



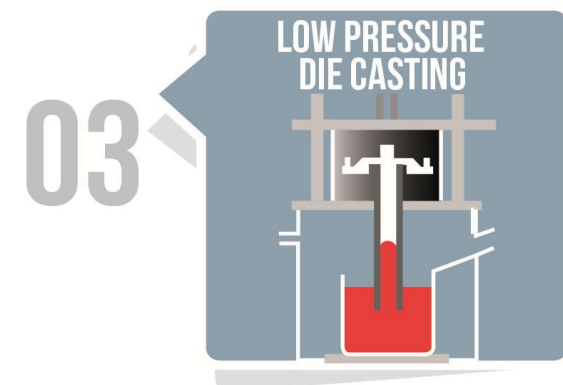
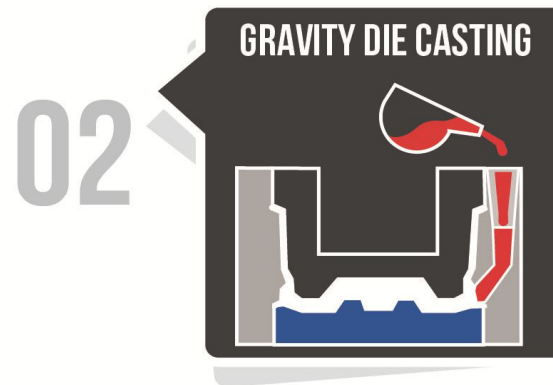
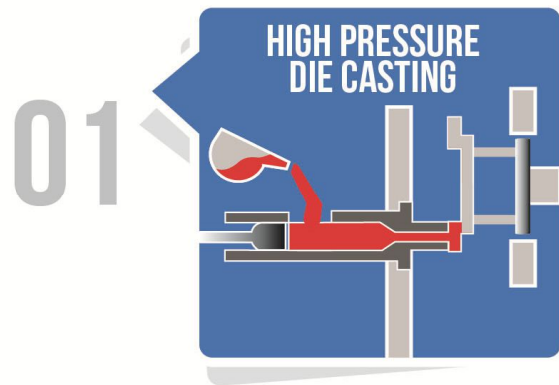
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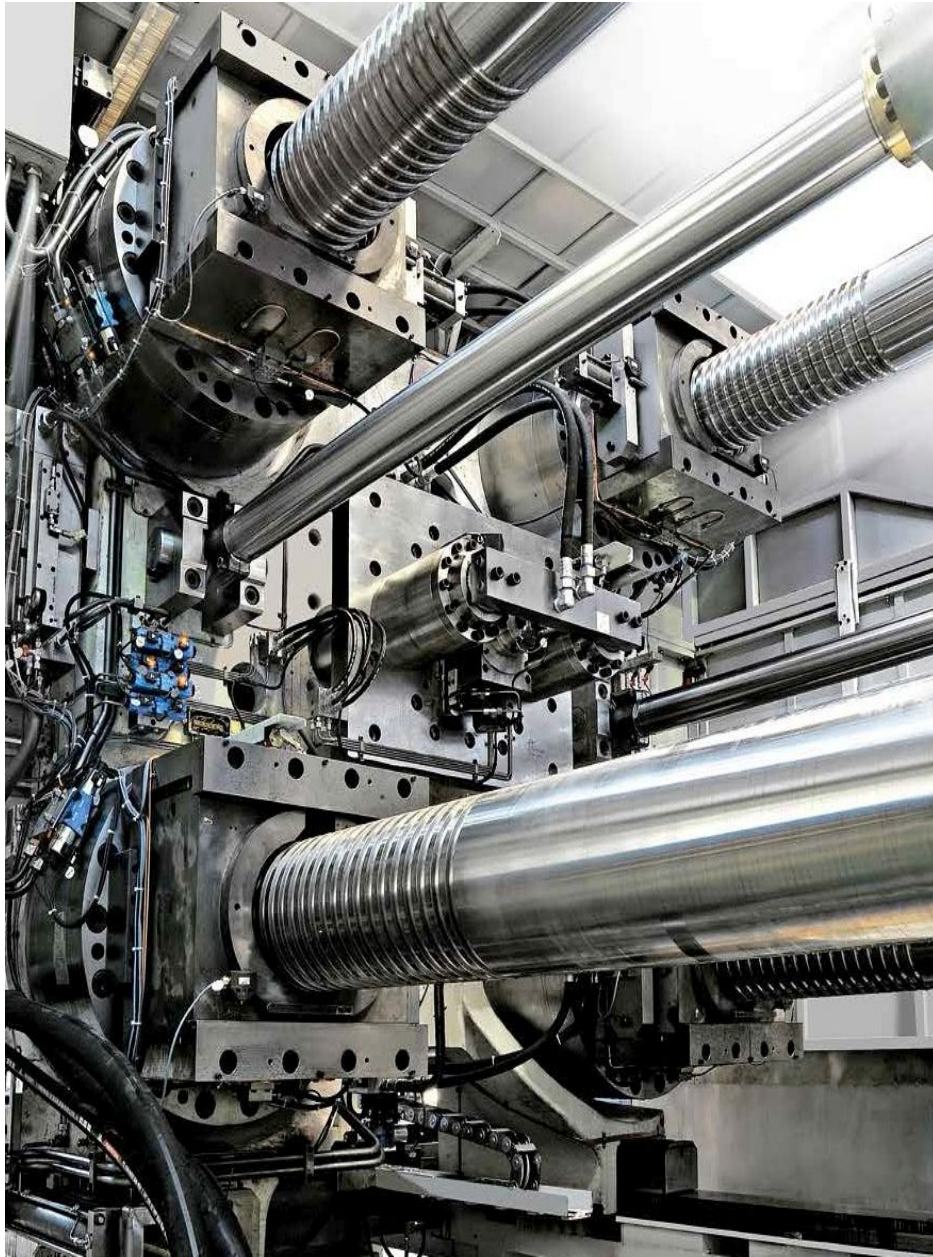


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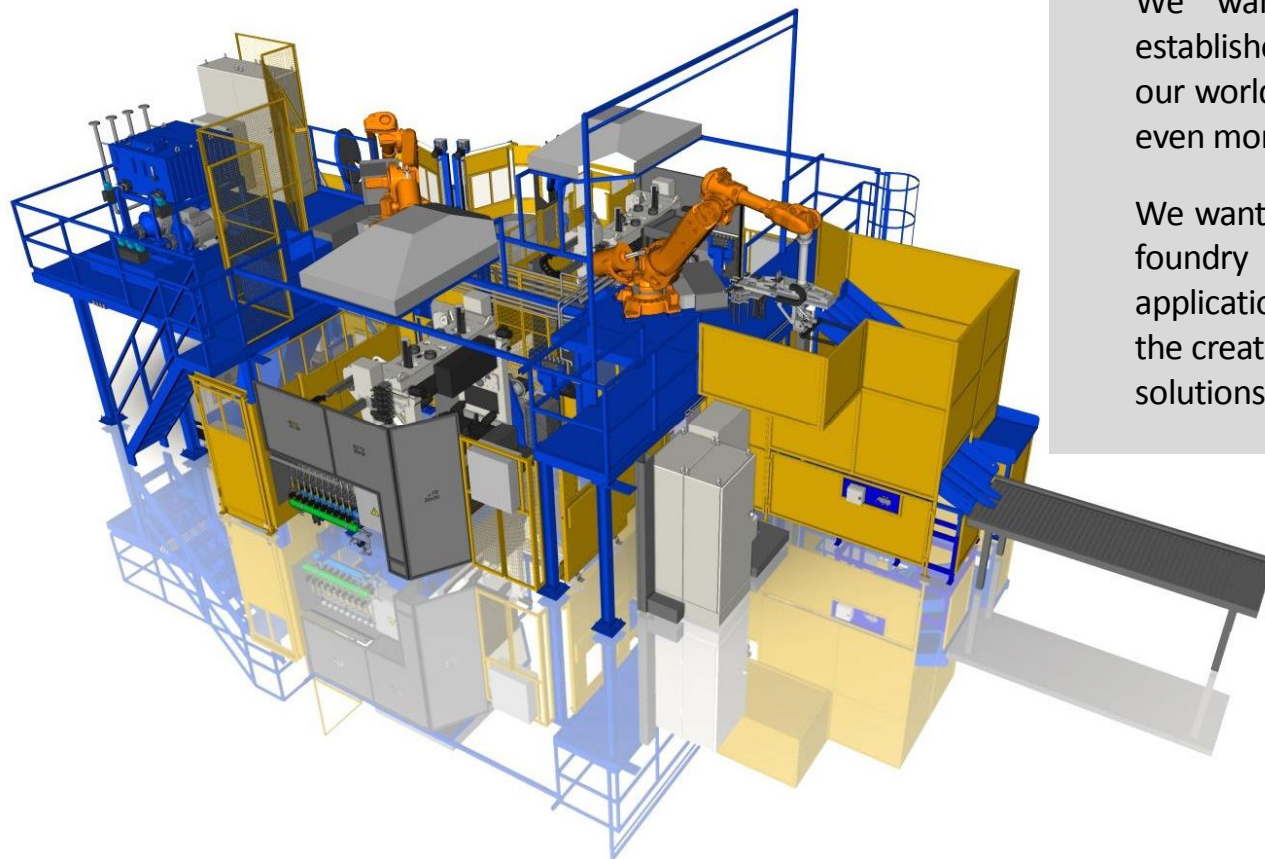
**THE GROUP: ONE SUPPLIER FOR LIGHT-ALLOY CASTING**



## OUR MISSION: SPECIALISATION AND EXPERTISE

We build machines and automatic cells for die casting and gravity casting of light alloys, with a constant focus on excellence, technological innovation, quality and production flexibility.

We provide our customers with our 45 years of experience, acquired in the most advanced industries worldwide: since our establishment we have exclusively focused on light alloy high pressure die casting and gravity casting.



## OUR VISION: FLEXIBILITY, INNOVATION AND KNOW-HOW

We want to attain an even better established leadership position, increasing our worldwide presence, thus obtaining an even more prestigious market position.

We want to become the benchmark in the foundry of light alloys for advanced applications, where innovation is crucial for the creation of cutting-edge technological solutions.



**ITALPRESSE<sup>®</sup>**

CASTING TECHNOLOGY

# OUR HISTORY

## 45 years of Technology

**1969**

Establishment of the company.

**1975**

Development of the first automatic work cell.

**1990**

Business development on markets out of Europe (China, Mexico, Brazil and Russia).

**2000**

Consolidation of the global structure: establishment of branches in China, France, Mexico and USA.

**2005**

First on the market offering the two platen toggle-free machine.

**2010**

Consolidation of the positioning of IP as technological leading partner on a global level.

**2015**

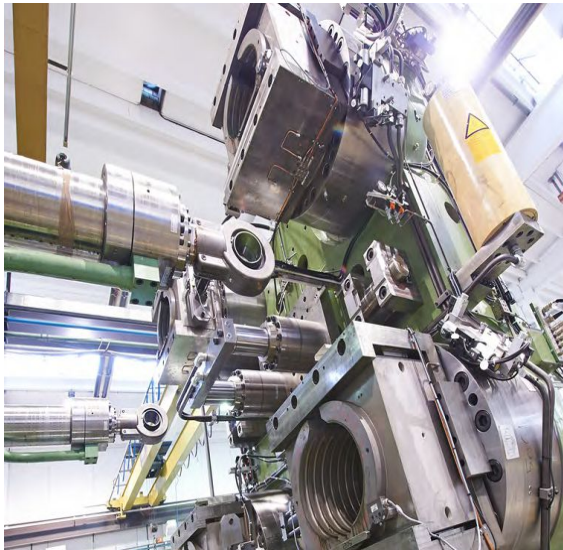
Development of HMe and ECO-FIT.

**THE FUTURE**

A constant challenge...

# PRODUCTION

Integrated and flexible for the most complex needs.



**Automatic Cells**  
**Two Platen Die Casting Machine**  
**Three Platen Die Casting Machine**

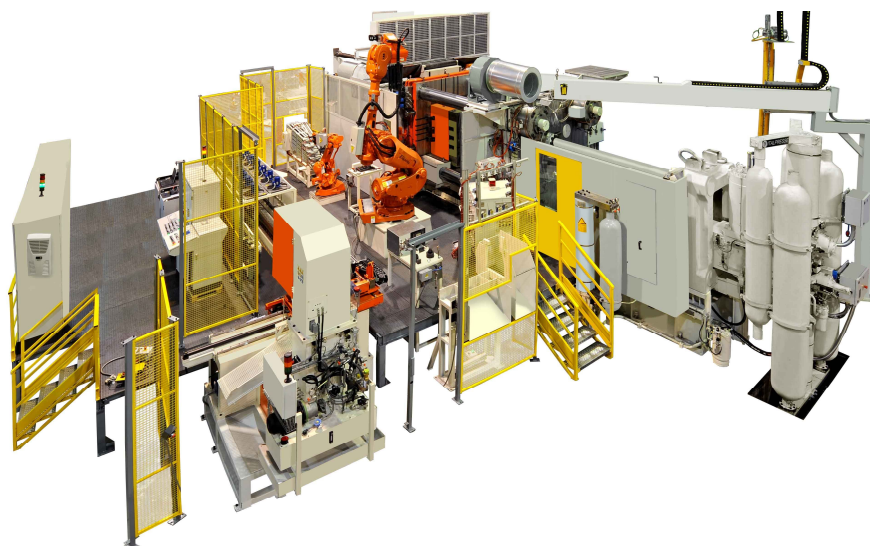
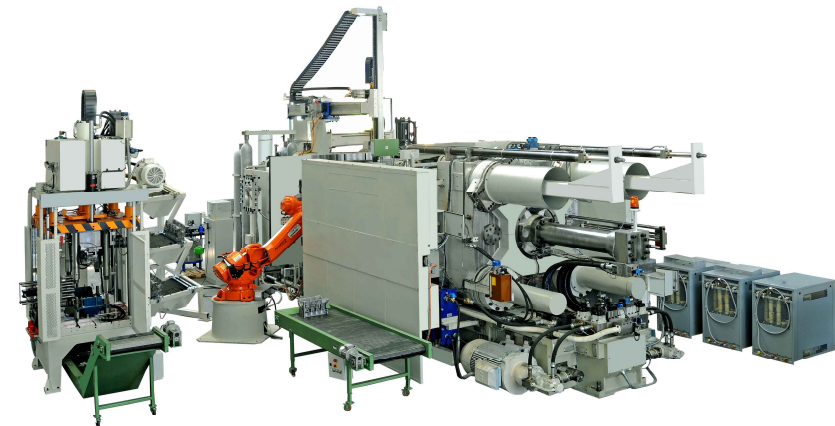
# AUTOMATIC CASTING CELLS

Solutions designed around the customer's actual needs

We supply automatic work cells that integrate all peripheral devices, from the furnace to automatic de-burring machines with the arrangement of pieces ready for machining.

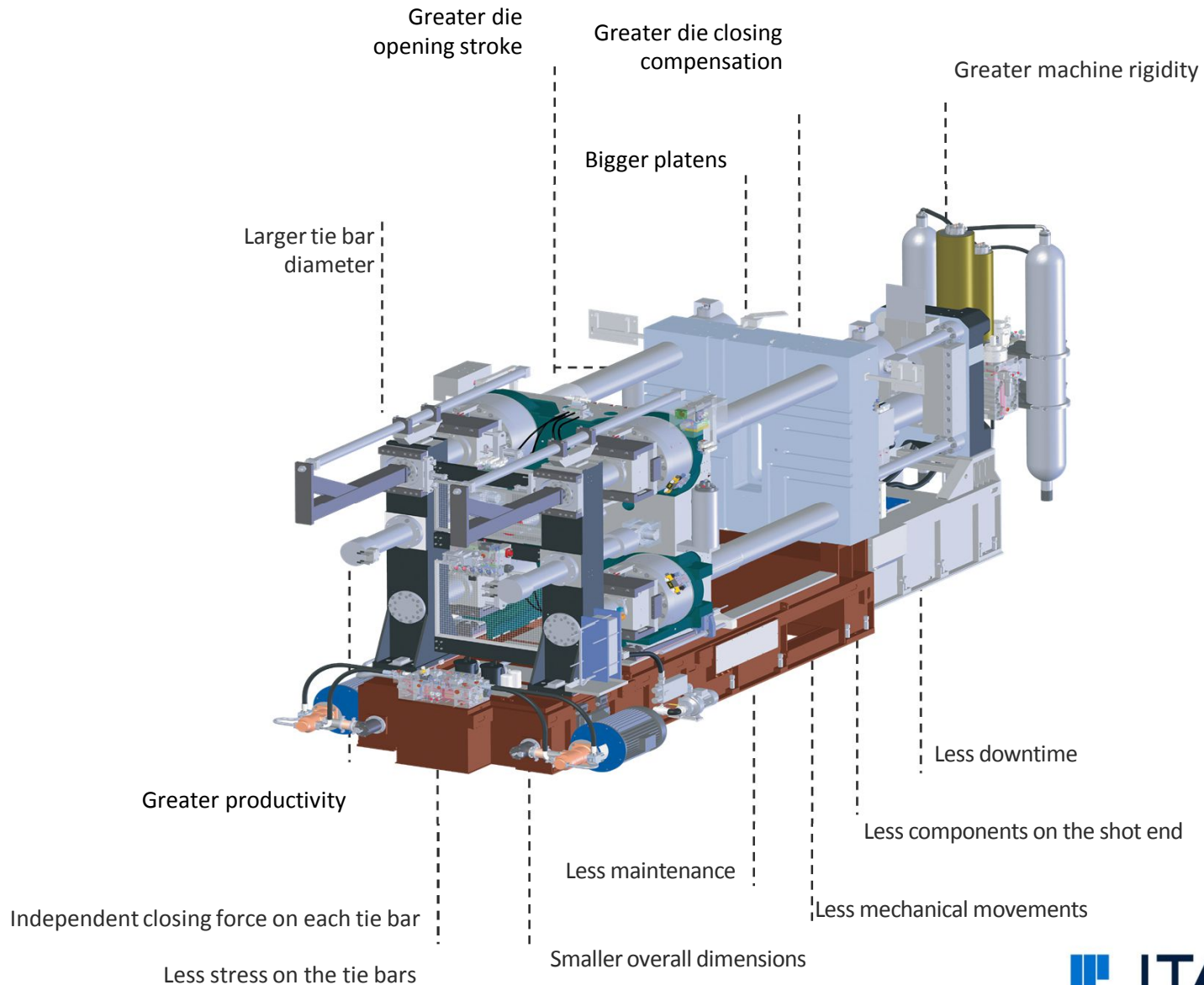
We provide support from consultancy to process design, manufacture, construction or procurement and integration of peripheral devices, including them into production, since we are the sole supplier and company responsible.

We can assist the customer in a flexible way, with the supply of complete turnkey cells, individual components or only engineering.





# TF\_TWO PLATEN HPDC Machine TOGGLE FREE



**BENEFITS OF  
THE TF SERIES**

# TF\_TWO PLATEN HPDC Machine TOGGLE FREE

## 01

### SPACE OPTIMISATION

Reduced size given the same closing force compared with toggle machines.

## 02

### MACHINE RIGIDITY

The hydraulically implemented closing force keeps the machine rigid, thereby ensuring greater die closure and, as a result, less rejects.

## 03

### RATIONAL DESIGN

Neat and functional structure, perfectly suited to work in the demanding environment of a foundry.

## 04

### MINIMUM STRESS AREA

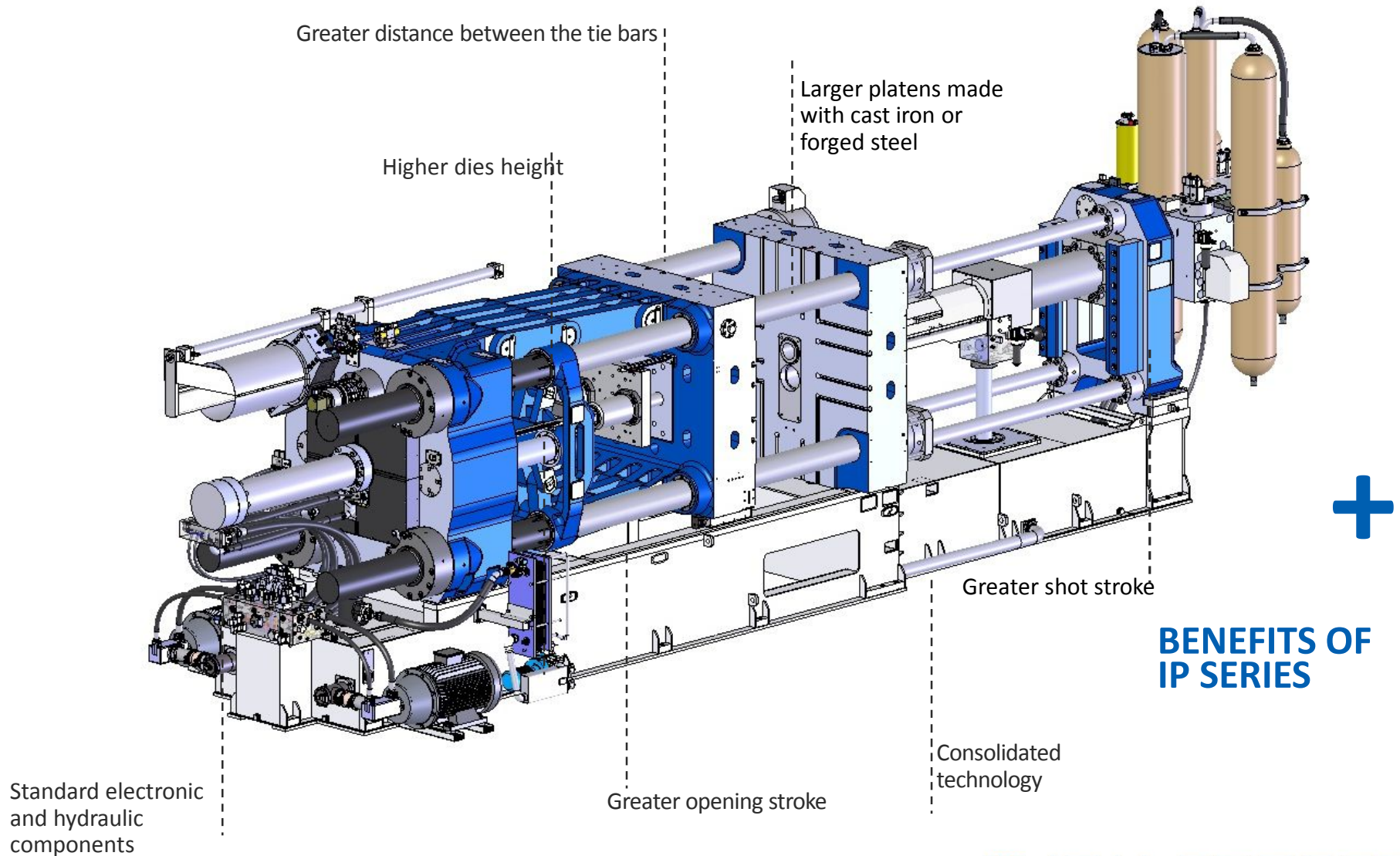
The machine can automatically compensate for issues related to die parallelism and their thermal expansion, and adapts to different working conditions.  
Minimum stress area and minimum elongation of the tie bars.

## 05

### RELIABLE AND EASY MAINTENANCE

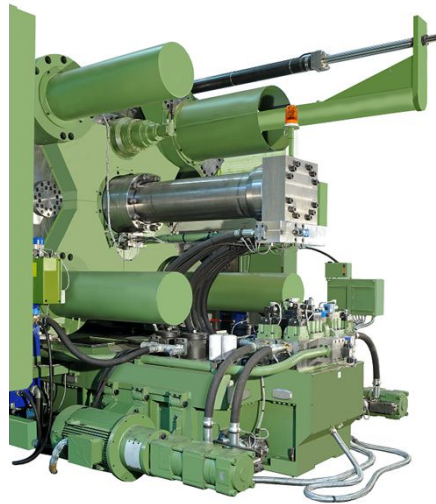
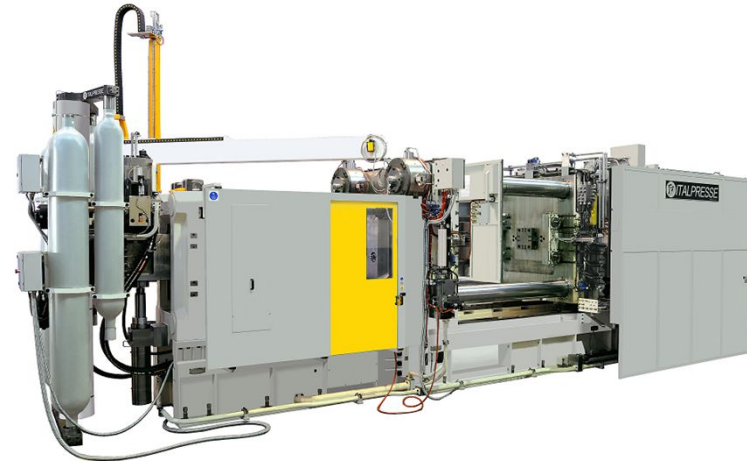
The lack of the connecting rod system and reaction platen makes the structure leaner, reduces wear on parts and issues associated with play resumption lubrication, resulting in reduced maintenance costs and downtime.

# IP\_THREE PLATEN HPDC Machine

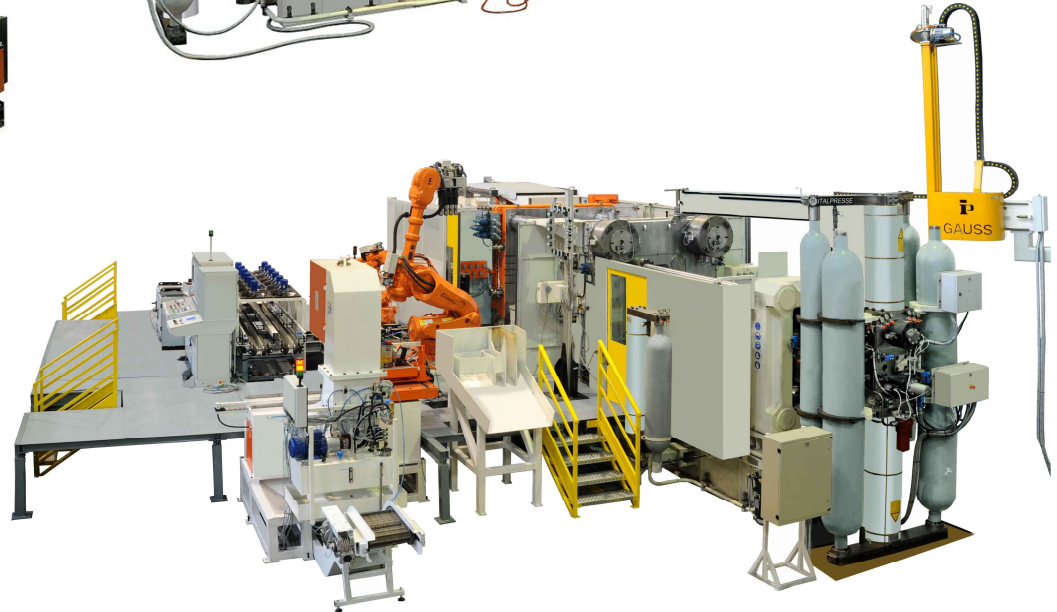


# IP\_THREE PLATEN HPDC Machine

Consolidated technology, improved performance.

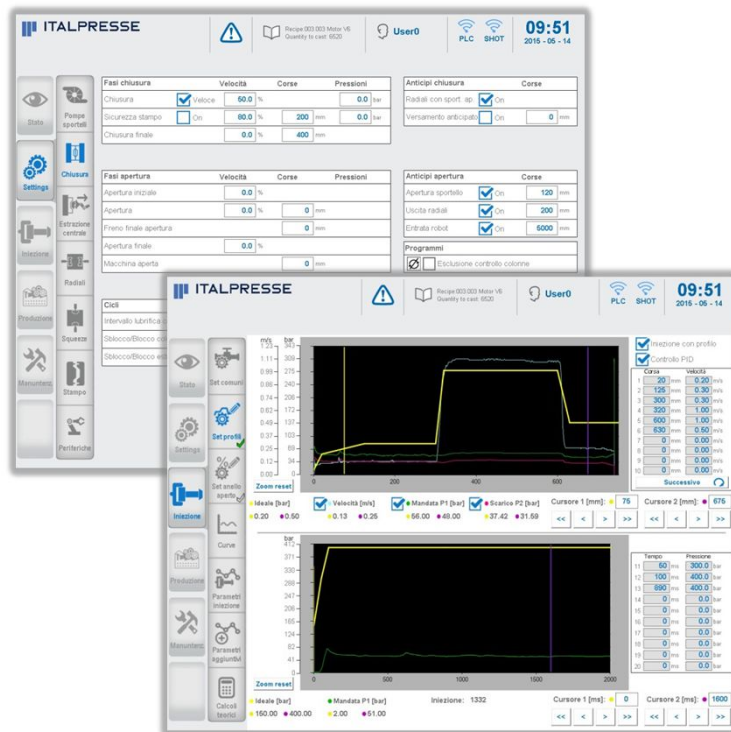


IP machines offer a wide range with a closing force ranging from **200** up to **4400** tonnes.



# HMe

## Diagnostics, control and monitoring



Italpresse has developed a new machine supervision and control system. The new HMe is powered by Wonderware, the global leading brand by Schneider Electric for industrial software including HMe and SCADA.

An even more USER FRIENDLY SYSTEM:

- A greater focus on the relevant information.
- A rational new distribution of the information on the pages.
- Less strong colours and improved position of the icons, in order to focus the attention of the user only on the useful information.
- Intuitive and simple steps for moving from a general browsing to a detailed one, with all the information at a glance.

The application is installed on a industrial Pc with Windows 7.

The system keeps the same hardware as before:

- PLC SIEMENS 7 with remote I/O for a simpler and easy to maintain unit;
- safety is managed with Pilz Pnoz Multi, connected to PLC by Profibus



# ECO-FIT MODE

## CUTTING EDGE

Constant research and development of applications, materials and processes from hydraulics to electronics, from automation to engineering.

ECO-FIT MODE is a smart system especially designed for the energy saving. Available on the entire machine range, the system allows the high dynamic operation of the machine with the maximum certified reduction of energy consumption, up to 60%.

# APPLICATIONS

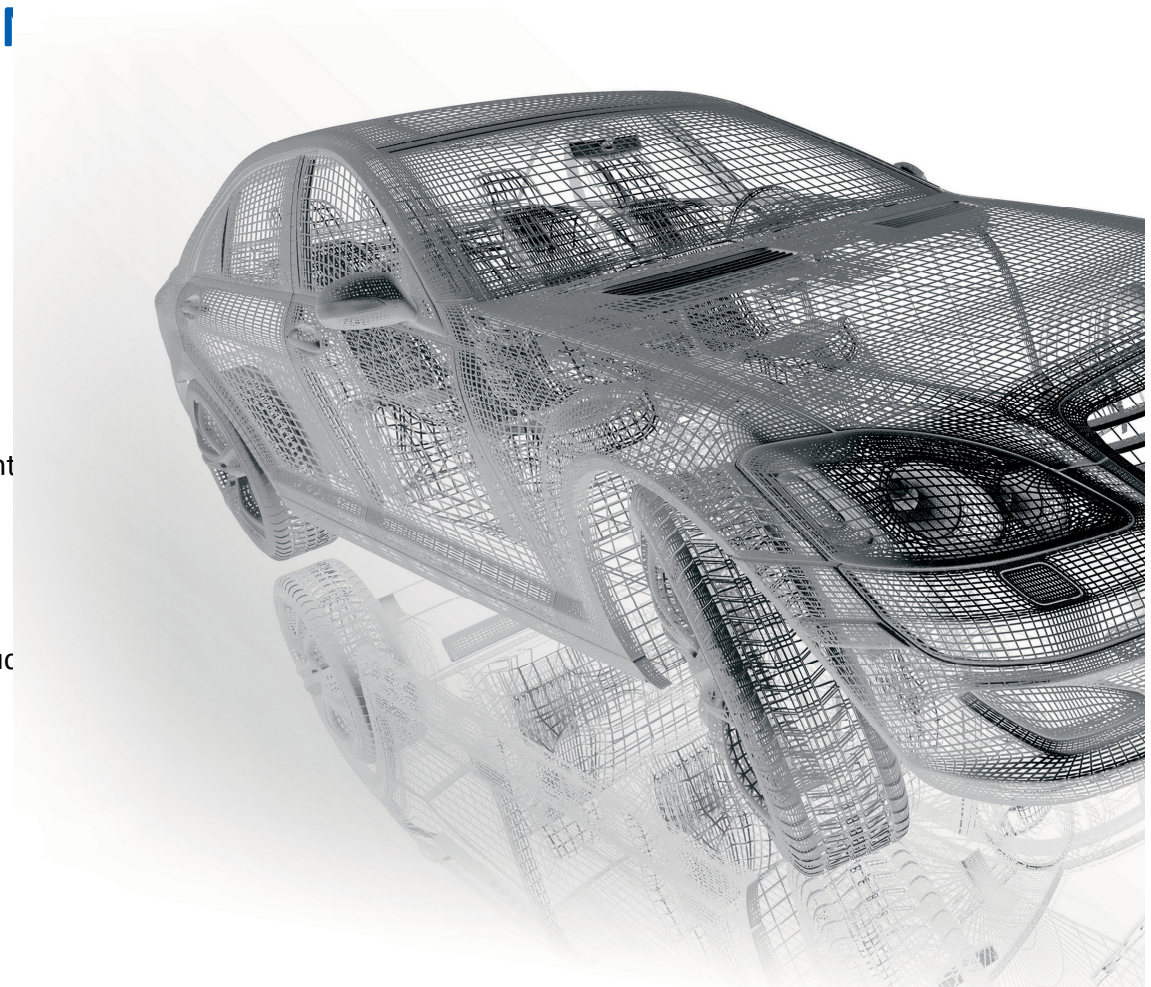
## MOTOR COMPONENTS UND STRUCTURAL CASTING

- Gearbox
- Oil sump
- Clutch housing
- Steering box
- ...
- bodywork and safety components
- magnesium or aluminum alloys
- complex geometry
- with minimum thickness and wide casting area
- with the option of applying a thermal treatment
- high integrity

## Other Industries

we are also suppliers of machine cells for the production of various industries:

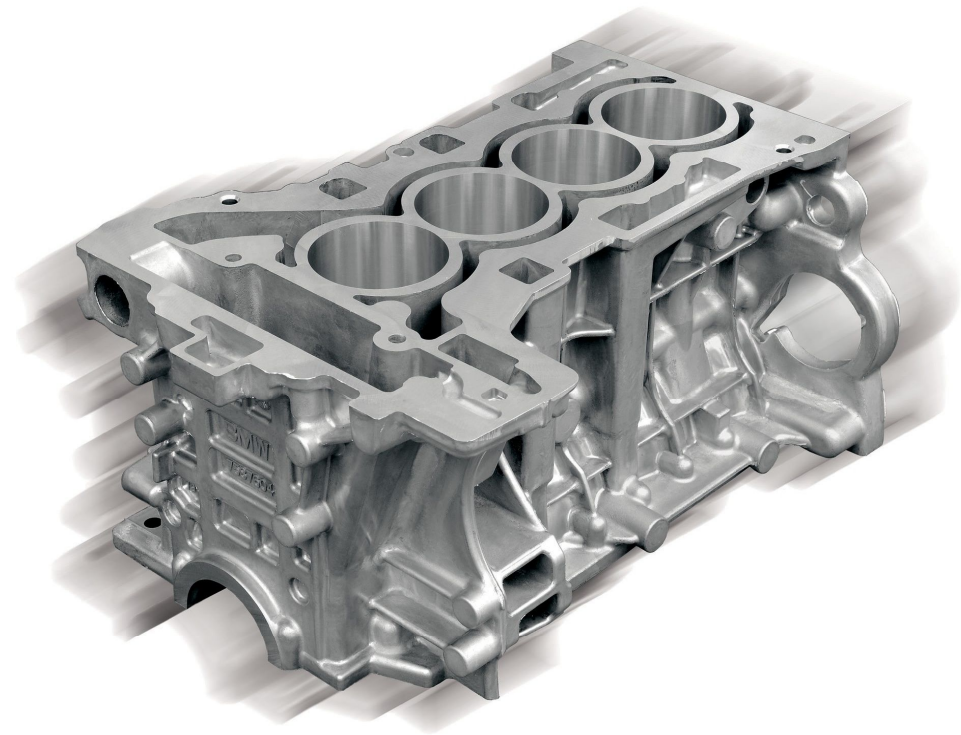
- Radiators for household heating
- Escalator steps
- Chassis and components for electronic devices
- Telecommunication components
- Household appliances
- Electric motors



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**PARTNER OF TOP  
CAR MANUFACTURERS**

of Tier-1 foundries and leading OEM manufacturers







**GAUSS**<sup>®</sup>  
CASTING TECHNOLOGY

# OUR HISTORY

## 45 YEARS OF TECHNOLOGY



**NINETEEN67**

The first working laser in the world is patented

### FOUNDATION

Gauss was born, already with a strong technical knowledge of the sector.



**NINETEEN75**

The first home video game was born.

### SUCCESSFUL SYNERGY

In partnership with Italtipresse, development and installation of the **first auto-cells** for die casting: a pioneer in the sector and the world.



**NINETEEN89**

On 9TH November the Berlin wall falls

### THE FUTURE FOR AUTOMATION

Gauss asserts itself as an important supplier of **advanced solutions for automation and gravity die casting.**



**TWO THOUSAND14**

Traces of methane and organic compound have been found on Mars.

### LOW PRESSURE

Gauss installs its first low pressure die casting machine. Gauss-Italtipresse become a complete supplier of the light alloy foundry with equipment and automation for the three different die casting process: **high pressure, gravity and low pressure.**



**THE FUTURE...**

A story to be written.

### THE PAST CREATES THE FUTURE.

Gauss, thanks to the experience gained in the sector, plays a leading role internationally. It faces the coming challenges by building its future around the research and development of innovative technologies.

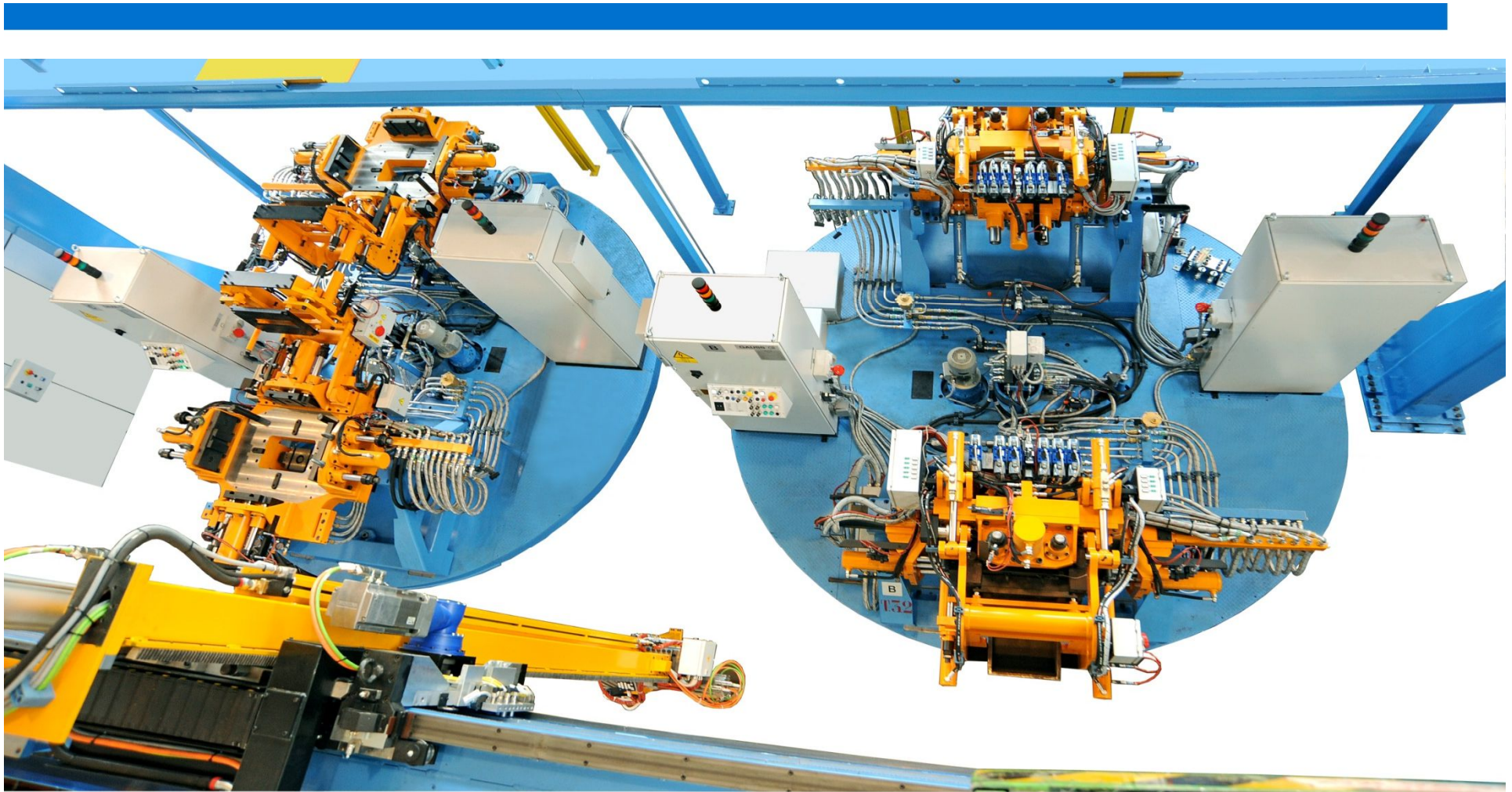
# SPECIALISATION AND EXPERTISE

Today, present and active all over the world,  
Gauss has installed about:

- **900 pouring robots,**
- **350 gravity die casting machines,**
- **170 gravity die casting cells,**
- **350 anthropomorphic robots.**



One of the first Gauss robots  
for gravity casting



In Capriano del Colle, where Gauss occupies part of the 20,000 sq.m. of the Italpresse plant, 40 people are employed.

One of the company strengths is the technical organizational structure, formed by a qualified and expert team of mechanical and electric designers

# GRAVITY DIE CASTING AUTOMATION

01

furnace & degassing system



02

core setting



03

pouring



04

extraction & marking



05

cooling & cutting



06

pre-decoring



07

deburring



# SERVICE



## RESEARCH & DEVELOPMENT

Mechanical and electric design for various solutions, control/supervision software development.

## ENGINEERING

Feasibility studies, installation designs, draft projects: specific applications and turnkey solutions.

## TECHNICAL SUPPORT

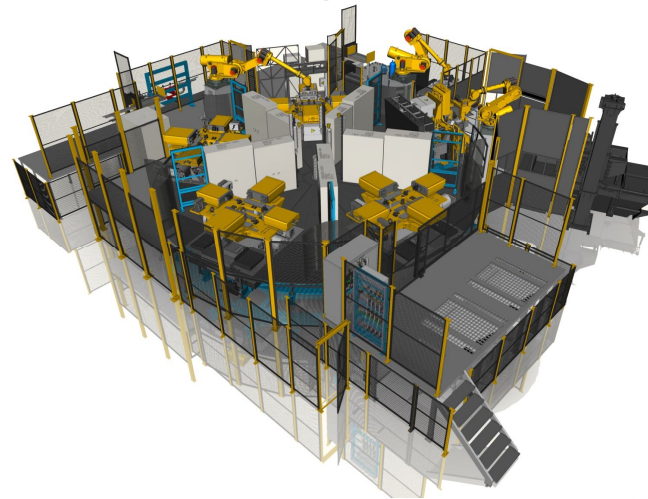
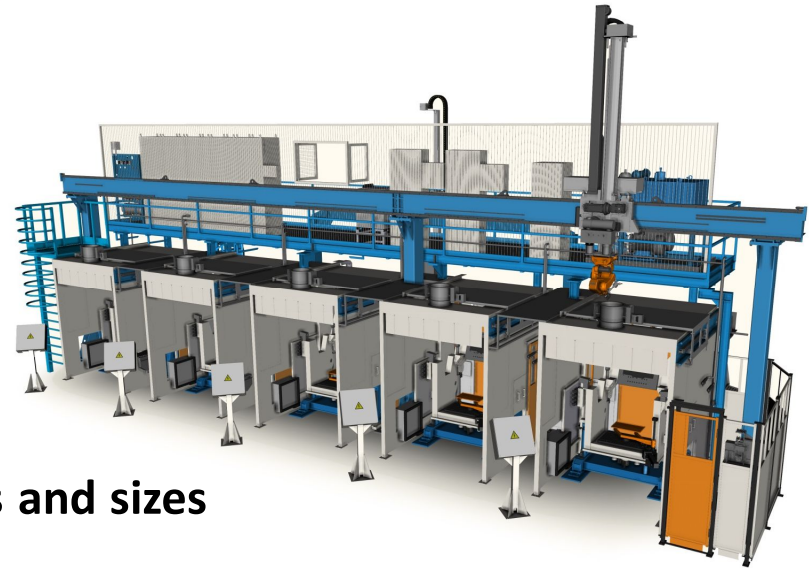
Mechanical and electrical start-up, industrial start-up, production assistance.

## AFTER-SALE SERVICES

Spare parts, technical assistance service, teleservice and consulting.

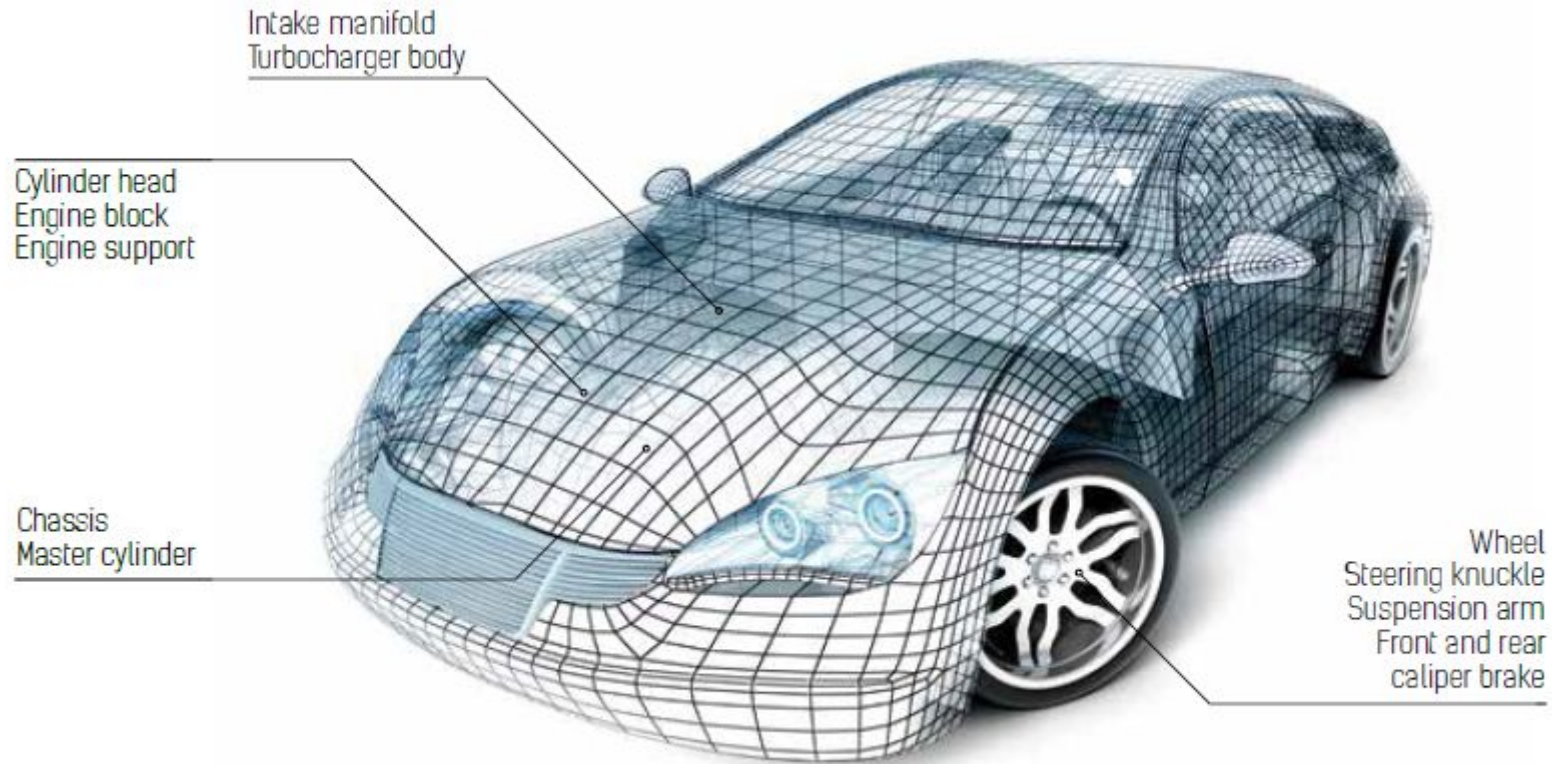
# PRODUCTS

- Gravity die casting machines
- Low pressure die casting machines
- Linear cells or carousels in different solutions and sizes
- Extraction and core setting grippers dedicated for each piece
- Automatic core assembly
- Management of the pouring, extraction, core setting functions with Gantry system or robots
- Sand core and casting manipulation
- Pre-finishing integrated cells
- Control and supervision software



# APPLICATIONS

Thanks to its 45 years of experience, Gauss is the ideal partner for aluminum foundries that want to rationalize their production process. Gauss offers turnkey solutions for the production of complex automotive castings.







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