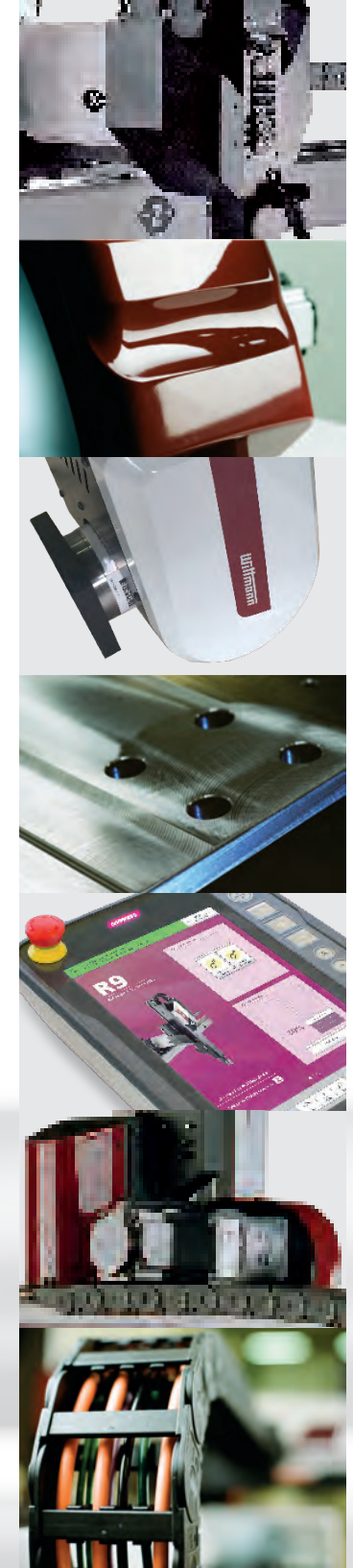


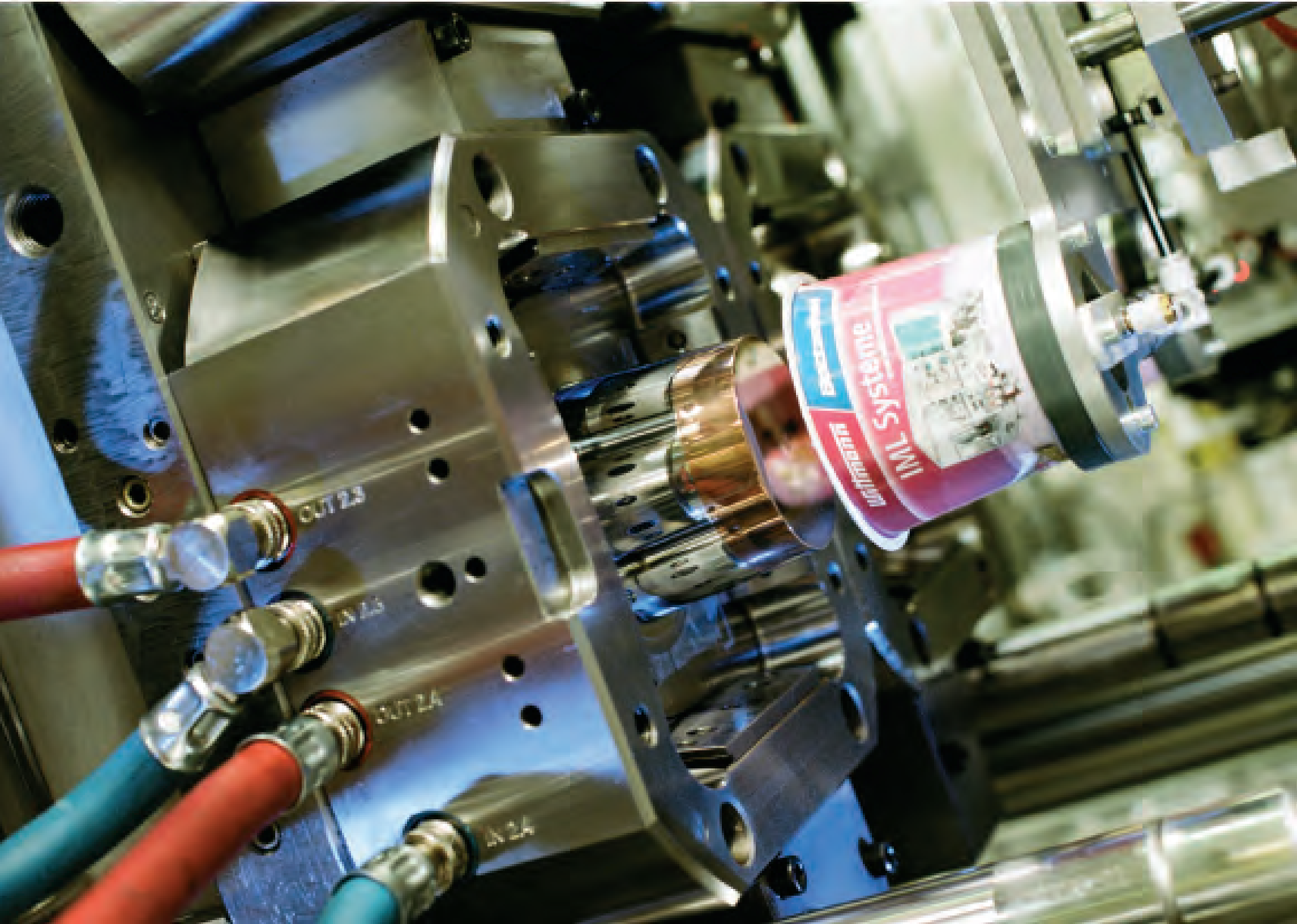
WITTMANN servo robots are built to the highest specifications; horizontal axes constructed with steel beams and a kick-stroke set-up constructed with aluminum special section tubes.

For additional degrees of freedom, WITTMANN supplies optional servo rotational axes around all 3 principal axes.

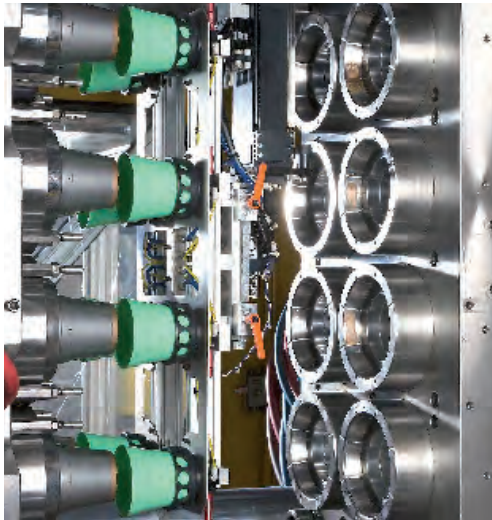
The touch-screen robot control allows access to special program functions that provide the user with unrestricted flexibility.

A WITTMANN bestseller: W818 robot for clamping forces of 20 to 300 tons





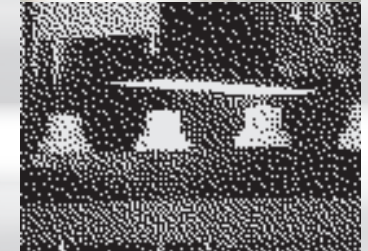
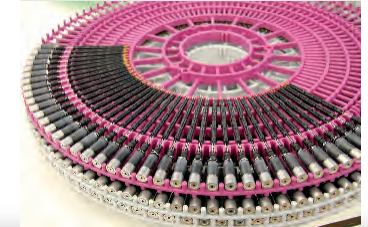
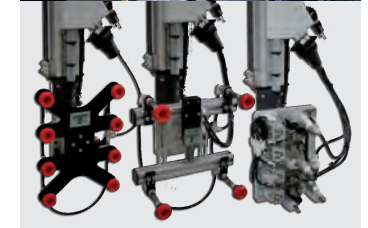
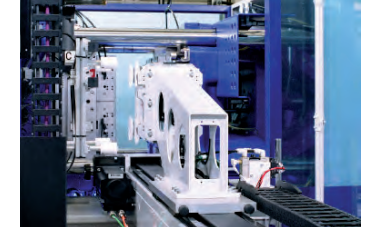
Automation



WITTMANN sprue pickers and servo robots are ubiquitous in plastics processing; typically used for part insert operations, part removal and are generally essential in any part of the injection molding process.

WITTMANN's comprehensive range of robots can be used for handling any payload. The WITTMANN product range also comprises special automation builds that enable the fastest removal of parts and the automation of the In-Mold Labeling (IML) process.

Highest quality allows for the shortest cycle times.





Flow Control

Water flow controllers from WITTMANN are robust and easy to handle.

And for many years now, these devices have been the industry standard for the plastics processing sector.

WITTMANN currently produces the most innovative product developments in the field today: intelligent flow controllers with touch-screen displays that extensively monitor and document the entire production process.



Flowcon plus and Series 310 flow controller





Temperature Control

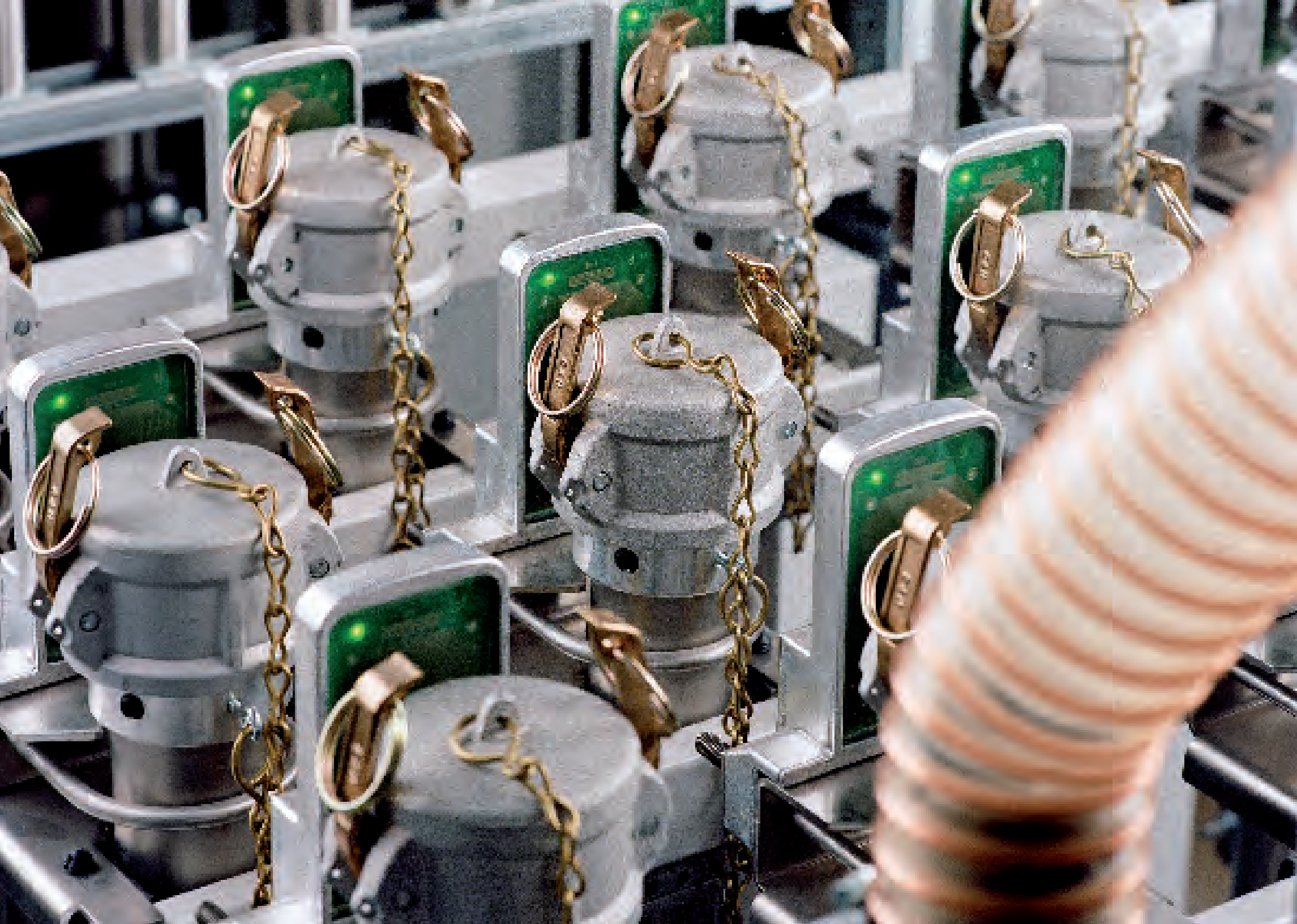
Powerful, with maximum ease of use, and immensely successful for a long time now: WITTMANN Tempro temperature controllers enjoy a very good reputation in the plastics processing sector.

The Tempro series includes competitively-priced standard models for simple applications; directly-cooled units with very high capacities, up to oil-based units for the highest demanding process applications.



Tempro primus C120, Tempro basic C120, Tempro basic C90, Tempro plus D single and dual zone units





Material Conveying/Central Systems



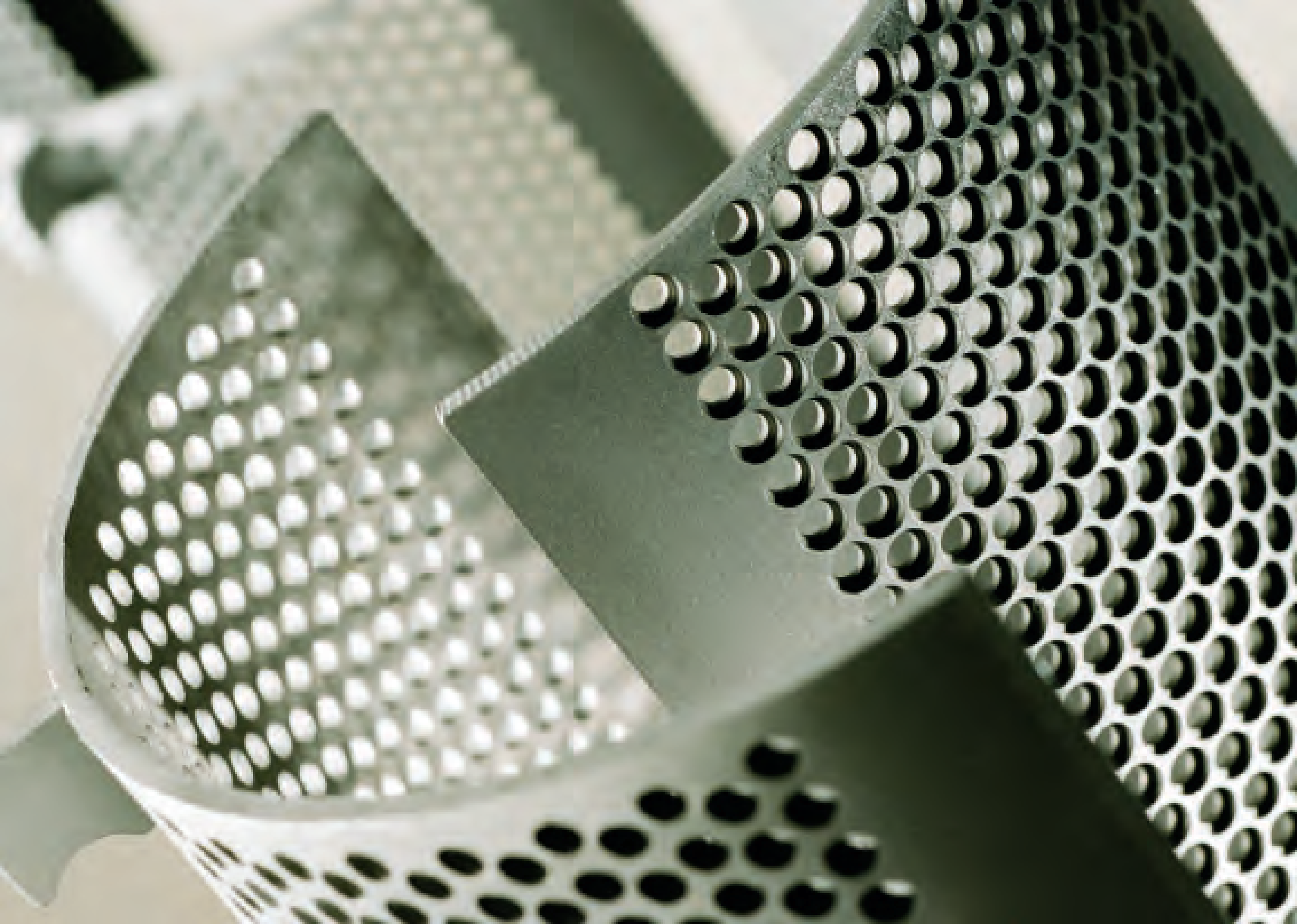
When it comes to drying, conveying, and blending plastics material, it is necessary that the diverse operations function as one.

Only in this way, it will be possible in the long run to assure a production process that is working absolutely frictionless.

Drying and conveying systems from WITTMANN integrate all equipment within a centrally controlled and singular process, thus ensuring optimum manageability and reliability at all times.



Card 3G/FIT, Card 20S and Aton plus VS dryers, Feedmax basic and Feedmax S 3-net material loaders, Gravimax G34 blender



Recycling

Strategies for the optimization of all resources are at the center of our concerns.

Inline recycling of plastics is a clear priority.

WITTMANN screenless granulators and blade granulators (used as central or as beside-the-press solutions) make clean regrind from even the most different sprues and parts (made of soft, tough or glass fiber reinforced plastics). This regrind can typically be re-introduced in the manufacturing process.



G-Max 33, S-Max 2 plus, Junior Double 4 beside-the-press granulators, and ML 33 central granulator



WITTMANN 4.0

We aim for seamless production-related integration of injection molding machine, automation and auxiliary equipment, thus bringing together all functions in one complete working cell.

The ambition and intention of the WITTMANN Group is to comprehensively integrate all devices in one single control, thus allowing for unlimited access to all operations.

We are on the way to WITTMANN 4.0, our own vision of Industry 4.0.



Schematic representation: integration of auxiliaries in the machine control





Training and Service

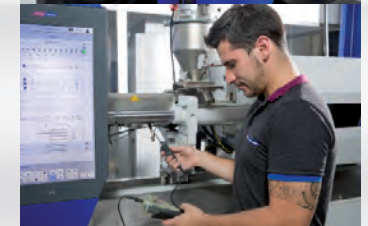


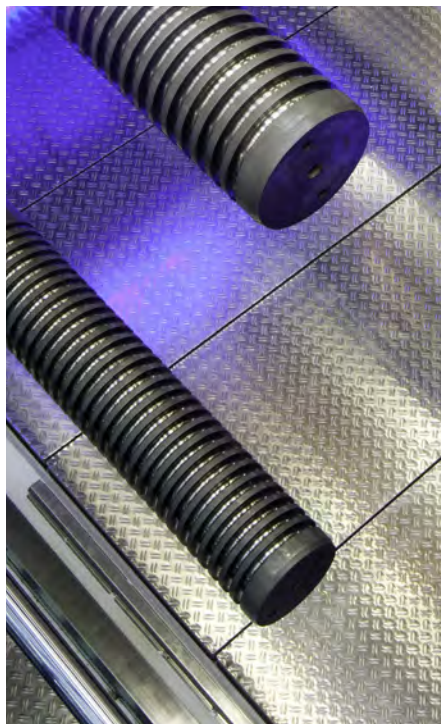
Training facility at WITTMANN BATTENFELD in Torrington, CT, USA

The WITTMANN Group offers worldwide service to the plastics processing industries. Using the most modern communications media, our service is available around the clock.

WITTMANN Web-Service provides expert technicians with direct access to the equipment, thus giving the customer hands-on service and quality.

Training programs are also offered at numerous locations around the world, ensuring that our partners deploy well-trained personnel in the field.





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