

PRODUCT ENGINEERING

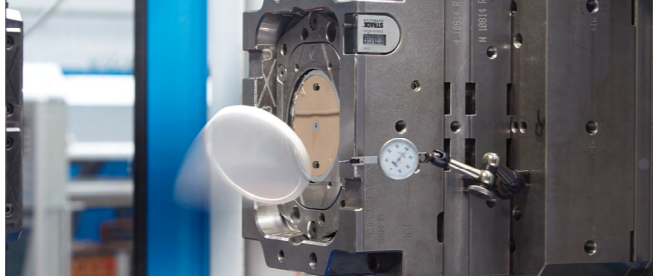
ERMO guides its customers in the product engineering starting from the draft design.

Advanced Finite Element Analysis simulations verify any functional aspect of the part to speed up product development:

- Mechanical performance
- Displacement under deformation or loads
- Sealing requirements
- Kinematics
- Assembly process

PROTOTYPE MOLD

ERMO is leading the Time To Market, allowing its customers to acquire well designed parts in a very short time. This operation allows having the right design including the functionality of the part in the right material. If any change is required, doing the necessary modifications will be easy and fast.



HIGH QUALIFIED LAB FOR PART VALIDATION

ERMO is equipped with a wide range of injection molding machines to fine tune customers' molds. ERMO Internal Lab for Part Validation certifies that features of the molded parts perfectly match customers' requirements thanks to:

- Dimensional control with the Laser and CMM three dimensional (multisensor) combined with manual three dimensional touch sensor
- Sealing control
- Strength control / Opening force / Top load
- Aesthetic control (can be performed under different lighting)
- Clamping force control
- Hinge strength control



FROM CONCEPT TO PART

We work with a 360-degree know-how supporting the customer with the full package: mold, hot runner system and control unit.

ERMO offers advanced solutions to control the injection molding process.

When a customized cooling solution is needed, ERMO provides SLM (Selective Laser Melting): the conformal cooling technology.

SLM (Selective Laser Melting Technology) 3D laser steel printing

- Conformal cooling channels perfectly shaped to the molded part
- High mechanical properties
- Relevant cycle time gain with assured tolerances
- Improved aesthetic finish of the product thanks to consistent thermoregulation
- Reduced residual stress that lead into less warpage of the finished part

WHERE WE ARE

Production plants

Marcillé-la-Ville (headquarter):

ERMO - Zone artisanale Marcillé-La-Ville - 53102 Mayenne Cedex, FRANCE
Ph: +33 2 43 00 71 22 - Fax: +33 2 43 00 65 20 - info@ermo-tech.com

Vire:

Route de St-Lô - Val Fleuri - 14350 Sainte-Marie-Laumont, FRANCE

Mayenne:

ZI des Peyennières - 53100 Mayenne, FRANCE

Brazil:

RK Ferramentaria, Rua Valenza, 154, Colombo - PR, 83413-576, BRAZIL

SALES AND SERVICE NETWORK



1 plant in Brazil with our RK Ferramentaria partner

3 plants in France

5 sales Area Managers



Colombo

Marcillé-La-Ville

Vire

Mayenne

ERMO

Zone artisanale Marcillé-La-Ville - 53102 Mayenne Cedex, FRANCE

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Mold making solutions

Premium technologies for multicavities molds



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ERMO



WHO WE ARE

ERMO is an established expert in the design and manufacture of high precision injection molds for the plastics industry. The company, based in France, covers a wide range of technical applications that require **high production volumes and fast cycle times as thin wall packaging, beverage & home, beauty & personal care, medical sectors.**

OUR NUMBERS

40 years of experience in the design and manufacture of high precision injection molds for the plastics industry.

9 + ERMO patented technologies that have changed the world of plastics injection molding.

10% + of investments in R&D, equipment, product engineers, process improvement activities.

9 injection molding machines mono and multi component from 150T to 550T in our Test Center.

10.000 m² of operation covered area [total surface 40.000 m²].

OUR MARKETS



BEAUTY & PERSONAL CARE



BEVERAGE & HOME



MEDICAL



THIN WALL PACKAGING

INNOVATION

ERMO MAC²S

Mold Alignment Continuous Safety System

New system to improve productivity and inform a wrong functionality of the mold

Functionality:

- Measure the mold alignment every cycle
- Alert by mail, sound and visual of the mold dysfunction
- Stop the machine if the misalignment is outside the tolerance
- Save all values measured
- Wifi access
- Storage document of mold (maintenance book, PDF connecting etc)
- Installation possible on all molds

Benefit:

- Ensure a good productivity
- Increase the mold guaranty
- Improve the maintenance schedule



10 REASONS TO CHOOSE US

- 1 Dedicated area for mold prototyping to ensure the fastest Time to Market.
- 2 Thermal and structural analysis on customer parts.
- 3 Part design improvement & co-development project.
- 4 Specialized laboratory for part validation.
- 5 Testing Center with an integrated quality department equipped with a full range of IMM.
- 6 High qualified area for special polishing.
- 7 Area for customers for turnkey manufacturing cell.
- 8 SLM (Selective Laser Melting), conformal channel for optimal mold cooling.
- 9 9+ patented technologies.
- 10 Finance Support can be evaluated with advantageous conditions for customers.

OUR EXPERTISE

ERMO's know how includes the following technologies:

In Mold Assembly (IMA) - patented

Single stage procedure which enables the user to assemble 2 or more different **components in a single mold**. Main benefits: only one IMM, no assembly machine, pairing cavity by cavity, no need part positioning, space saving, improve quality control. This technology which is an advantage regarding the global footprint, is also **patented in its electrical version!**

Tourniquet - patented

The main principle is the **bi-material/color by inner rotation core** that allows cycle time reduction. Higher cavitation, faster cycle, better part quality, smart solution, patented technology.

In Mold Labelling (IML)

A technology that allows **customized decoration of injected plastic parts** where user's robot can be integrated in the unique technology of thin pre-shaped hinge lid.

Multi-component molds

specialization in multi-component injection molding, rotation technology, transfer and Coreback technology. The application of these skills provides high degree of colors customization and simplify assembly procedures and integrate functions.

Stack molds

the solution that ensures the highest production capacity at the shortest cycle time. Different opening stroke layout possible.

In Mold Closing (IMC)

the IMC solution has recently been improved **thanks to its patented electric version!**

