



**FROM PELLET TO PART
YOUR PARTNER IN BUILDING
A SUSTAINABLE FUTURE**



Imagine the future where industries work together committed to preserve resources, reduce waste and create high value products with greater longevity...

In DME we believe in building the Sustainable Future through Innovation. We work with our partners daily to prove that Less is More: reducing energy consumption, bringing down material waste and optimizing the manufacturing process while increasing productivity and output.

The Future is Ours, the Future is DME

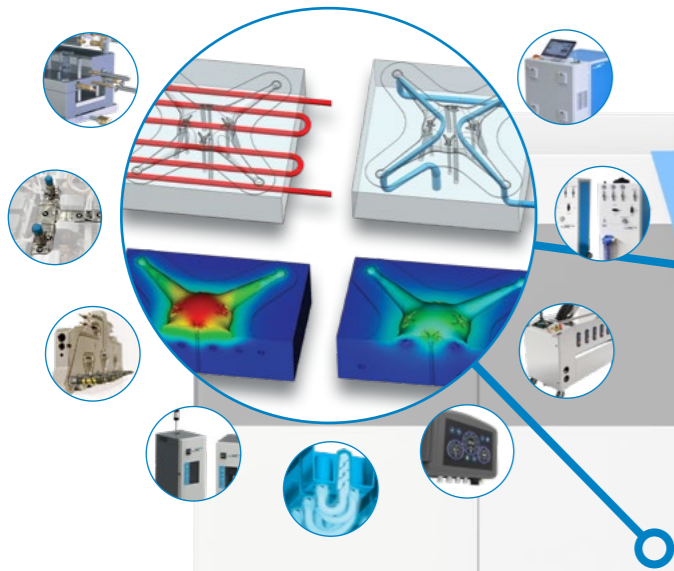


FULL SOLUTIONS PROVIDER

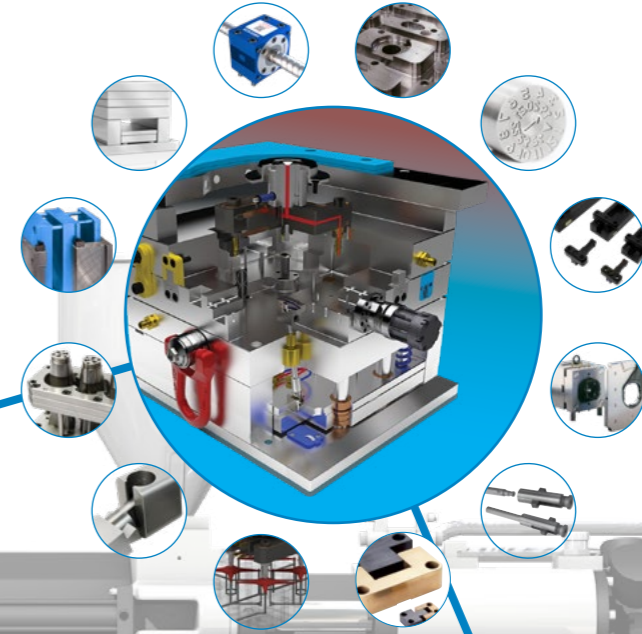
IoT & DIGITAL CONNECTIVITY



THERMAL MANAGEMENT OPTIMIZATION



SOLUTIONS FOR MOULD DESIGN



MILACRON

BUILDING THROUGH INNOVATION



PRODUCTIVITY

SUSTAINABILITY

Solutions for mould design

IoT & Digital connectivity

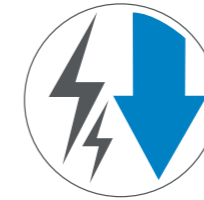
Thermal management optimization

LEARN MORE ABOUT DME SOLUTIONS BY SCANNING QR CODES BELOW

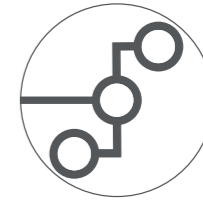
REDUCE CYCLE TIME



SAVE ENERGY



DIGITAL CONNECTIVITY



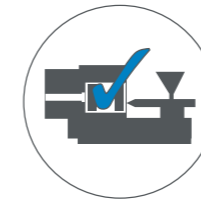
LOWER SCRAP
IMPROVE PARTS QUALITY



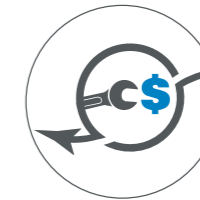
REDUCE TOOLING COSTS

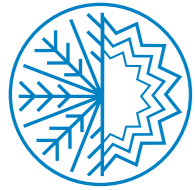


INCREASE MACHINE UPTIME



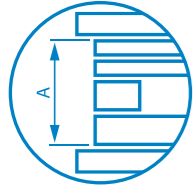
LOWER MAINTENANCE COSTS





THERMAL MANAGEMENT OPTIMIZATION

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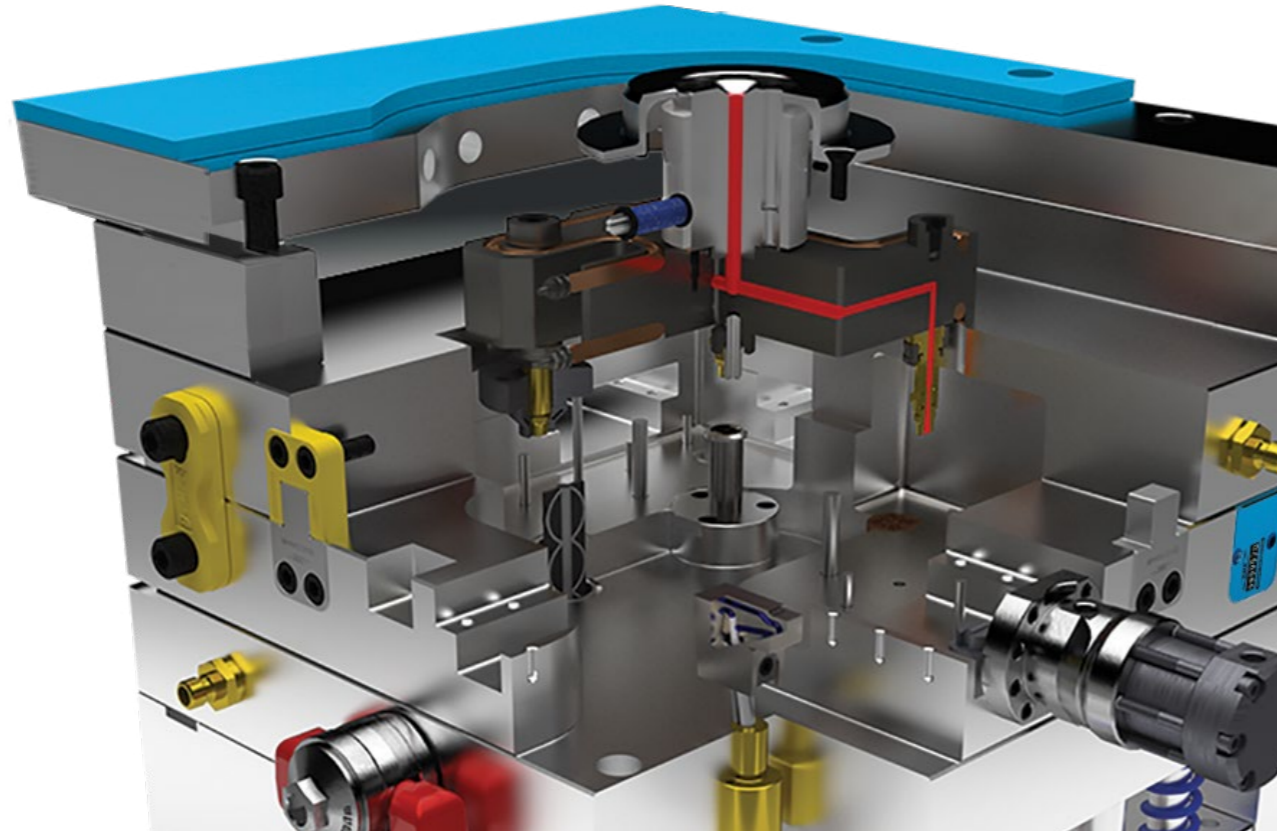
SOLUTIONS FOR MOULD DESIGN

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IoT & DIGITAL CONNECTIVITY

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1. THERMAL MANAGEMENT OPTIMIZATION

New and improved technology solutions to better control and minimize thermal variation within the mould and better facilitate thermal transfer enables the improvement in part quality and reduced cycle times. RESULT: Produce more with less, helping to improve profitability and your overall sustainability performance.

MOULD DESIGN

The optimization of thermal management starts at the time of part and mould design. All elements must be holistically evaluated and modelled. Technical solution designed into the mould to manage heat distribution and mould cooling optimizes processing performance.

MOULD PROCESSING

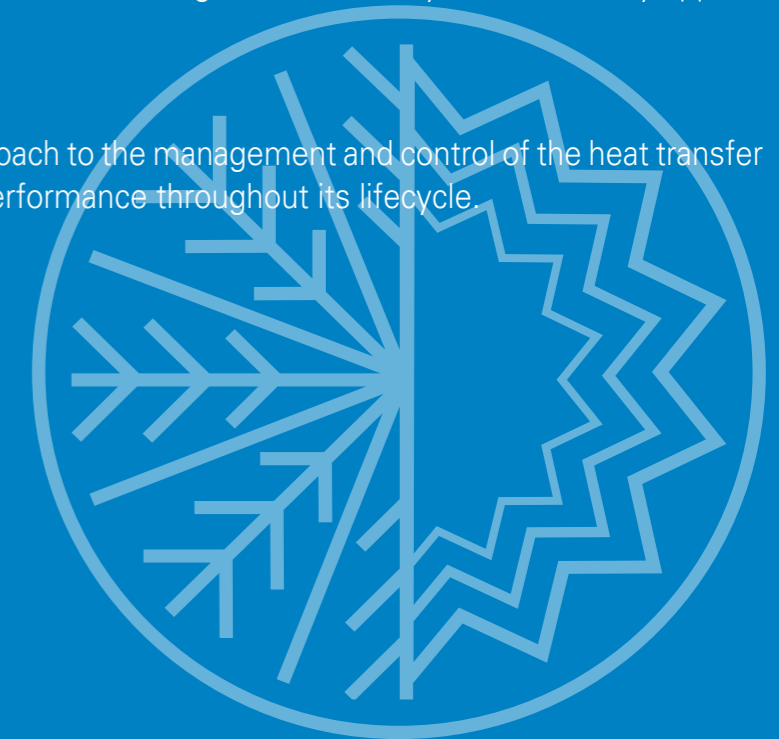
During the moulding process all key variables of the moulding process should be monitored and controlled. Temperature balance is critical with heat needing to be efficiently and effectively applied and then quickly removed.

SOLUTIONS

DME's latest technologies provide a total approach to the management and control of the heat transfer process of the mould including maintaining performance throughout its lifecycle.

Benefits

- Increased production output
- Simplest set up processes
- Extremely fast heating and cooling times
- Lower energy consumption
- Remote and speedier maintenance

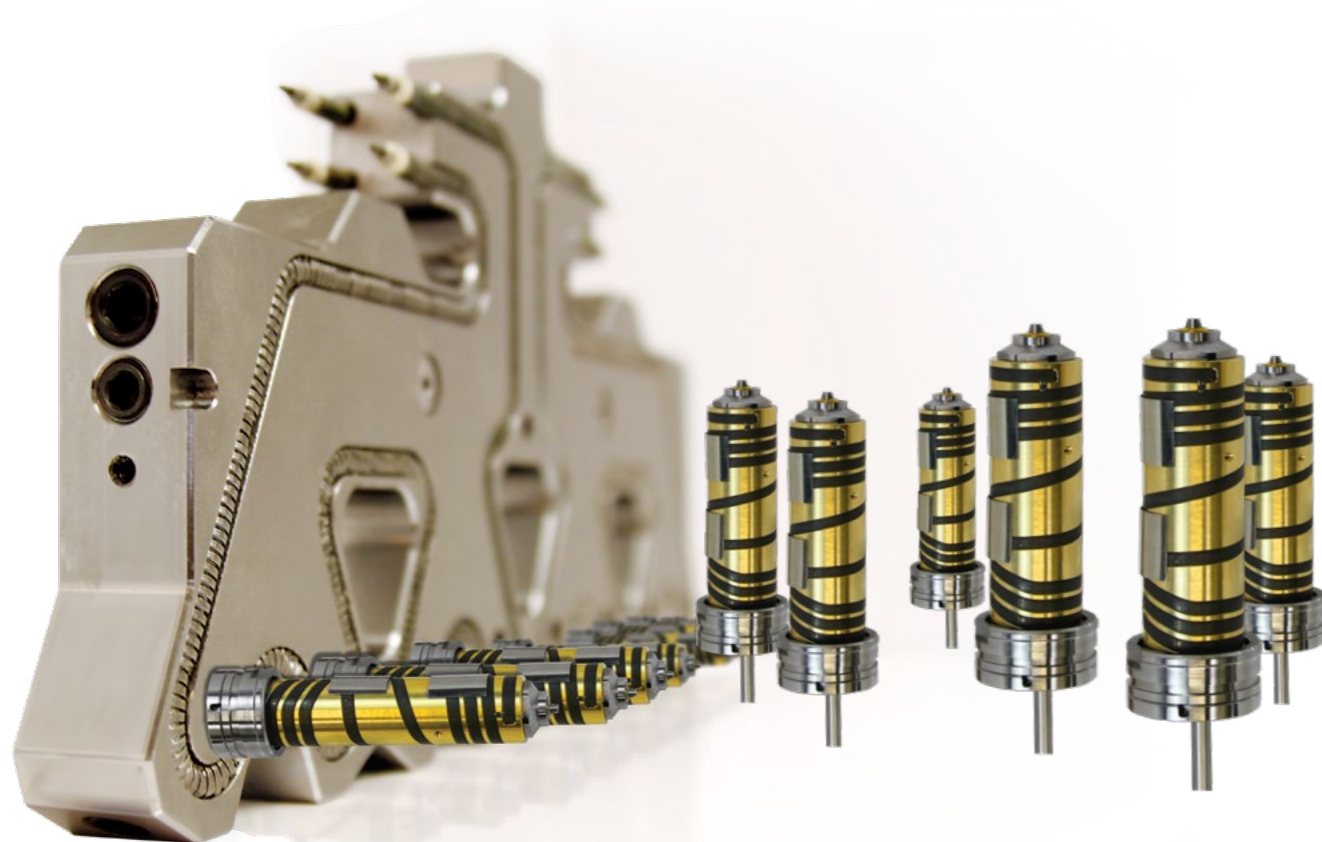


SMARTONE HOT RUNNER SYSTEM

New cost effective yet highly reliable modular system, available in both open and valve gate, making it ideal for lower cavitation tooling processing of a broad range of resins. Standardized on a global platform for ease and superior economics of aftermarket service.

Your benefits:

- Modular for ease of installation and maintenance
- Unobstructed nozzle flow path for faster color changes
- Global aftermarket service for fast delivery of parts
- Combined with iControl™ insulation for reduced cycle times, faster start-up & lower energy consumption

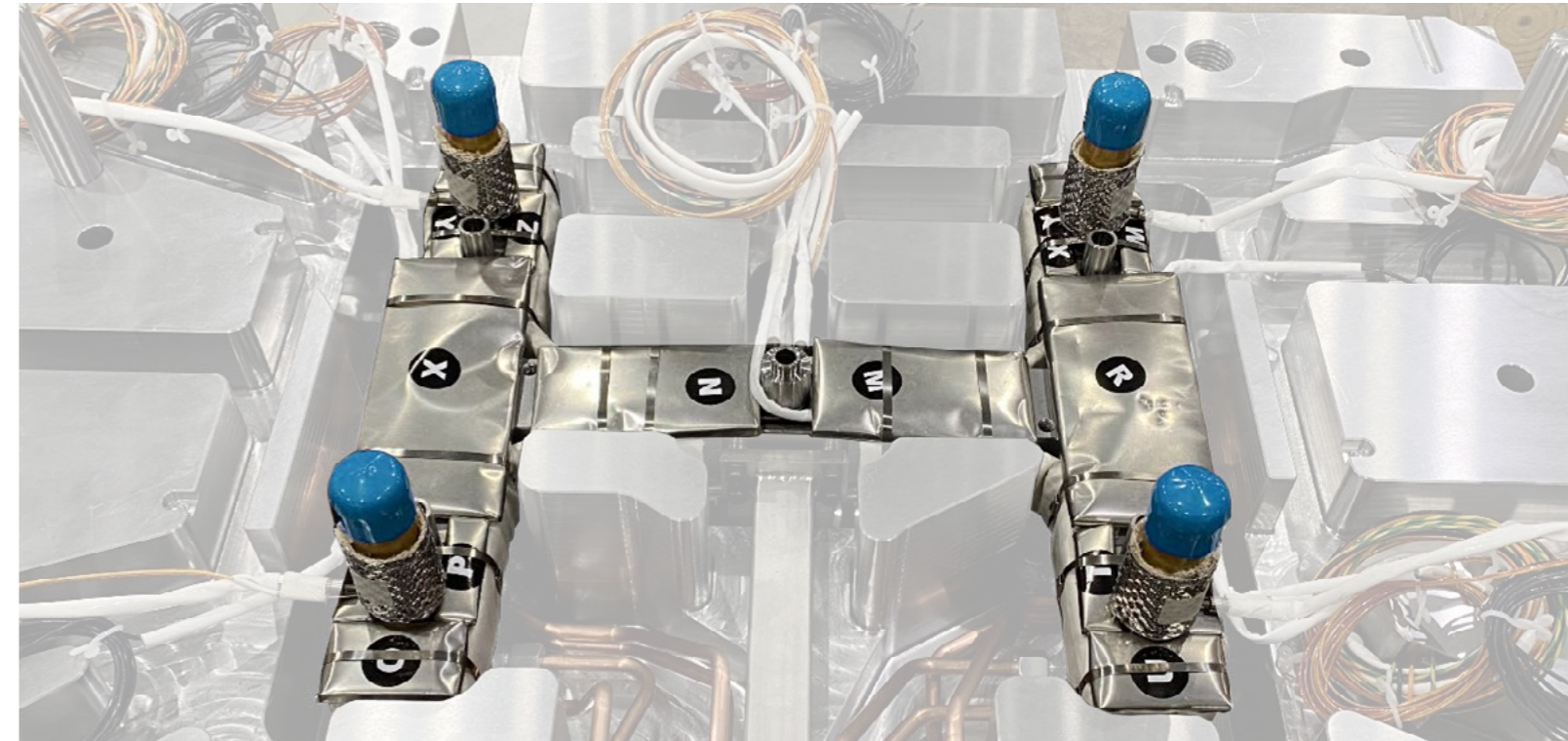


iControl™ INSULATION

Encapsulating hot runner system with insulation allows for lower mould temperatures reducing energy consumption and boosting the productivity of the injection moulding process.

Your benefits:

- Reduced cycle times
- Faster start up times
- Lower energy consumption
- Processing of heat sensitive materials such as optical grade resins, bioplastics and resins with high post-consumer recycle content which are all prone to degradation with elevated processing temperatures



DME SMART SERIES™ M2+ HOT RUNNER TEMPERATURE CONTROLLER

One of the industries most advanced controller platforms capable of controlling 1-500+ zones. Incorporates a comprehensive list of production and safety features designed to enhance part quality, minimize scrap and maximize productivity. Features include plastic leakage detection, color change wizard, soft start, ground fault detection and much more. M2+ can also be fitted with a range of integration options such as water flow monitoring, sequential valve gate and servo control.

Your benefits:

- Precise and reliable temperature control to enhance part quality and minimize scrap
- Intuitive full-color touch screen controls makes navigation quick and easy
- A wide range of integration options helps to eliminate excess equipment and save space



DME CONFORMAL COOLING

Even with the most complex geometries advanced thermal transfer is possible by balancing the heating and cooling performance across the part.

Your benefits:

- Reduced cycle times
- Improved parts quality
- Better aesthetics
- Higher process stability (better CPK values)



DME WATER MONITORING & CONTROL

Consistent performance through the lifecycle with optimized temperature and flow.

Your benefits:

- Maximize moulding performance
- Multiple presets storage for quick mould changes
- Logging and reporting for mould cooling optimization
- Reducing scrap and energy consumption



DME COOLING CHANNEL MAINTENANCE

Reestablish original design cooling performance through the lifecycle of the tool.

Your benefits:

- Removes rust, lime and other deposits from your tools, and machines
- Increase quality, efficiency, and performance of your systems
- Reduces wear on your machines
- Reduces maintenance and repair costs
- Minimizes production downtime
- Lowers energy resource consumption

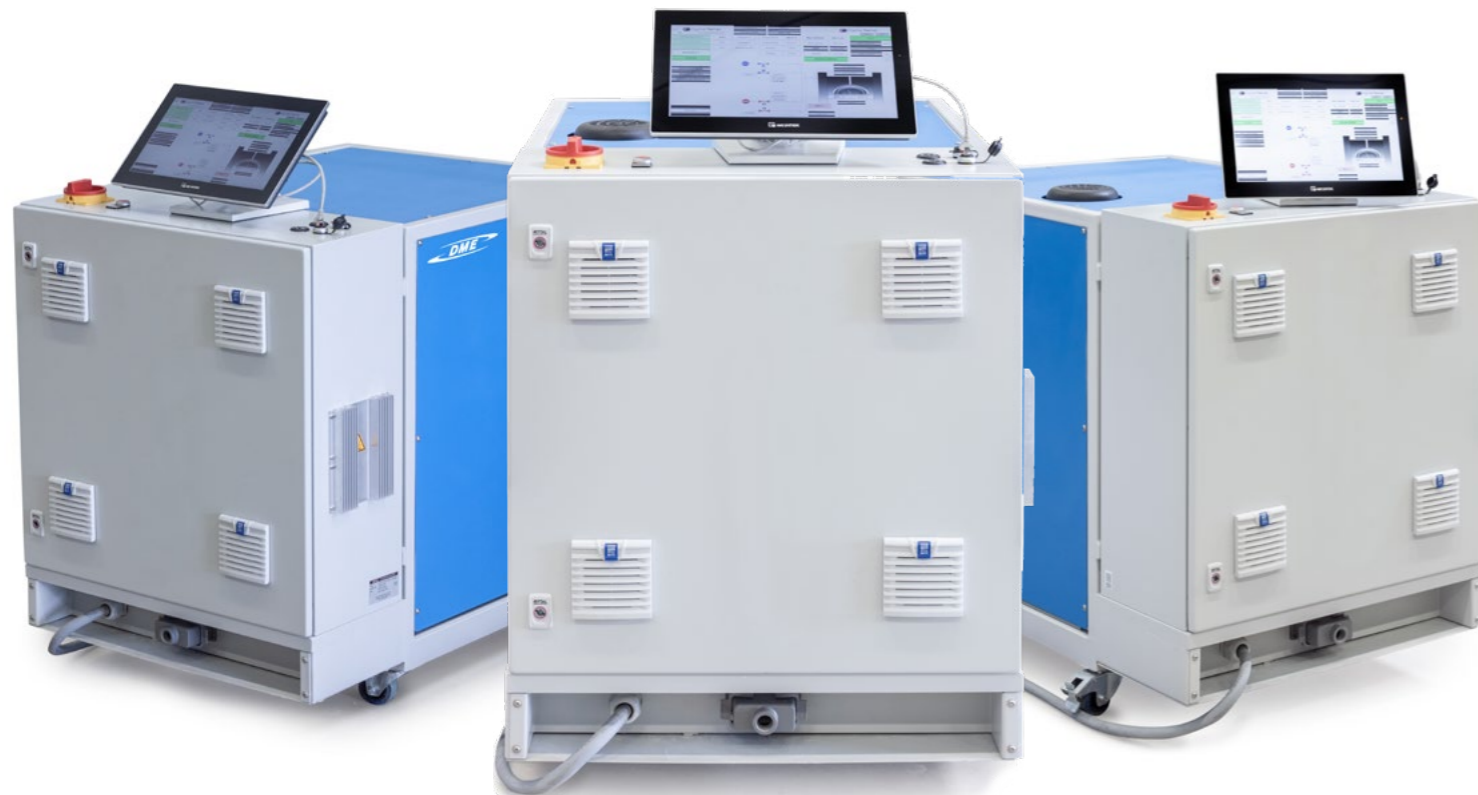


VARIOTHERM TECHNOLOGY

“Hot/Cold” heating and cooling system cycles from 20 to 200 degree within nano seconds to control the thermal transfer process.

Your benefits:

- Simplest set up processes
- Extremely fast heating and cooling times
- Major energy savings
- Remote maintenance

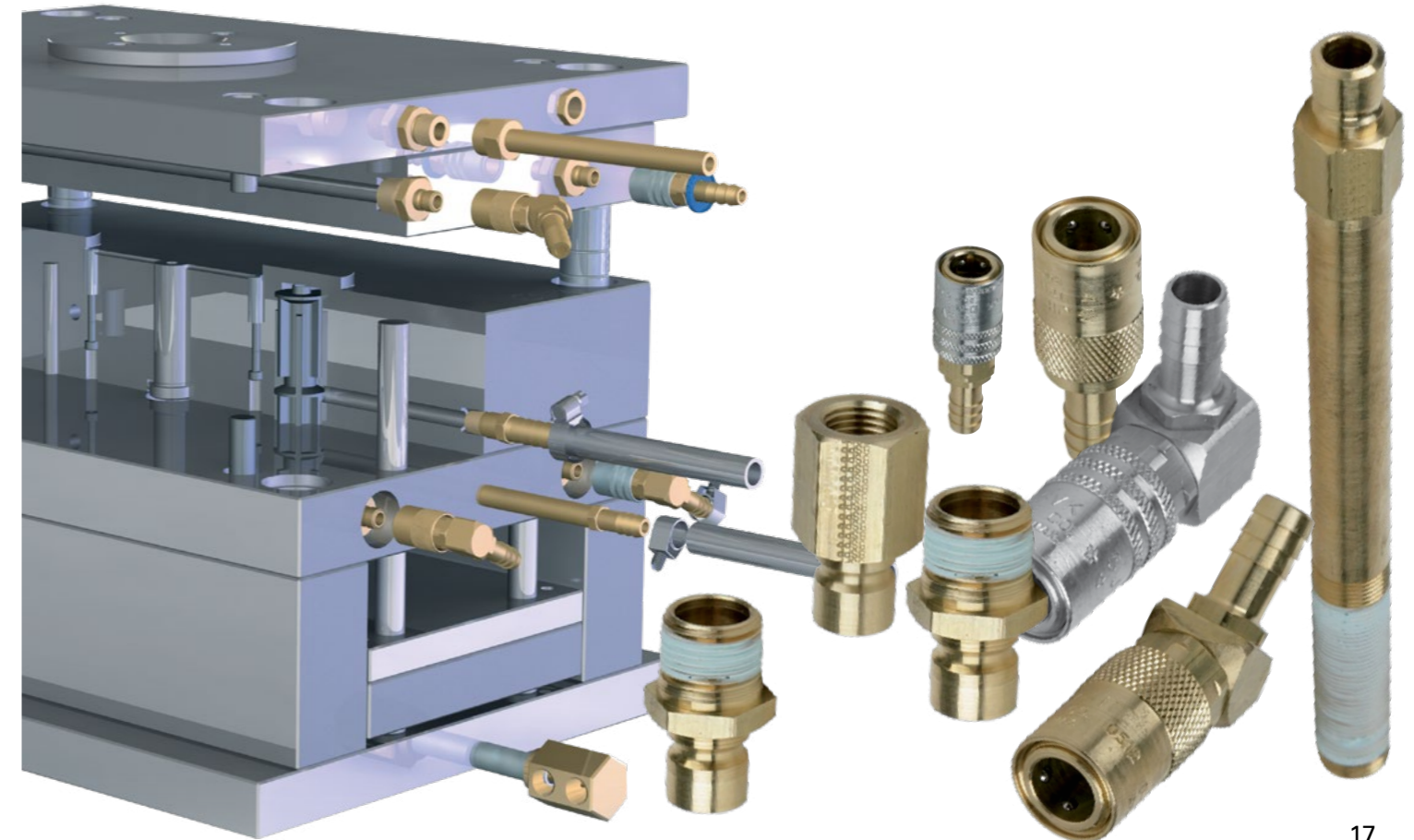


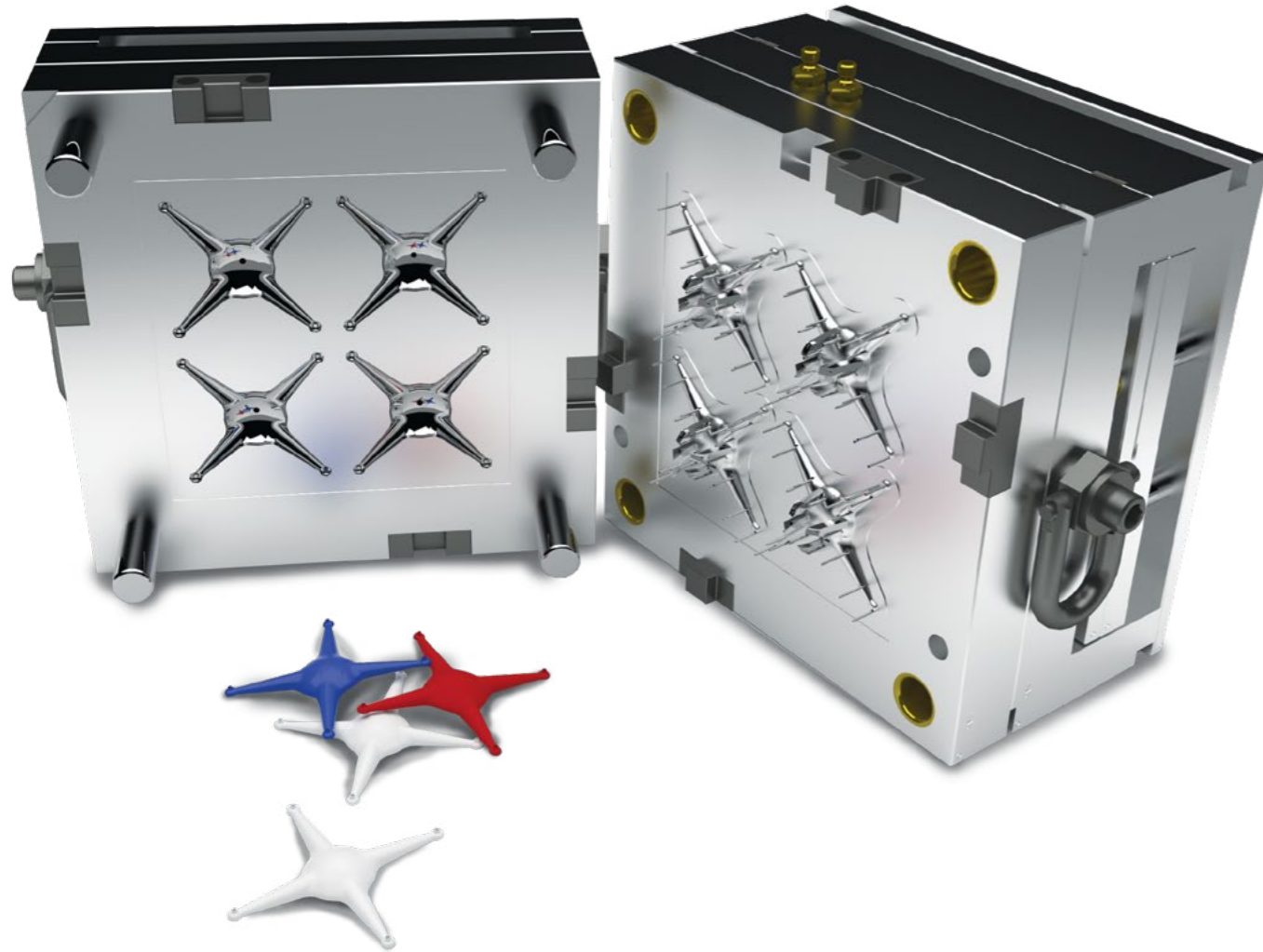
FLUID CONNECTORS

Quick connect, safely and efficiently, to manage your thermal transfer media.

Your benefits:

- Widest possible selection with fast deliveries
- Working Temperature Air: -15°C up to 200°C Oil: up to 120°C Water: up to 100°C
- Compatible with leading industry standards worldwide
- Advanced sealing technology
- Safety locking to prevent leaks





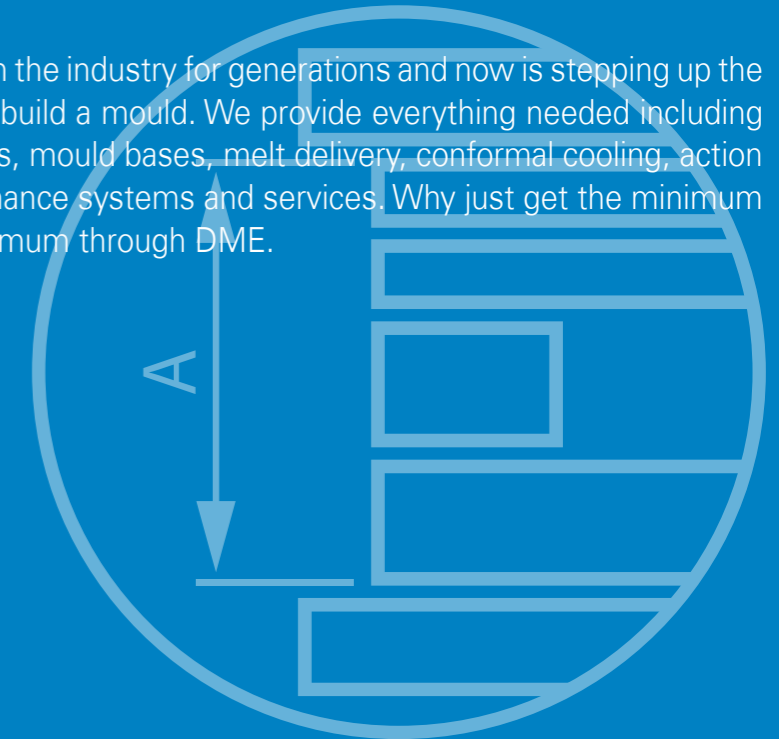
2. SOLUTIONS FOR MOULD DESIGN

DME has been supporting mould makers since the 1940s, and after eight decades we're still at the forefront of new and innovative technology evolving within the moulding industry. Precision components, state of the art monitoring and control, industry 4.0 maintenance systems are all available at DME. Our goal is your goal; reduce cost and maximize productivity.

To reap the full benefits of DME we would like to help you design the optimal mould base around your plastic part.

DME is your partner for a designed solution that provide you and your customer with the lowest possible mould cost over the mould lifecycle. DME provides solutions that optimize the management of the melt, reviews the efficiency of heat transfer and the ease of part removal all within the DME mould base. Contact DME today and let us help guide you to a toll that will provide optimal space, improve part quality, and reduce cycle time.

A truly global partner, DME has been a leader in the industry for generations and now is stepping up the game again with virtually anything needed to build a mould. We provide everything needed including full bundled solutions: fittings, insulator sheets, mould bases, melt delivery, conformal cooling, action and ultimately proper mould care and maintenance systems and services. Why just get the minimum out of your mould when you can get the maximum through DME.



BALL SCREWING CENTERING DEVICE

Industry's first ever ball screw device designed for use in stack moulds provides more reliable plate control even on the largest of tools.

Your benefits:

- Reduces mould size
- Improves cycle time
- Self-lubricating version available
- Saves energy cost

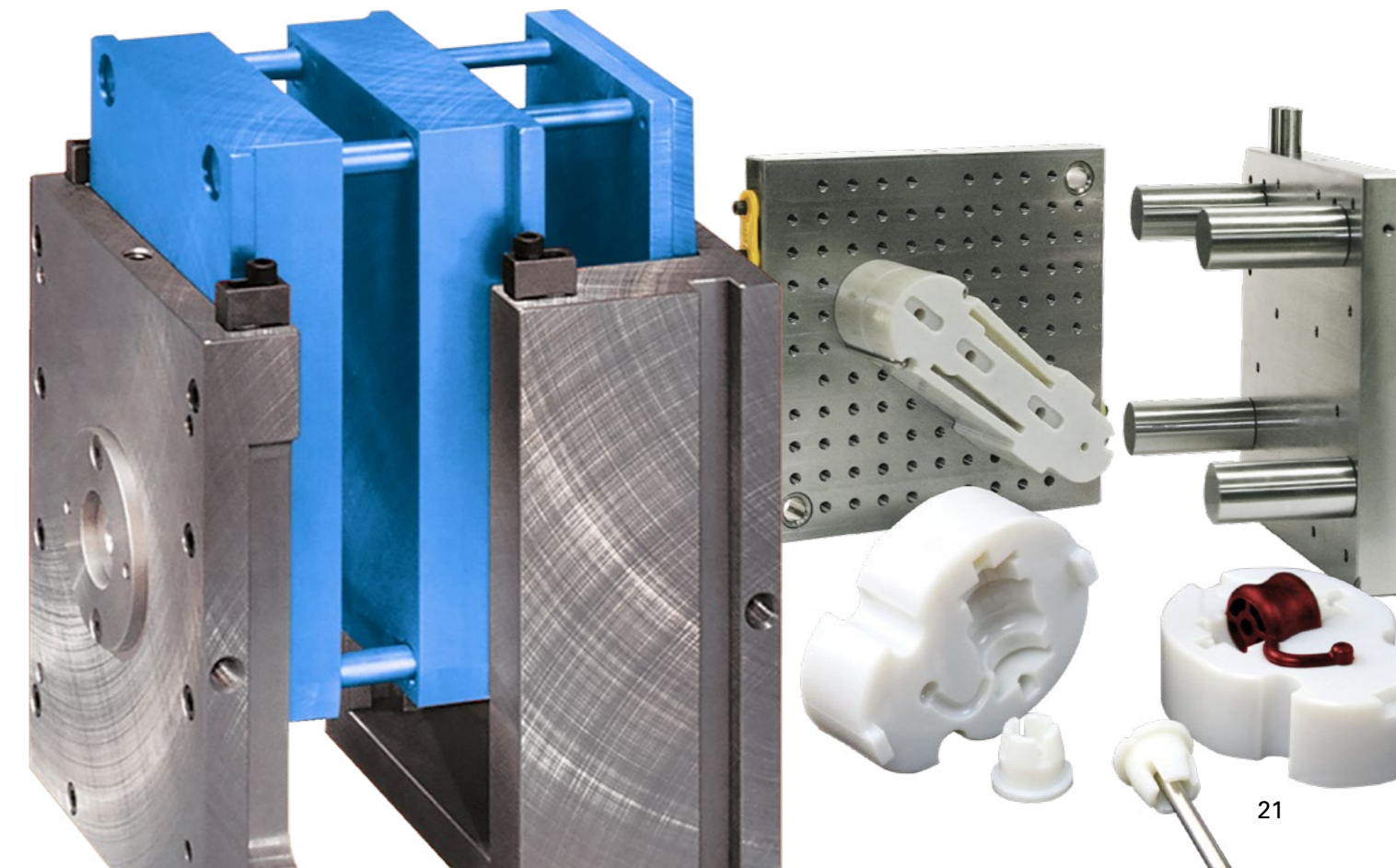


MUD® QUICK CHANGE & 3D ADAPTER

Proven interchangeable mould base system to quickly switch between moulds for fast changes and flexibility in part production. The perfect complement to new 3D Additive printed mould inserts.

Your benefits:

- Improved productivity
- Decreased tooling costs
- Reduced working capital
- Increased uptime
- Lower labour costs

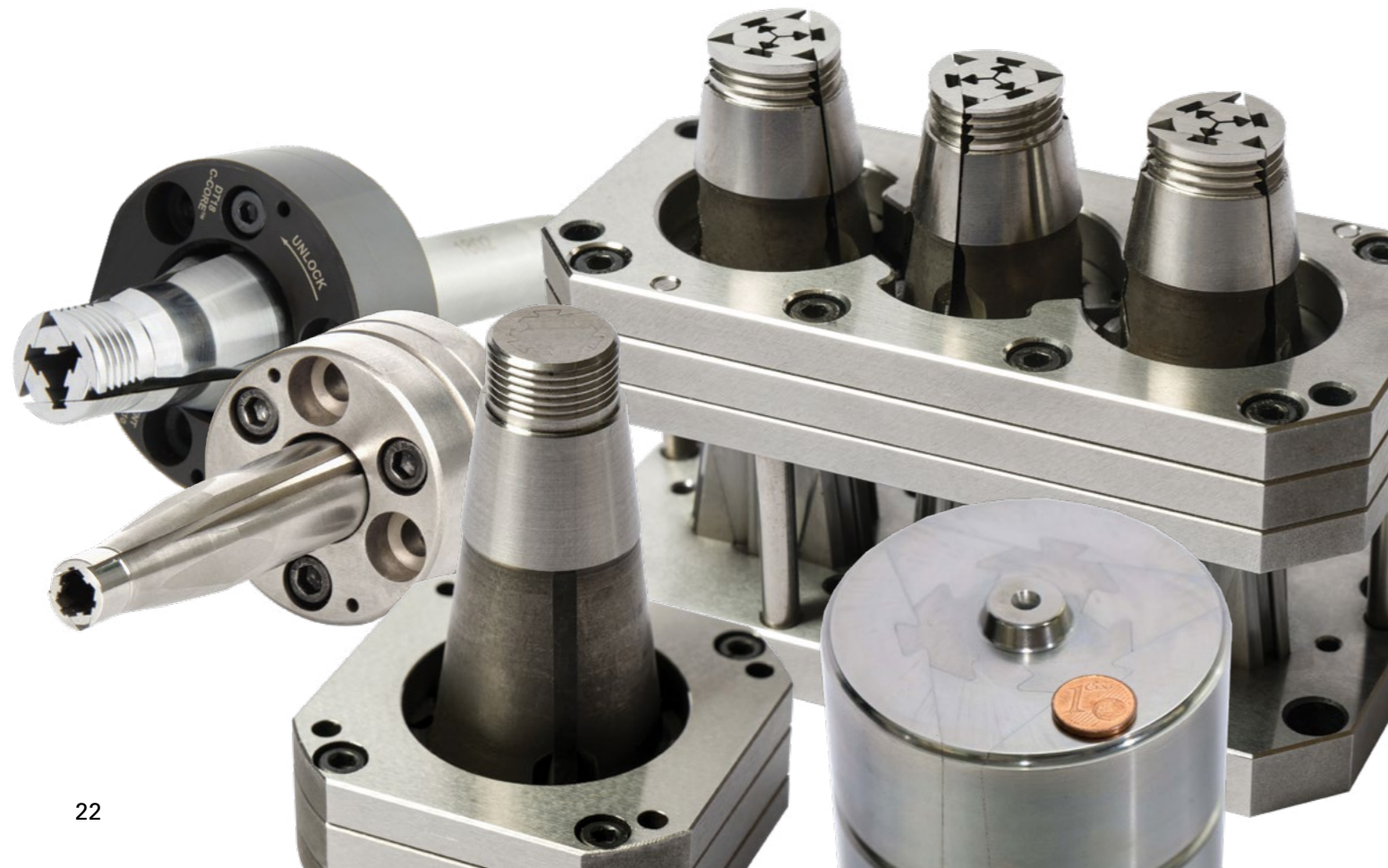


DME COLLAPSIBLE CORES

Engineered solutions for the most challenging undercut and threading project.

Your benefits:

- Premium undercut solution from DME
- Improved cycle time
- Oval and rectangular designs
- Wide range of diameters, from 6 to 400 mm
- Stackable, with flat back

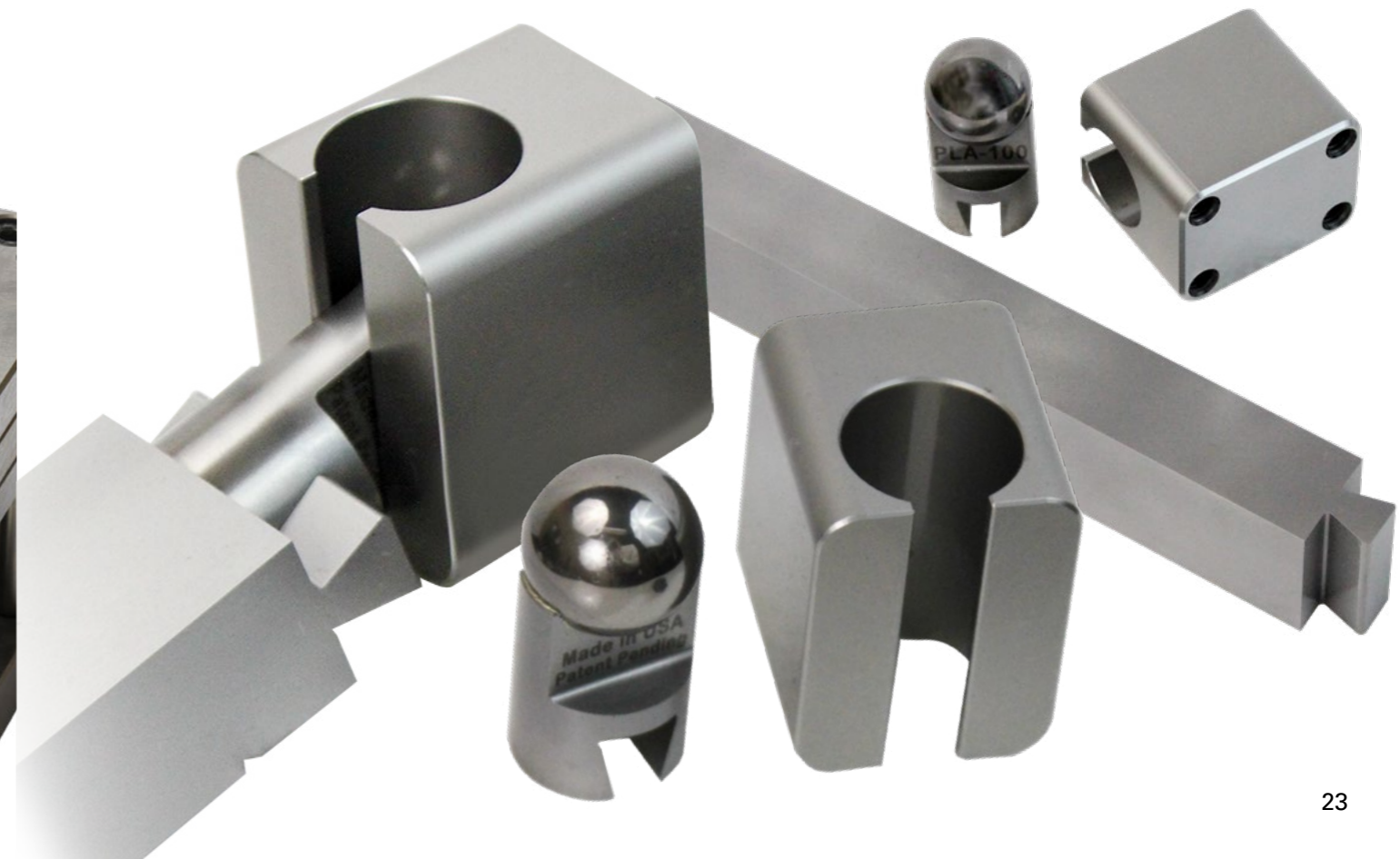


ACCUALIGN LIFTERS

Available also with 3D additive conformal cooling to overcome cooling challenges even in the most complex geometry parts.

Your benefits:

- Self-adjusting and self-aligning for long life moulding performance
- Increased resistance to binding and breaking
- Two design variants (lifter bar or lifter rod)
- Carbide ball with dovetail adapter for minimal wear
- Built in safety feature for protection of the tool

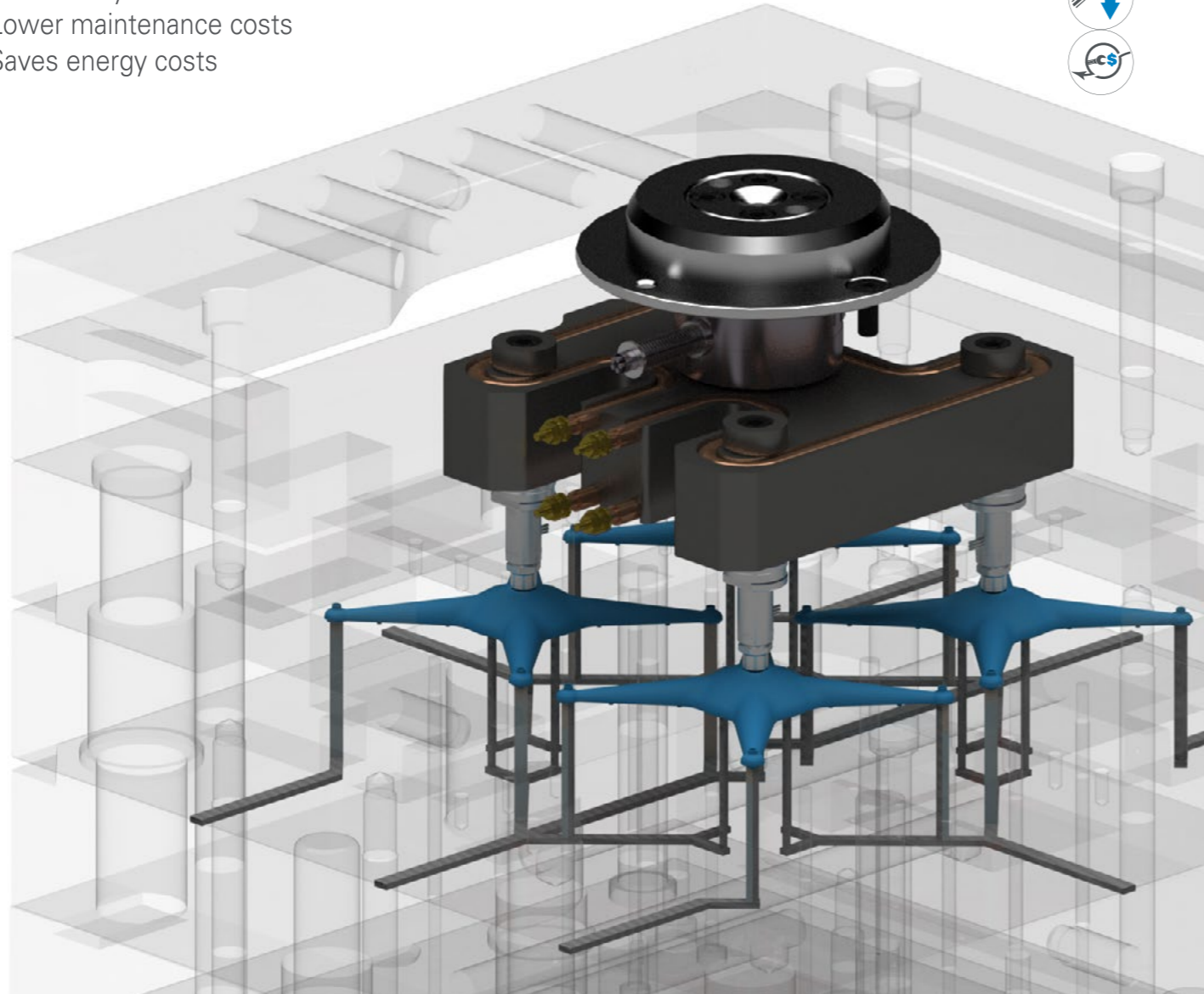


DME VENTING PIN & VALVE

Switch out your ejector pin for an instant and highly cost effective venting solution.

Your benefits:

- Better part quality
- Reduces cycle time
- Lower maintenance costs
- Saves energy costs



MOULD ALIGNMENT

Innovative new solutions to better control alignment through the moulding life cycle.



Your benefits:

- Accurate alignment of mould halves
- Easy installation
- Industry-compatible sizes
- Improve part quality
- Reduce cycle times
- Increase production uptime

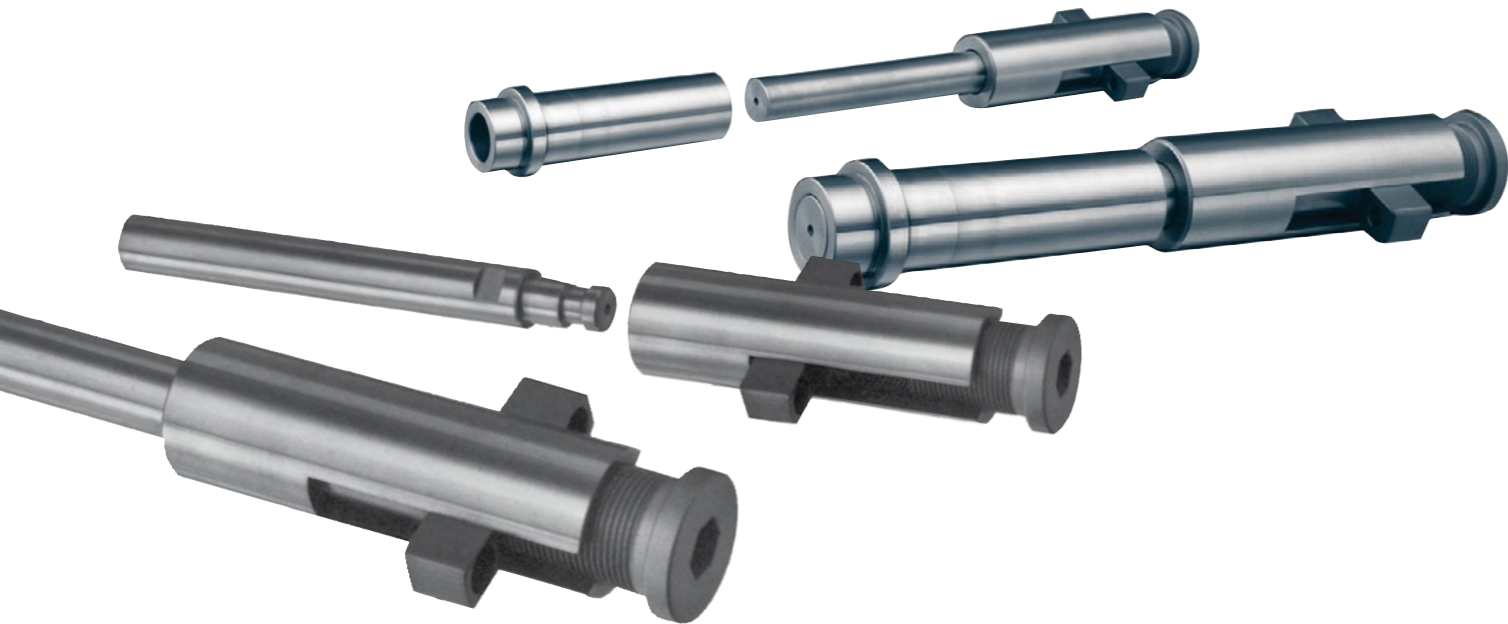


INTERNAL LATCH LOCKS

Internally installed for safety and efficiency of the moulding process.

Your benefits:

- Reduces mould size
- Improves cycle time
- Reduces maintenance
- Better part quality



FLEXIBLE MARKING & NEW QR SOLUTIONS

Your benefits:

- Easy solution for traceability communicate sustainably
- Wide range of standard and custom options
- New external to the mould visible and adjustable system for operator safety and reduced risk of mould damage

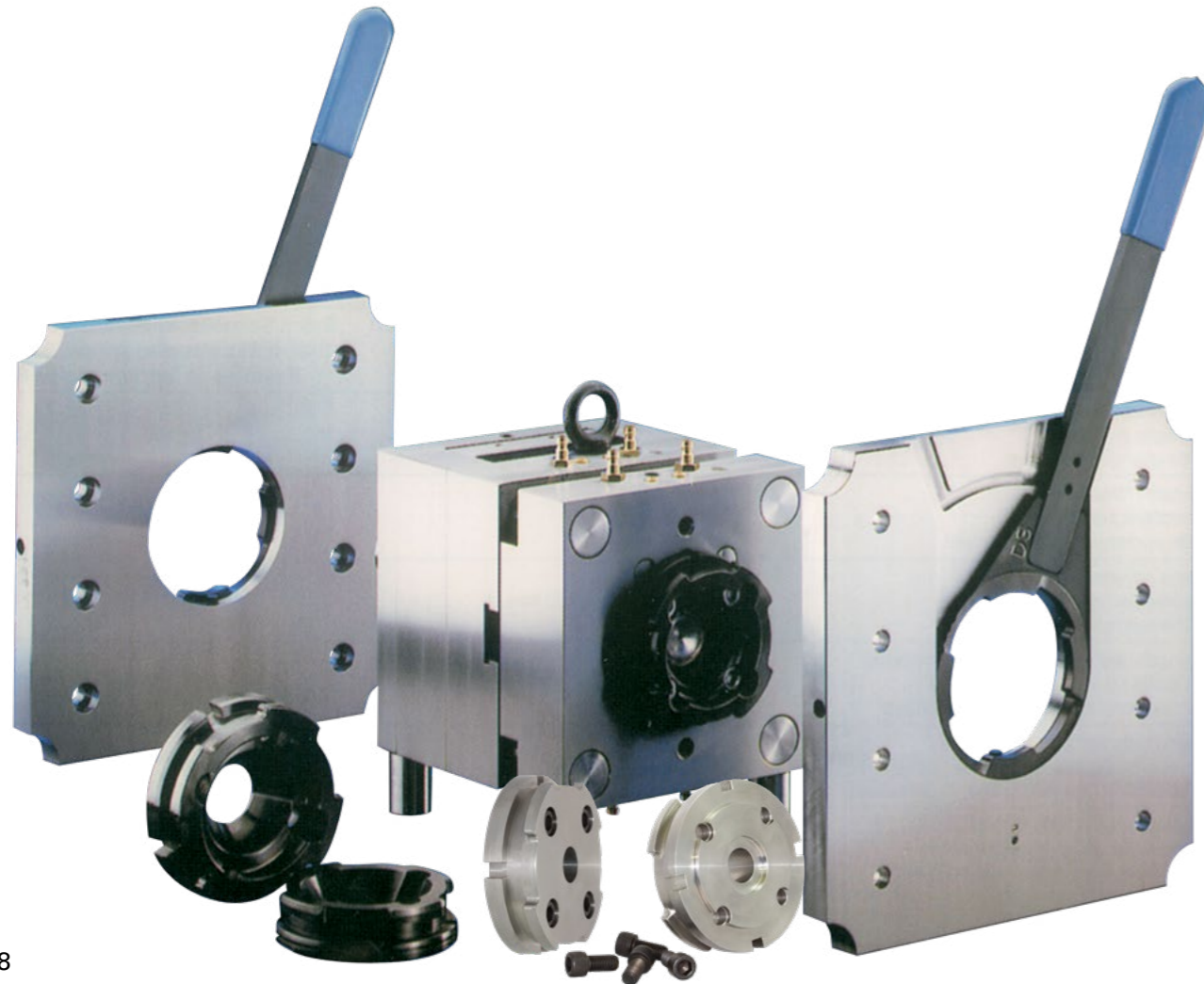


BAKRA SYSTEM

Proven system for quick and easy mould changes

Your benefits:

- Clamping system for quick mould changes
- Maintenance-free and self-locking
- Several clamping system adapters available



EZ-LATCH LOCK

Ease of installation and reliable and flexible plate control.

Your benefits:

- Truly universal external latch lock system
- Pre-drilled extended latch bars
- Easy to install straight out of the box
- Positive mechanical lock with no springs
- Easy solution for all plate control application



MODULAR MOULD BASE SYSTEMS

Speed to market with a cost effective off the shelf solution.

Your benefits:

- High quality machining & steels
- Complete range of plates and sizes
- Special plates & mould bases
- Time & energy saving
- Shortened cycle times
- Heat treated

Available steelgrades:

1.1730, 1.2083, 1.2085, 1.2162, 1.2311,
1.2312, 1.2343, 1.2343 ESU, 1.2344,
1.2738, 1.2767, Toolox33



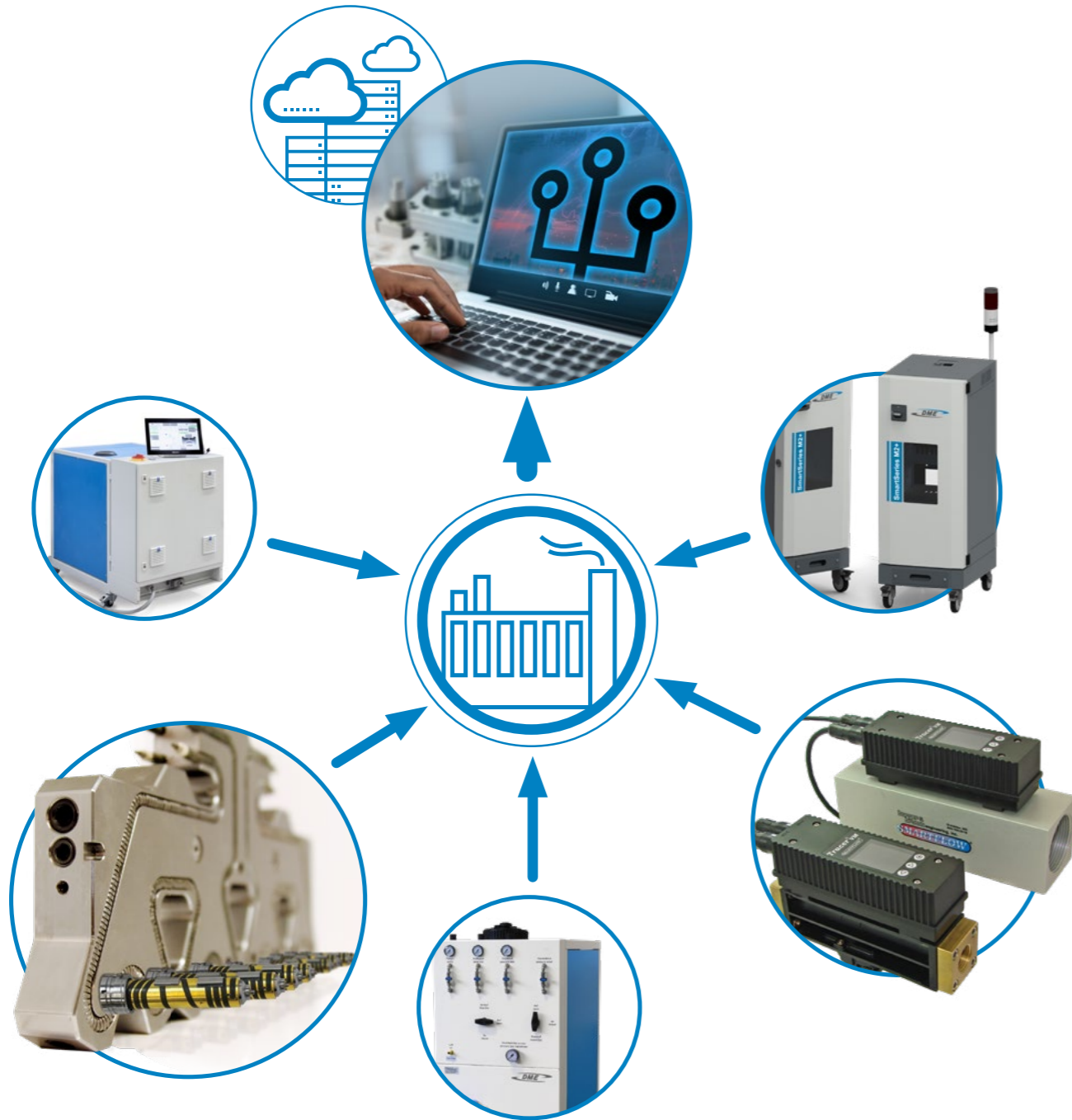
TIRAD HIGH PRECISION SPECIAL MACHINING

Focus on your core business trusting TIRAD's proven precision performance.

Your benefits:

- 10 microns machining accuracy
- Manufacturer of high precision custom mould plates and bases
- Excellent quality, reliability and full service
- Sizes up to 2300 x 1500 x 1000 mm, 3500 kg
- ISO9001
- Mould base pre-assembly including selected components





3. IoT & DIGITAL CONNECTIVITY

DME is leading the way in digitalization helping to revolutionise the way the world does business. Connecting and analyzing data to simplify, streamline and automate processes while generating new and innovative ways for companies to create value.

YOUR DIGITAL HUB CONNECTED TO THE CLOUD

DME supports your digital connectivity and leverages the Internet of Things (IoT) through its **SmartMold** mould monitoring system. This easy to install and manage device captures process data and events on the injection moulding process in real-time throughout the entire life cycle of the mould. The data can be accessed directly on your device of preference connecting directly with the Cloud. Linking to SmartMold will be a series of DME connected devices each offering their own unique technological solutions and which when combined, strengthen the overall injection moulding process eco-system. These include thermo controls, water flow management systems, cooling channel maintenance and many more.

“CLICK AND CONNECT” PLASTIC PARTS

DME Connect, a simple yet powerful technology, built on laser engraved mould inserts, allows a digital watermark to be incorporated into the mould, which then applies it to the part when moulded. This cost-effective form of connectivity can be used to strengthen and support the sustainability of the eco-system. Recycled parts can be quickly identified and sorted using a camera and the information transmitted. The same technology allows the consumer to simply scan the watermark accessing a digital managed library of data and information opening the door to many more opportunities.

Take your next steps on the digital journey with DME

SMARTMOLD MONITORING

With advanced sensor technology allowing for scientific moulding, capture the data you need globally to improve Overall Equipment Effectiveness (OEE).

- First step towards predictive and autonomous capabilities
- Compatible with any brand of mould and/or machine
- Connect moulds only, injection machines only or connect everything
- Users can scale the system to their facility and budget requirements
- Only pay for what you use



SmartMold





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