



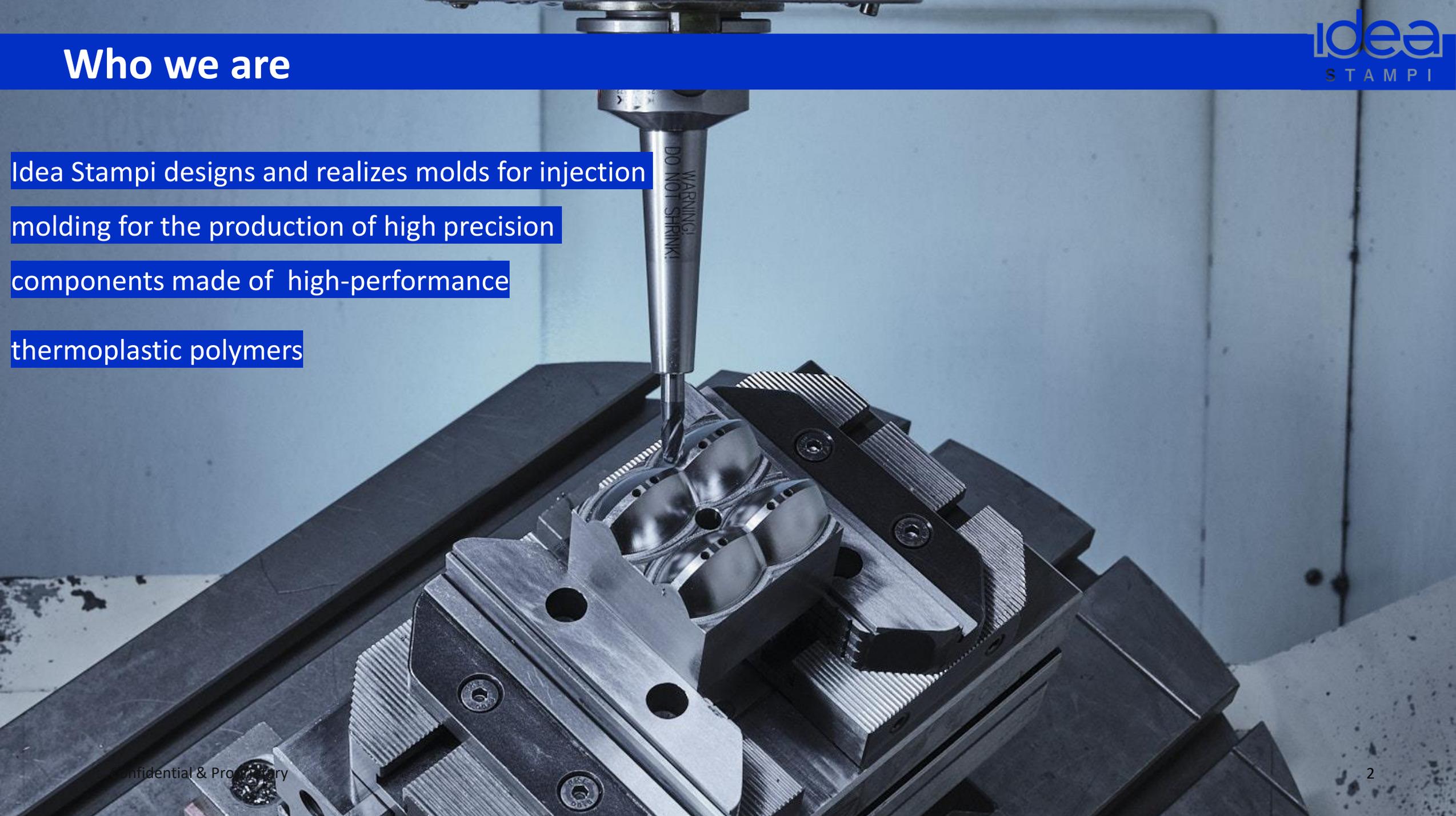
# idea

STAMPI

**Molds design and construction**  
**Injection molding**

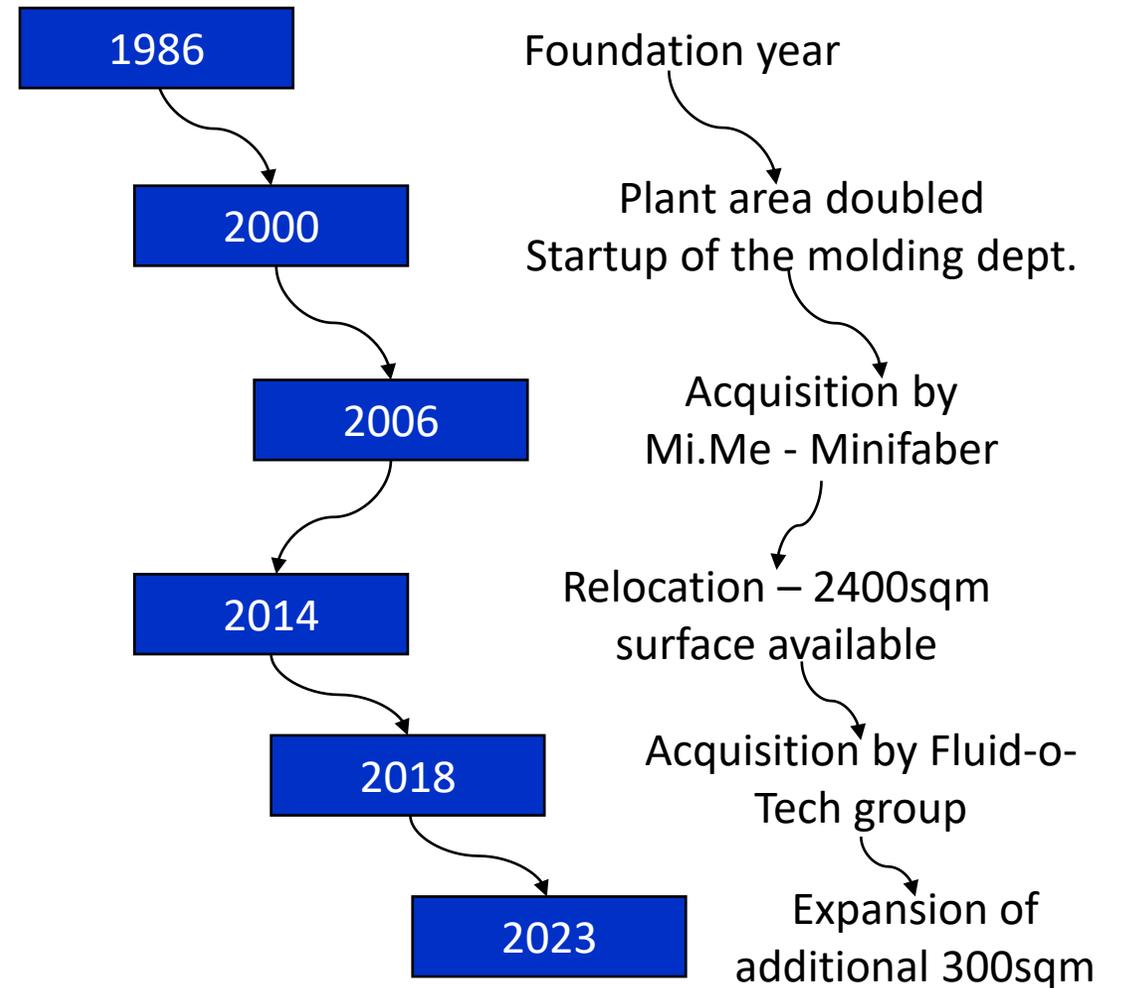
# Who we are

Idea Stampi designs and realizes molds for injection  
molding for the production of high precision  
components made of high-performance  
thermoplastic polymers

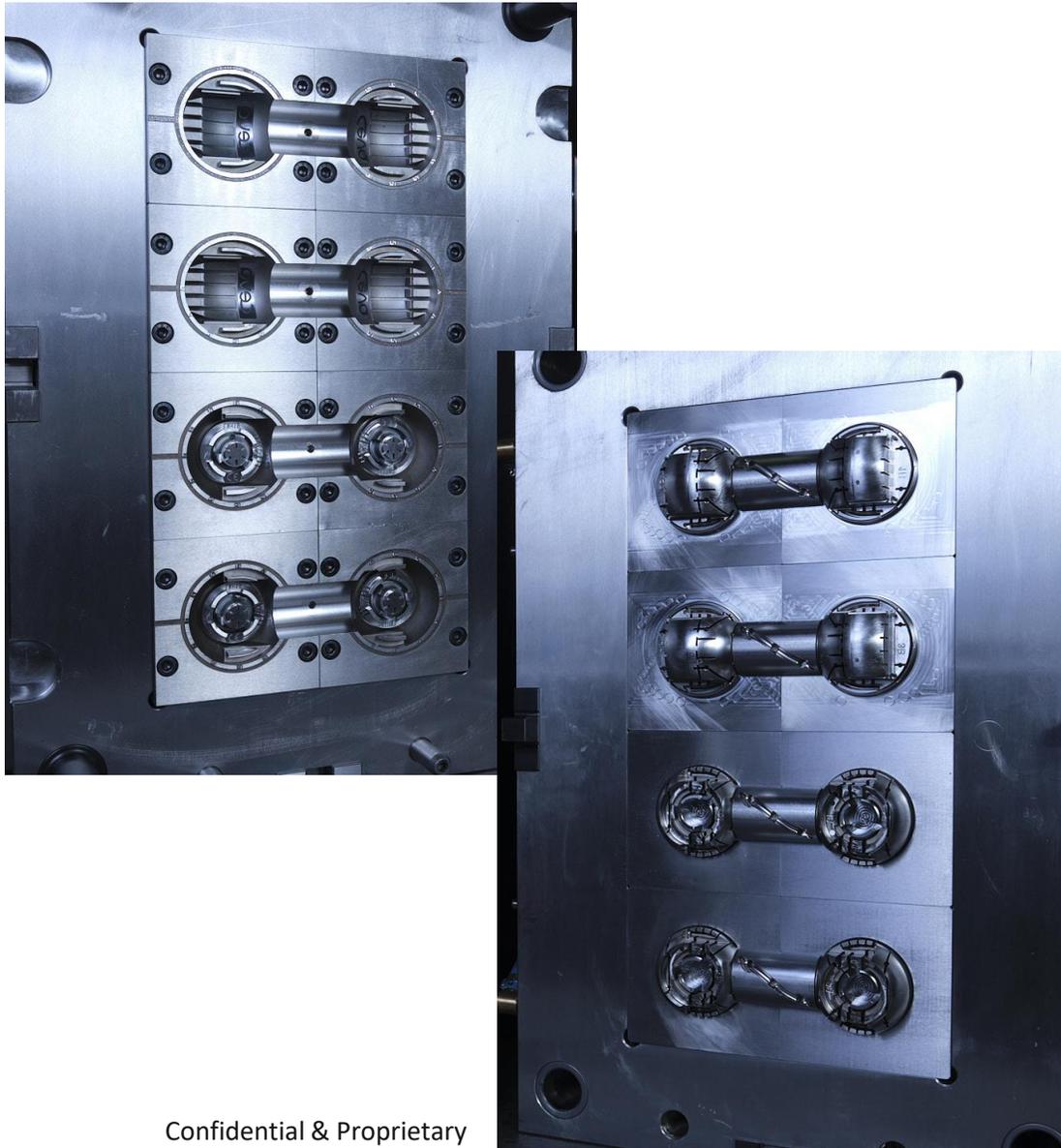


Idea Stampi has been active since 1986 in the design and manufacture of injection molds for the production of precision thermoplastic polymers parts.

The expertise and experience of the technical staff and the use of integrated CAD/CAM systems in a constantly updated production complex allows Idea Stampi to provide a complete service that starts from the collaboration in the industrialization phase of the component and, going through the design and construction of the mold, arrives to the molding of the component.







The experience gained over the years and the continuous updates of our technicians, allows us to provide a 360° service that goes through all phases: from product engineering to molding.

Increasingly, we face the need to quickly develop an idea into a winning product: Idea Stampi is the ideal partner, able to work alongside the customer from the very beginning, supporting him in the choice of the best solution.

It is therefore possible to identify, based on the quantities to be produced, the life of the product and the aesthetic requirements, the most appropriate solution for the construction of the mold and then perform the mold tests in-house and where required also provide the molding.

We provide a 360-degree service of injection molding molds manufacturing, ranging from the product pre-analysis to the actual mold construction.

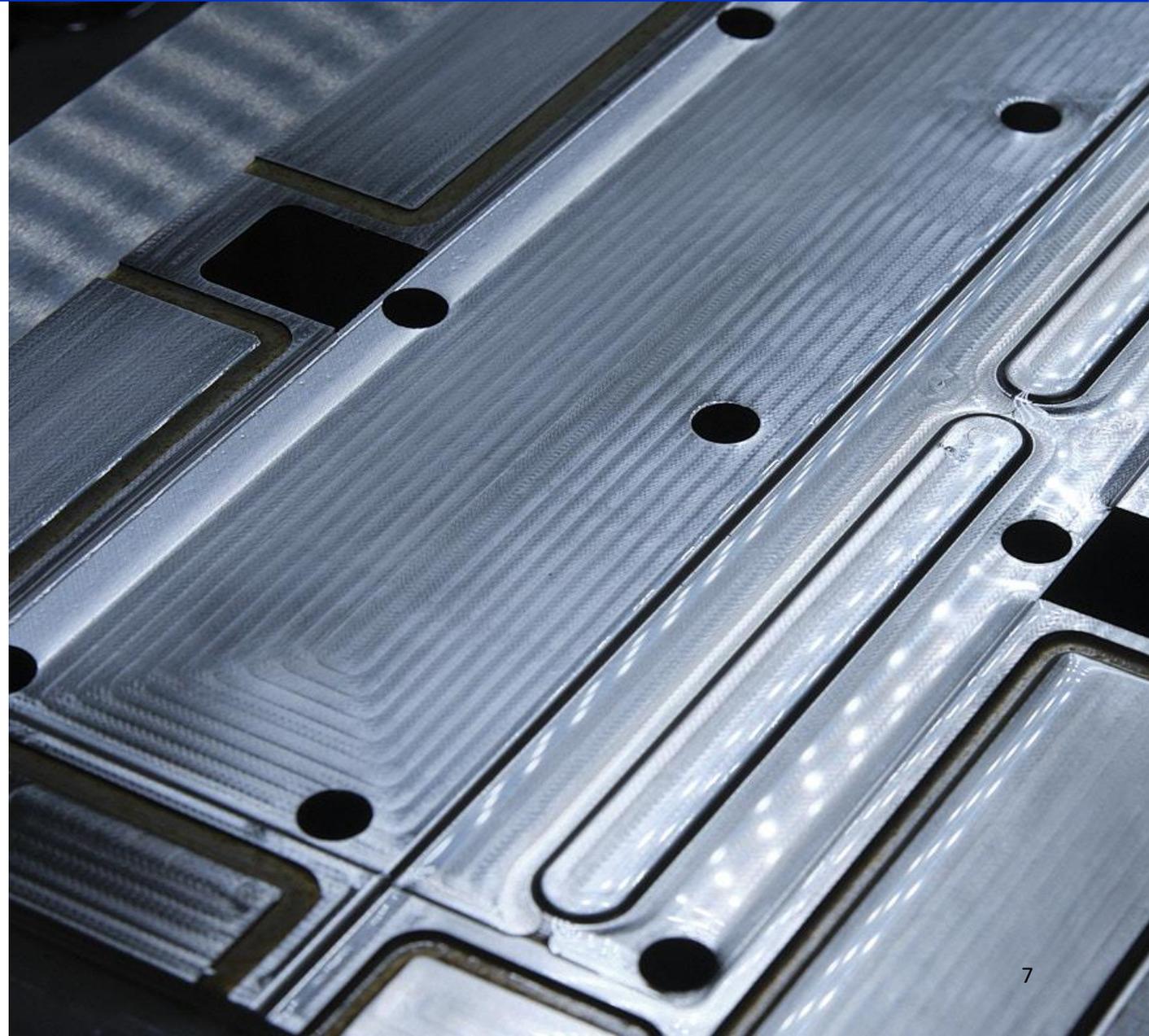
Production steps include analysis:

- Of the product to be made;
- Of the material;
- Of the geometry, in order to create molds that allow for perfect, burr-free injection;
- Of the lead times

It is all encapsulated in the name the company philosophy of Idea Stampi, we are able to provide a complete service that begins, where required, with a co-design operation, conducted in collaboration with the customer.

Starting from the customer's idea, all design aspects are discussed and evaluated, including the choice of the most appropriate material to be used, and the necessary modifications are made so as to arrive at the final design that will allow the construction of the various molds to begin.

Being able to interact as early as the initial stages makes it possible to reduce costs by avoiding subsequent interventions.





The expertise and experience of our technicians, combined with the most advanced technologies (CAD/CAM/CAE) allows us to meet our customers' requirements in a short time. The integrated Moldex 3D molding simulation system allows to engineer the part, thus defining the best gate position, thickness optimization and conditioning.

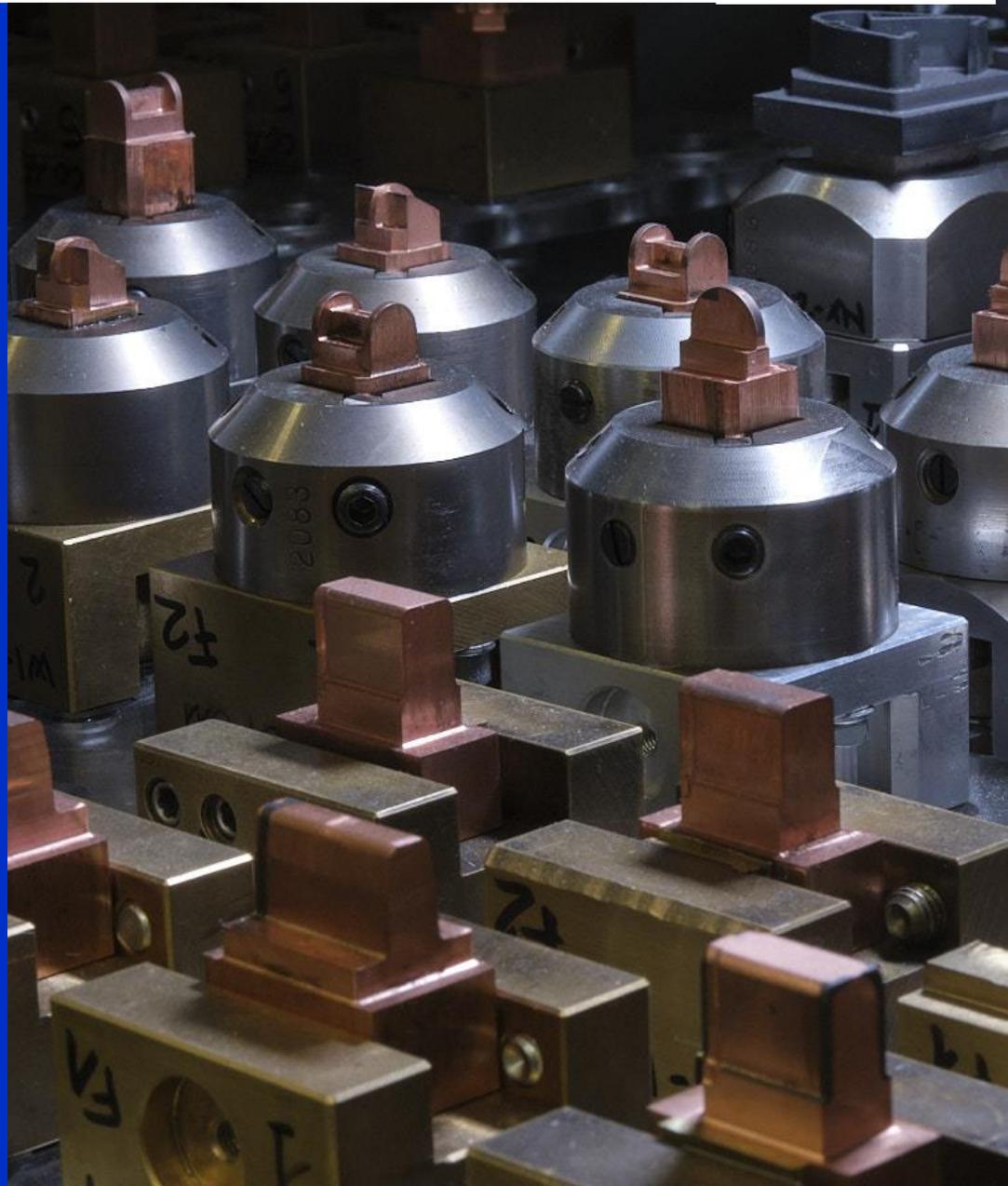
The entire production process carried out in-house (from construction to mold testing), means that our designers have gained the experience over time that allows them to design equipment with the best price-quality ratio.

# Molds construction

Products created to last over time and the need to amortize investments with as many pieces as possible requires a product of high reliability: here is the choice of a supplier like Idea Stampi is a winner.

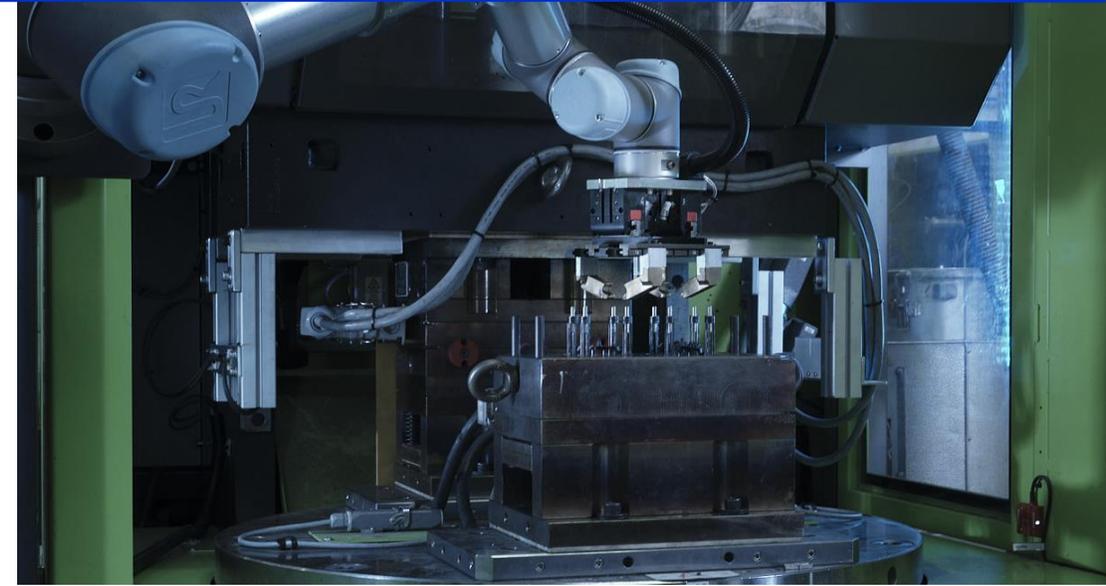
The tool shop makes use of the most modern machinery, the use of an integrated CAD/CAM/CAE system allows us to machine all components using the same 3D model thus avoiding transcription errors or interpretation of dimensions.

The operator often works with such small electrodes and tools that he has to follow through magnifying glasses the machining steps.



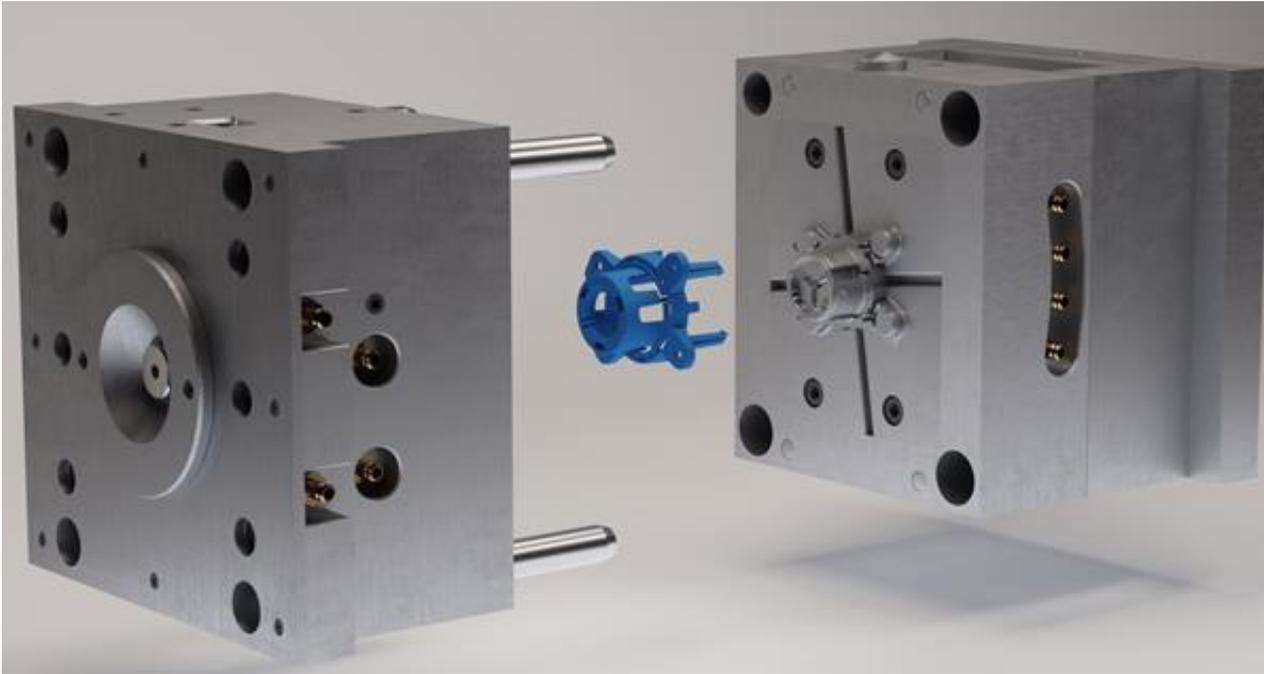
# Mold test

To complete the production cycle, Idea Stampi tests the mold in-house, having at its disposition 13 horizontal injection molding machines with clamping force between 25T and 400T in addition to two vertical machines with tonnage of 45T and 60T.



Samples are supplied with complete dimensional control and the injection molding cycle.

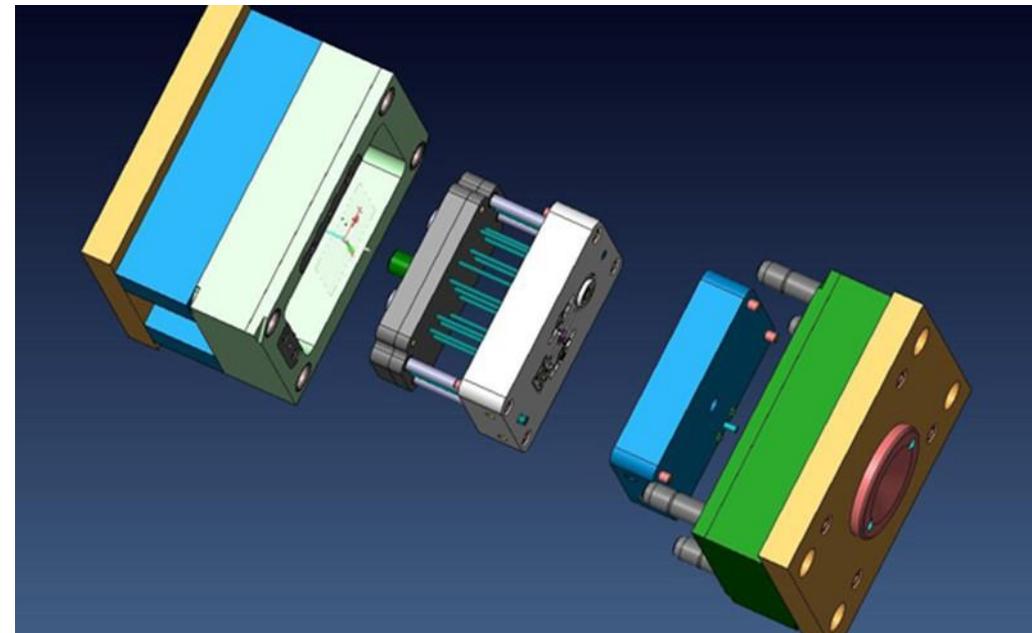
In addition to testing, Idea Stampi can provide a pre-series service, running the first production batches and thus optimize the molding cycle that will later be destined to the customer.



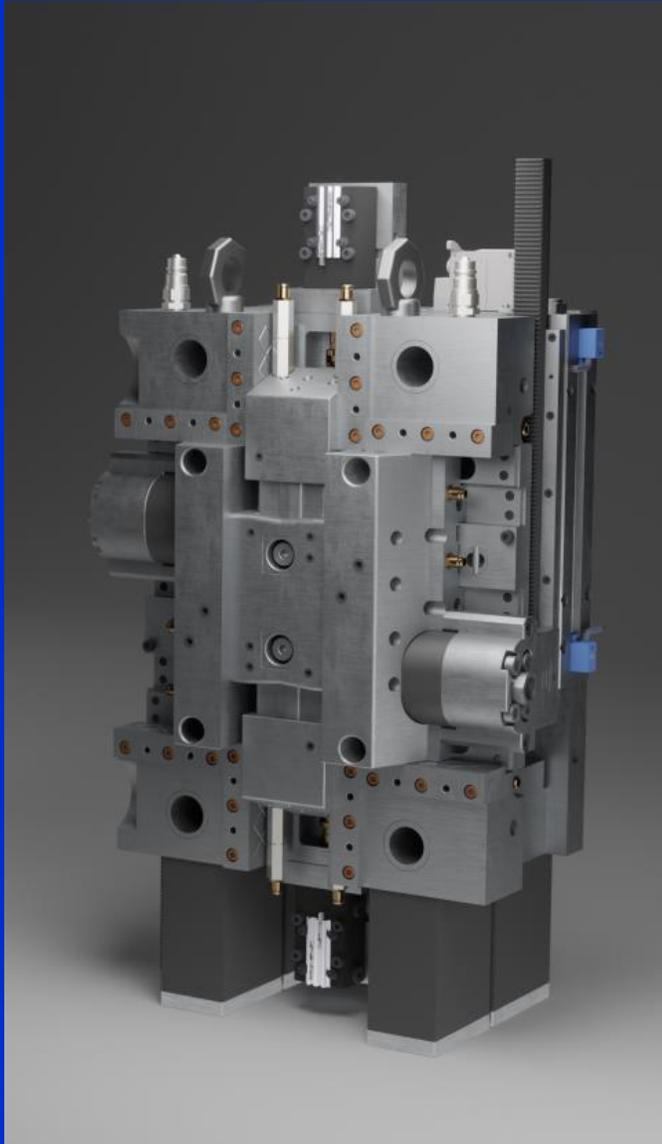
The solution of using a pilot mold sometimes turns out to be the winning choice (our experience enables us to make pilot molds that can even print quantities in the range of a few hundred thousand pieces).

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When there is a need to quickly verify the feasibility or functionality of a part, or before the construction of a final mold, a pilot mold can be chosen; an ideal solution to reduce investment risks in the case of multi-cavity molds and test manufacturing solutions in the meantime.



# Mold construction

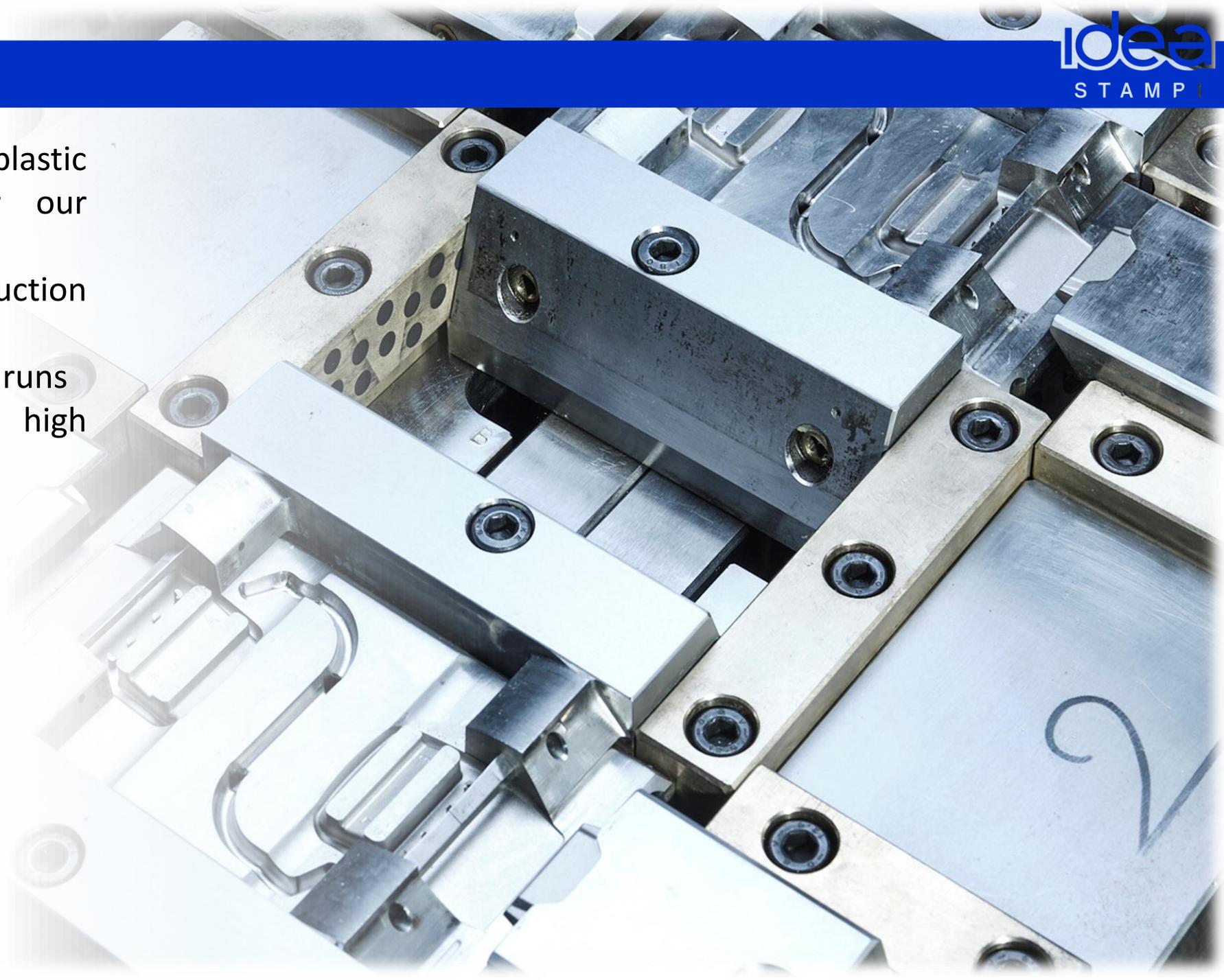


We make multi-cavity molds to meet the needs of large production runs, as well as modular mold stands to make niche and small-quantity products. For the last ones, in fact, simply changing the mold inserts with a few steps reduces production costs without affecting the quality and precision of the result.

# Mold types

There are three types of plastic molds that we supply for our customers:

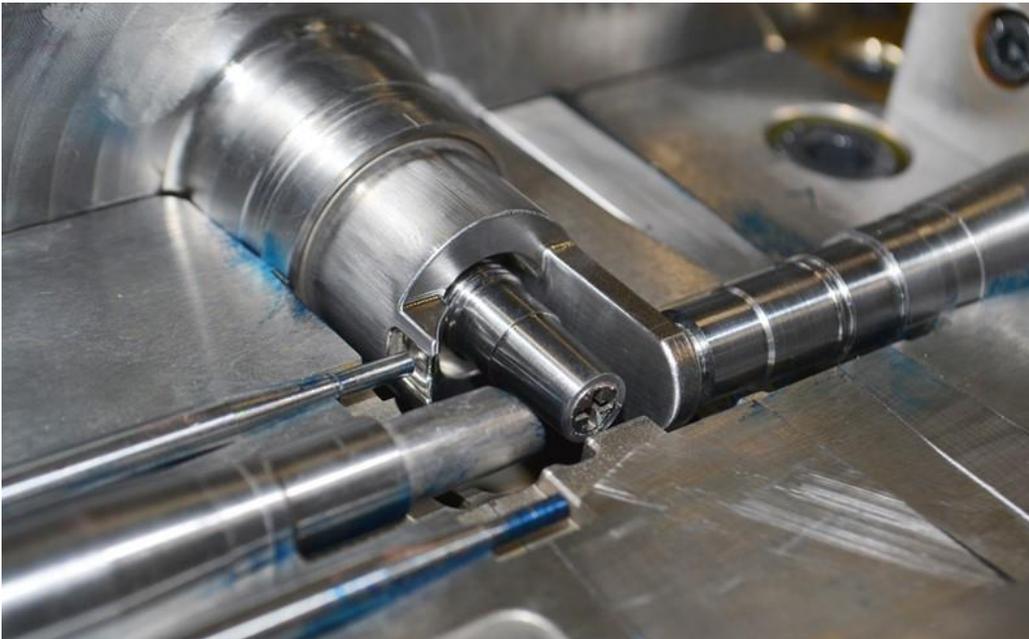
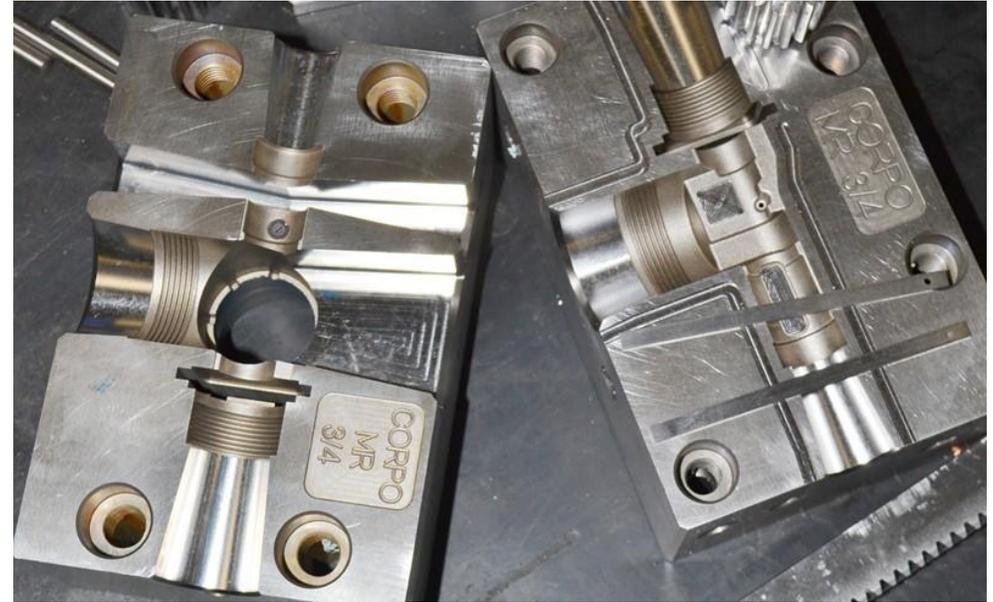
- Injection molds for small production runs
- Molds for medium production runs
- Multicavity molds for high productions



# Molds for small and medium production

Upon request we make pilot molds or molds for small series that can be made in various ways according to your needs. Among these we do have:

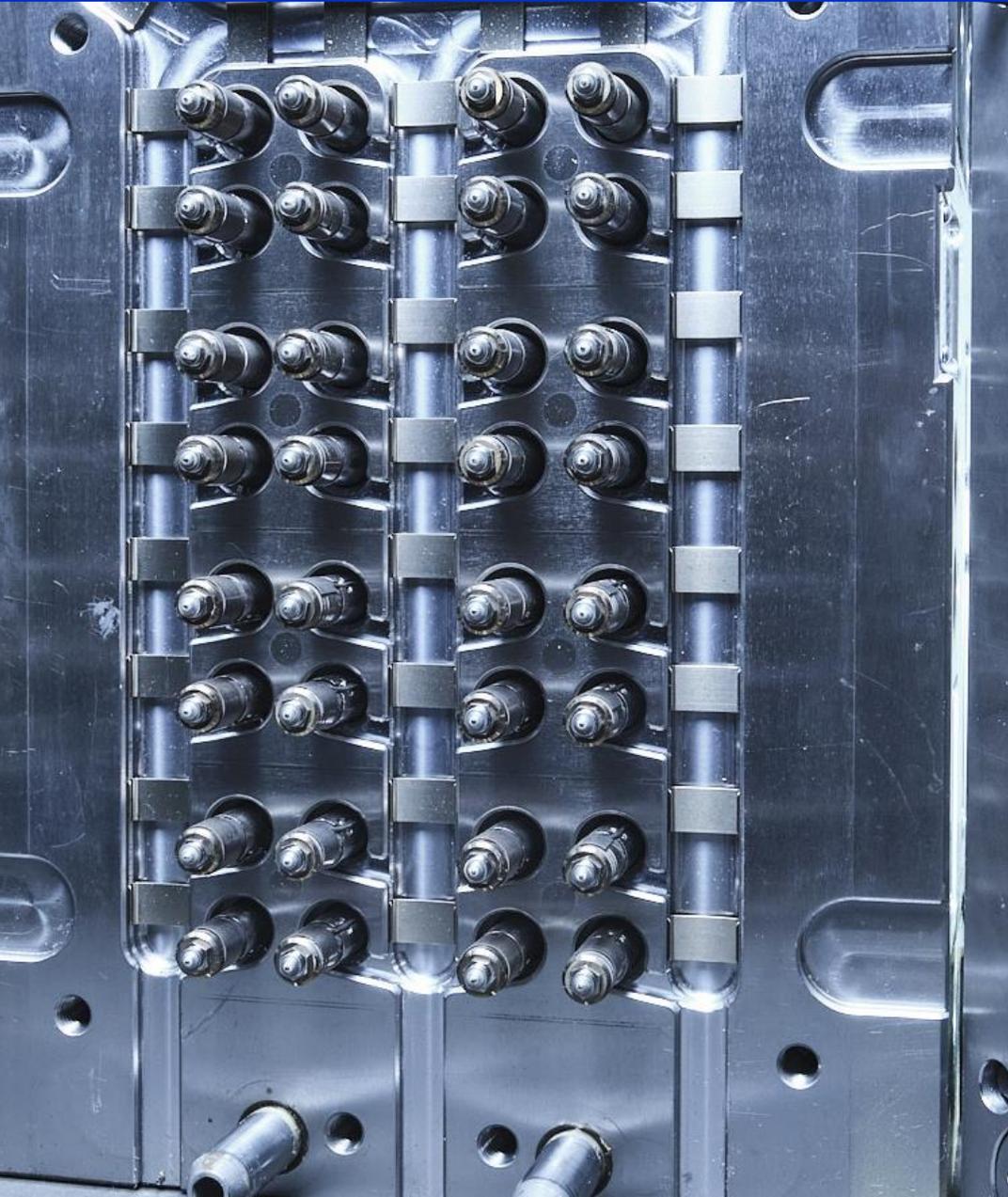
- Aluminum molds, for batches of a few dozen pieces
- Hardened steel molds



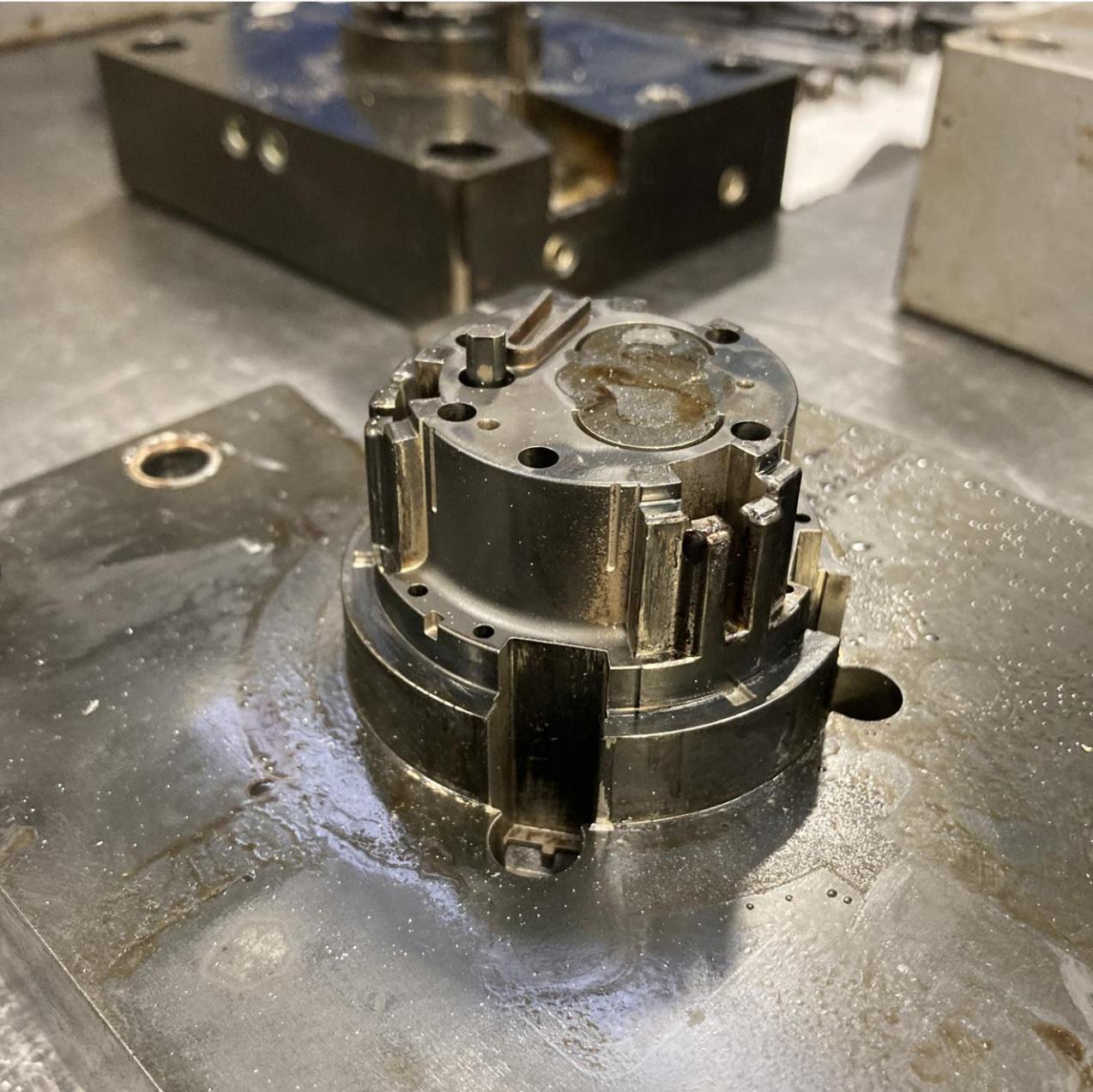
As for medium production molds, they are generally 2/4-cavity. The advantages are many, and include:

- High quality
- Low mold costs

# Multi-footprint molds for high productions



The construction of these plastic molds requires special attention to the choice of materials, heat treatments, and normals. High production could easily wear out mold components, and it is therefore necessary for molding parts to be easily interchangeable.



We provide on-demand plastic mold maintenance service, from simple cleaning to the reconstruction of worn parts or other works that we complete within 24/48 hours if extended mold downtime cannot be afforded.

This service is also provided on molds that are *NOT* of our own construction.

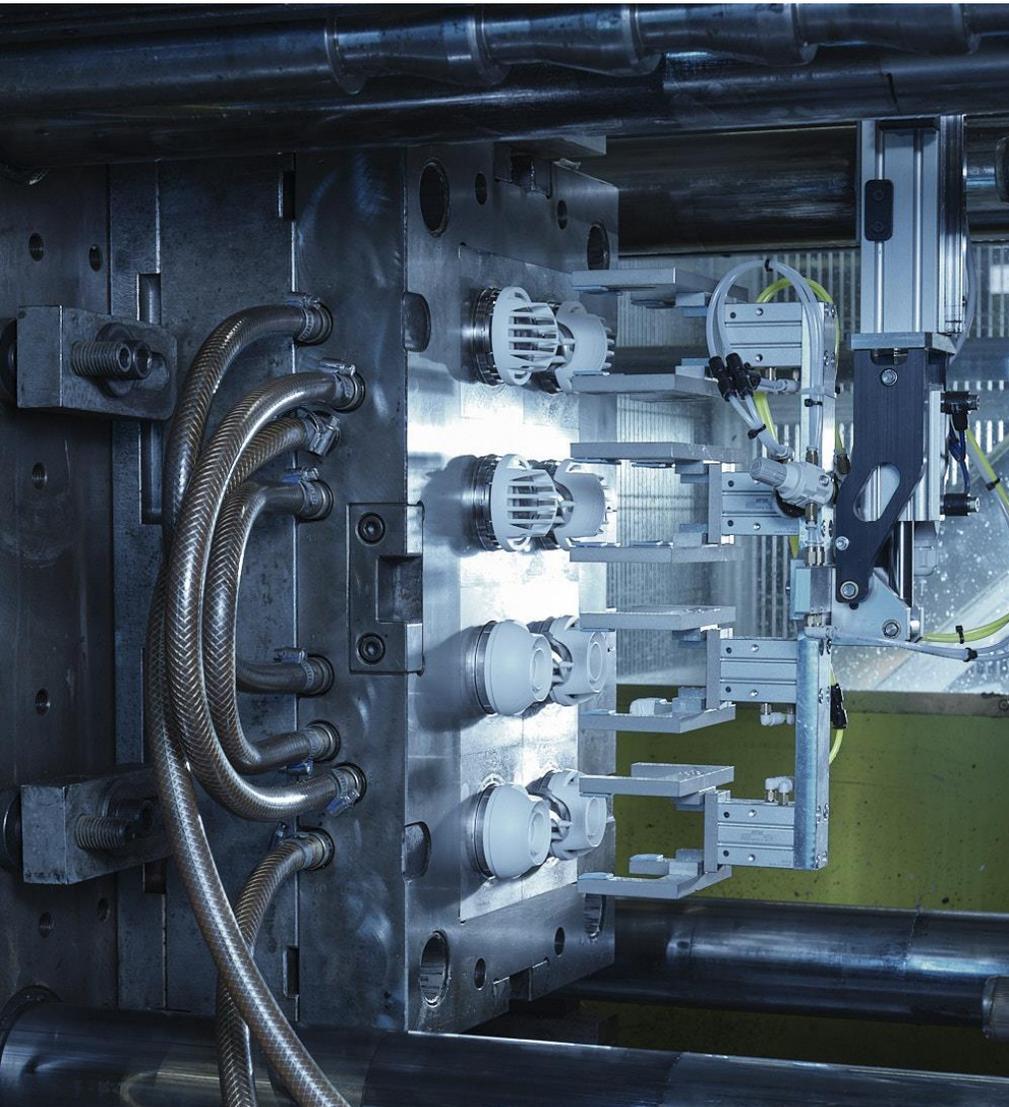
# Molds laser welding

We offer a mold laser welding service that allows mold modifications or repairs to be performed while avoiding overheating of components.

Laser welding allows for normal welding or micro-welding with very high precision in steel, bronze alloys, copper, aluminum, and titanium, with hardnesses up to 60 HRC.

We perform modifications and repairs that do not create distortion or cause the mold to lose its specific characteristics, such as tolerances and geometries.

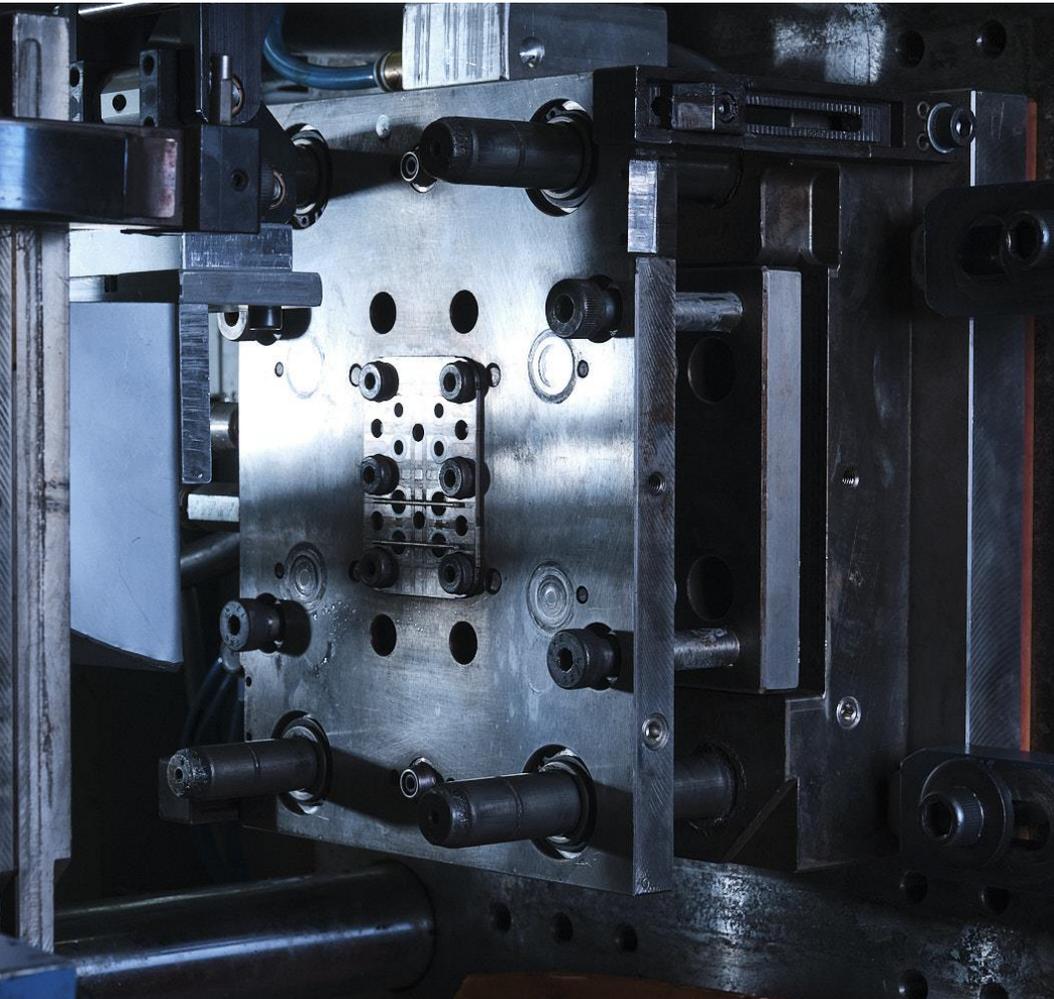
We can work on circumscribed areas so as to restore the mold to its original state and avoid further heat treatment on it.



We have been making injection molds for small, medium and large production runs since 1986. We have chosen to go one step further by introducing injection molding machines of various sizes into our fleet to carry out molding operations in-house.

This means two basic things:

- In-house management of the entire production process
- A molding service from start to finish, that is, from the production of pre-series batches to the creation of the finished product

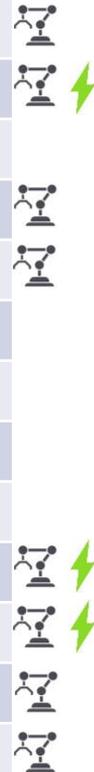


The molding department currently consists of the following injection molding machines:

Brand	Machine Name	Clamping force [T]	Screw $\phi$ [mm]
Engel	ES 330/80 ST	80	40
Engel	ES 200/50 HL	50	22 / 25
Fanuc	Roboshot	180	44
Arburg	270S 250/60	25	22
Arburg	470S 1300/350	130	45
Arburg	470C 1500/350	150	45
Engel	330/110 Tech	110	40
Arburg	470C 1500/350	150	45
Arburg	350C 500/100	50	25
Engel	ES 200/50 HL	50	30
Fanuc	Roboshot $\alpha$ -S50iA	50	20
Fanuc	Roboshot $\alpha$ -S50iA	50	26
Engel	ES 1350/400 HL	400	55
Engel	200/45V D900	45	25
IMS	Deltamatic RT-60	60	28

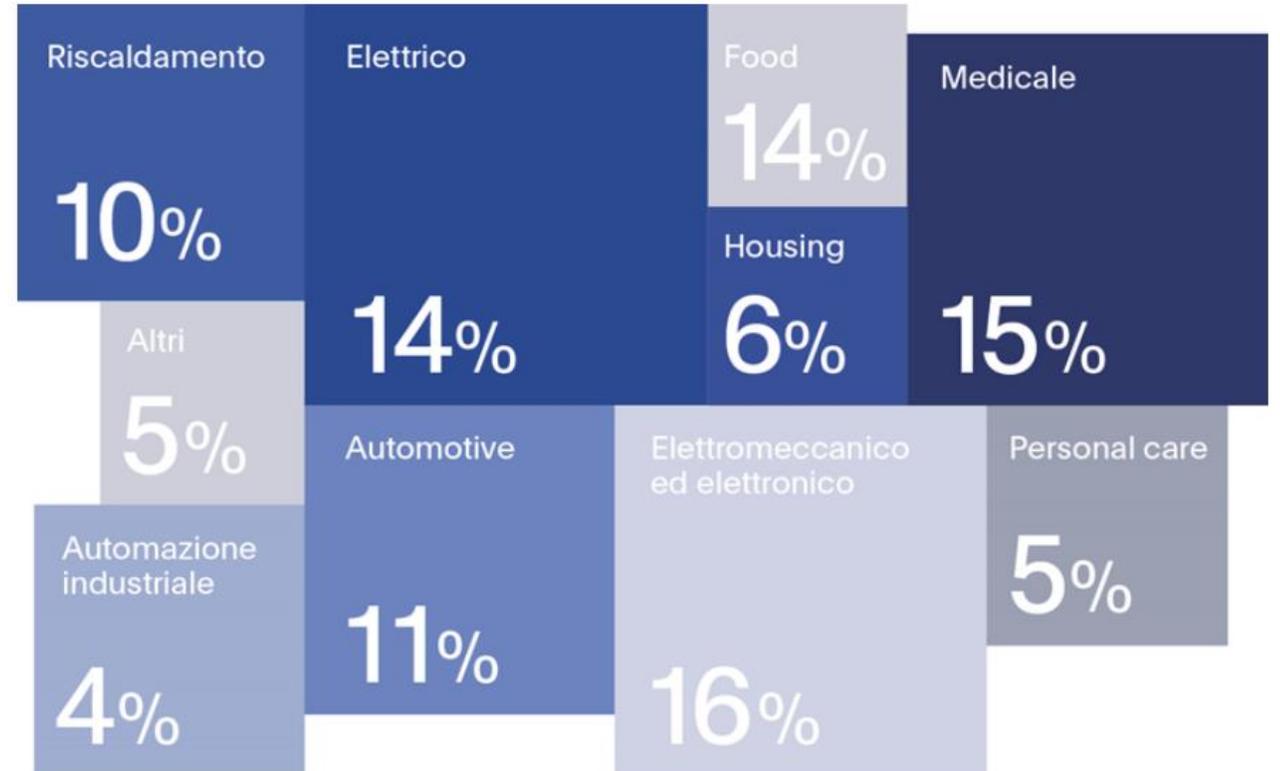
: Automated station

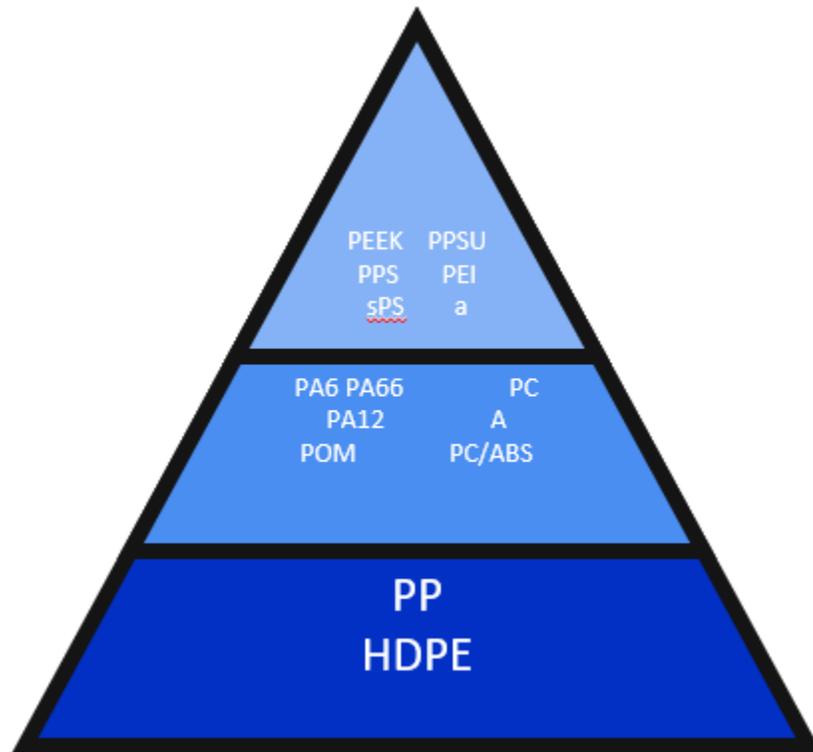
: Full electric



Sectors for the products manufactured at Idea Stampi are many, ranging from the electrical and electronics sector to the food sector, via the medical and automotive sectors until packaging for cosmetic products.

Being able to work on such a wide range of products, the experience gained over the years has given the staff the right knowledge to process multiple grades of polymers.





Our products' portfolio spaces in a wide range of fields, meaning we process a wide range of raw materials:

- PEEK
- PA-I
- PEI
- PPS
- PBT
- PA12
- POM
- PPA
- PA6
- PMMA
- PC/ABS
- ABS
- PA66
- PC
- PP
- PPO

Within our products it is possible to find different types of fillers and additives, according to customer requirements:

- Laser marking additive
- Anti-UV degradation add.
- Flame retardant
- Carbon fiber reinforce
- Carbon fiber + PTFE reinforce
- Glass fiber reinforce
- Glass sphere reinforce
- Mineral reinforce

# Quality control

Besides traditional manual measurement tools, Idea Stampi's quality control is equipped with 3 Zeiss machines with different measurement systems:

- Puntual contact scanning machine;
- Continuous contact scanning machine;
- 3D optical scanning machine.



In addition to Zeiss equipment/machinery, quality control can rely on a 3D measurement optical machine, a durometer for steel testing (e.g. after thermal treatments), a dynamometer for the control of coupling force amongst molded components.

# For the future....

Thanks to the new expansion of the production plant, the company will be able to create dedicated areas for molding parts for the medical sector; consequently, the goal for 2024 is ISO 13485:2016 certification, which will allow the company to grow through the introduction of new customers and technologies.



Idea Stampi has embarked on a path to improve its corporate sustainability. At the infrastructure level, it includes the introduction of a new photovoltaic system and the purchase of new machinery with less environmental impact. In addition to this, analysis are planned for continuous management improvement and staff satisfaction.

