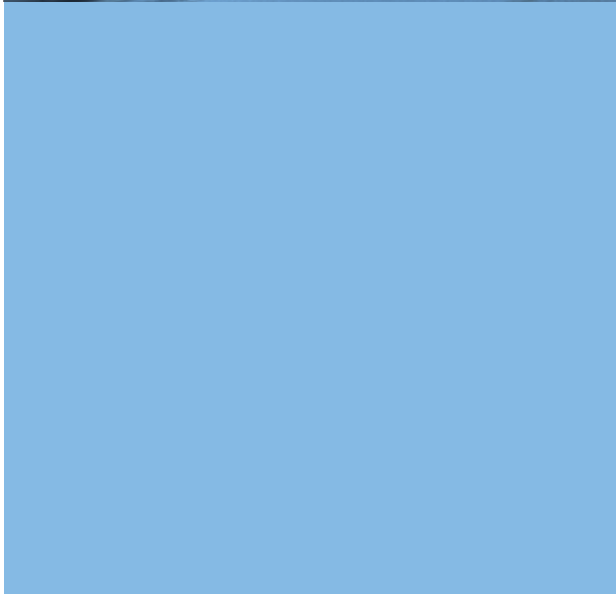


# Mold making solutions

Premium technologies for multicavities molds



**ERMO**   
Member of  **INGlass**



## WHO WE ARE.

ERMO Tec-Pac, member of INglass Group, 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.

**20 +** local support thanks to INglass global presence.

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

**37** ERMO Tec-Pac **patented technologies** that have changed the world of the plastic injection.

**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 Testing Center.

**10.000 m<sup>2</sup>** of operation covered area (total surface 40.000 m<sup>2</sup>)

# MARKETS.



Medical



Beverage & Home



Beauty & Personal care



Thin Wall Packaging

# 10 REASONS TO CHOOSE US.

**1** Thermal and structural analysis on customer parts.

**2** Part design improvement & co-development project.

**3** Specialized laboratory for part validation.

**4** Testing Center with an integrated quality department equipped with a full range of IMM.

**5** Dedicated area for mold prototyping to ensure the fastest Time to Market.

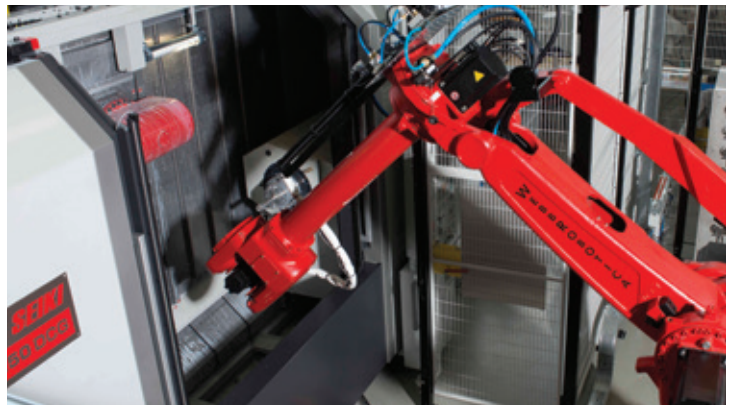
**6** High qualified area for special polishing.

**7** Area for customers for turnkey manufacturing cell.

**8** SLM (Selective Laser Melting), conformal channel for optimal mold cooling.

**9** Organization and quality process according to ISO 9001.

**10** Finance Support can be evaluated with advantageous conditions for customers.



# OUR EXPERTISE.

## 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 assembling machine, pairing cavity by cavity, no need part positioning, space saving, improve quality control.

## 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 customised decoration of injected plastic parts where user's robot can be integrated in the unique technology of thin pre-shaped hinge lid.

ERMO know how includes the following technologies:

## Multi-component molds

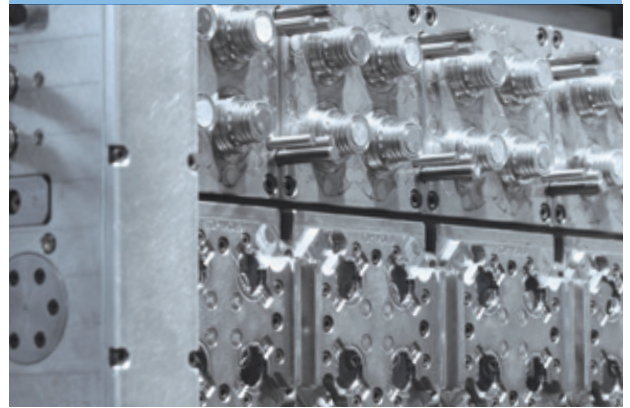
specialization in multi-component injection molding, rotation technology, transfer and Core-back technology. The application of these skills provides high degree of colors customization and simplify assembly procedures and integrate functions.

## Stack molds

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

## In Mold Closing (IMC)

this technology can be conceived also in multi-shot version



# PRODUCT ENGINEERING.

## ERMO Tec-Pac guides its customers in the product engineering starting from the draft design.

Every significant functional aspect of the part such as mechanical performance, displacement under deformation or loads, sealing requirements, kinematics, assembly process, etc. are verified by advanced Finite Element Analysis to speed up product development. These simulations can investigate the mechanical field as well as thermal and/or fluid dynamics in either static or dynamic conditions.

This capability speeds up product engineering and dramatically reduce product adjustments to perform on the pilot mold.



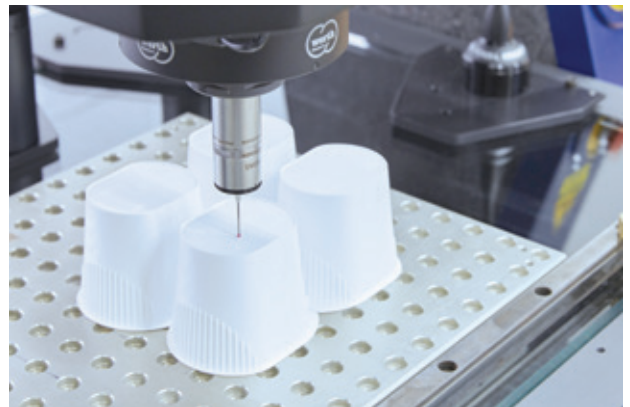
# PROTOTYPE MOLD.

ERMO Tec-Pac is leading the Time To Market, allowing our customer 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 Tec-Pac is equipped with a wide range of injection molding machines to fine tune and qualify pilot mold and production mold during the try-out phase. Thanks to its Internal Lab for Part Validation, ERMO Tec-Pac certifies that the features of the final parts perfectly match customers' requirements.



From the dimensional to the aesthetic control, we evaluate every aspect of the part:

- Dimensional control with the Laser and CMM three dimensional (multi-sensor) 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.

Through the corporate synergy with HRSflow ([www.hrsflow.com](http://www.hrsflow.com) hot runner systems branch), ERMO Tec-Pac offers advanced solutions to control the injection molding process even in the most complex cases when a high qualified expertise is required.

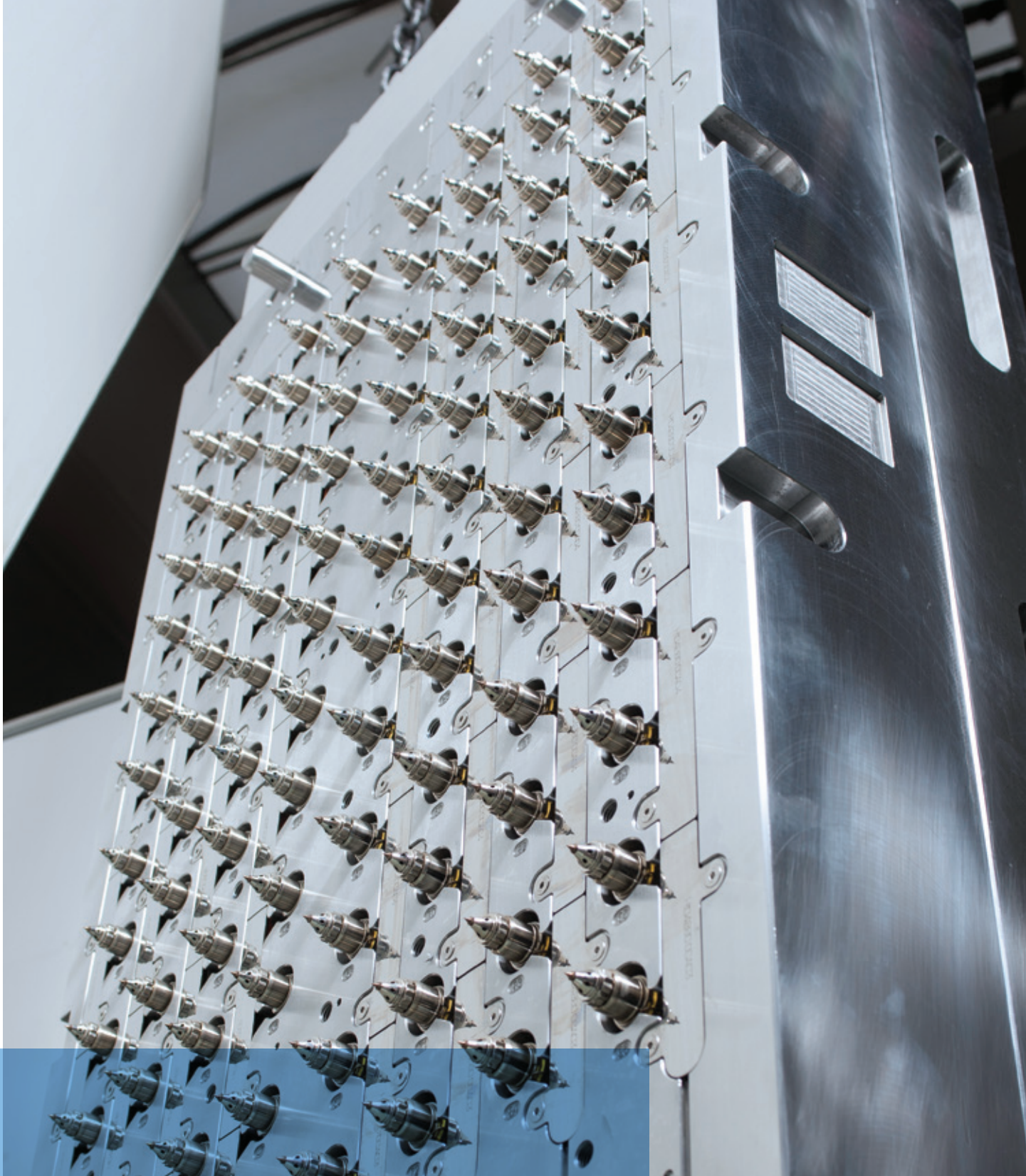
Moreover, in case of particular challenging applications, where a customized cooling solution is needed, we can provide SLM conformal cooling solution by means of 3 D laser steel printing (SLM Technology).

## SLM (Selective Laser Melting Technology)

- 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







HRSflow hot runner system features:

- Process repeatability and reliability
- Custom engineered for all technical materials
- Optimal resistance of the nozzle tip to wear and tear
- Fast color change
- Optimal balancing assured also in high cavitations
- High pressure leakage-proof technology

# WHERE WE ARE.

## Headquarter

### Marcillé-La-Ville:

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

## Other production plants

### Vire:

Route de St-Lô

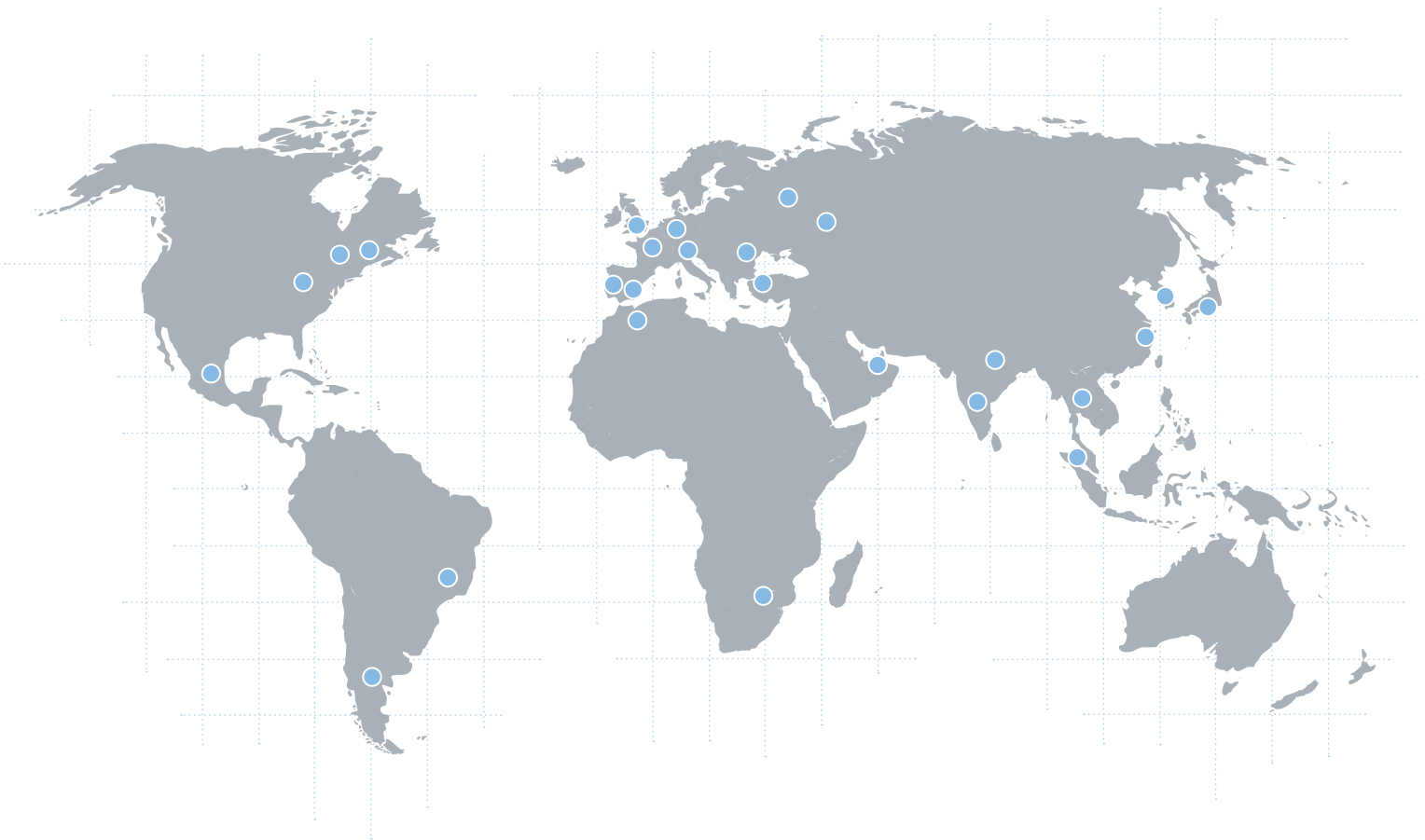
Val Fleuri

14350 Sainte-Marie-Laumont, FRANCE

### Mayenne:

ZI des Peyennières

53100 Mayenne, FRANCE



Marcillé-La-Ville



Vire



Mayenne