Zanardi Fonderie

Tailored solutions for industrial spheroidal graphite and austempered ductile iron components

Sector

Construction and mining

In Zanardi Fonderie S.p.A. - an Italian family-based company, founded in 1931 and now at its fourth generation - we produce green sand spheroidal graphite and austempered ductile iron (ADI) castings.

Zanardi Fonderie offers **advanced solutions for the production of spheroidal graphite, austempered and isothermal ductile iron castings, combining design, melting, heat treatment, machining and certification in one facility**. This approach allows us to ensure high quality, rapid delivery times and ready-to-assemble products.
Zanardi Fonderie's know-how and ability to manage the entire supply chain ensure customer-compliant products.

Materials produced by Zanardi Fonderie

Heat-treated materials

- Ghisa sferoidale (GJS)
- Ghisa Sferoidale Austemperata (ADI)
- Ghisa sferoidale isotermica (IDI)
- Ghisa Grigia Austemperata (AGI)
- Acciaio austemperato

Zanardi Austempering: steel and cast iron heat treatment

Subcontracting of austempering heat treatments on all grades of austempered ductile iron (ADI), isothermal ductile iron (IDI), austempered grey iron (AGI) and austempered steel.

Construction and mining sector

The **construction and mining sector** is divided into sub-categories such as earth moving, construction, mining and demolition. For the earth moving and construction sectors, we supply parts in **spheroidal graphite iron and austempered ductile iron (ADI)** for undercarriages and axles of cranes and mixer wagons. For the mining and demolition sectors, our castings are used in breaker hammers and hydraulic pumps.

Chain link

Planetary housing

Idler

Sprocket

Construction and mining sector

Energy sector

Forestry sector

Industrial sector, hydraulics and oil hydraulics

Agricultural sector

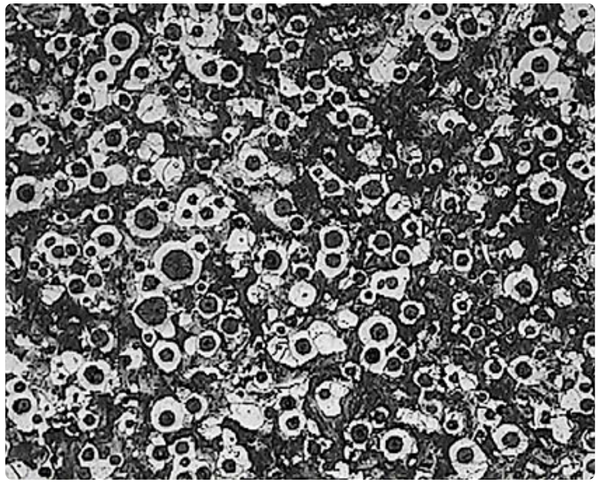
Off-road vehicles sector

On-road vehicles sector

Railway sector

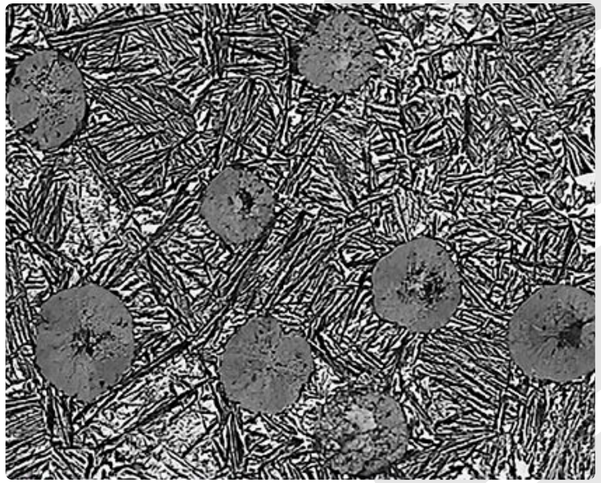
GJS - Spheroidal Graphite Iron

We manufacture all grades of spheroidal graphite iron according to international standards (ISO 1083, EN 1563, FIAT 52215, ASTM A536), including ferritic ductile iron with guaranteed resistance at low temperatures (in grades EN-GJS-400-18LT and GGG40.3) and also the new grades of solid-solution strengthened ferritic ductile iron, also known



ADI - Austempered Ductile Iron

La ghisa sferoidale austemperata (ADI) è molto richiesta come alternativa all'acciaio fuso, saldato e forgiato in quanto offre resistenza all'usura, tenacità, leggerezza, buona lavorabilità e ampia libertà di progettazione. Oggi possiamo realizzare tutti i gradi di ghisa sferoidale austemperata (ADI) secondo gli standard internazionali EN 1564, ISO 17804 e ASTM A897.



IDI - Isothermal Ductile Iron

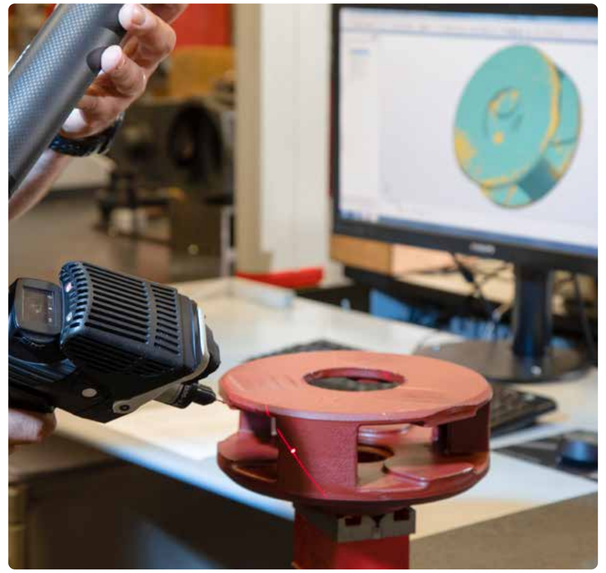
Isothermal ductile iron (IDI) is obtained by heat treating ferritic spheroidal graphite iron (GJS400) without the addition of costly alloying elements. Mechanical properties are between ADI800 and GSJ800. IDI is an extremely valid solution for the manufacture of very thick parts and/or as the thickness varies, even in the presence of low temperatures.

Castings controlled and certified in a first-class laboratory

Quality control takes place both along the entire production line and in the laboratory, accompanied by complete **material certification**. In our **in-house laboratory**, we carry out **mechanical tests, micrograph analyses, hardness checks and resilience tests** up to -40 °C.
Our laboratory certification can be accompanied by a **final testing service** on both non-machined and machined castings to check their dimensions, integrity and condition using X-ray, ultrasound and magnetic particle inspection.

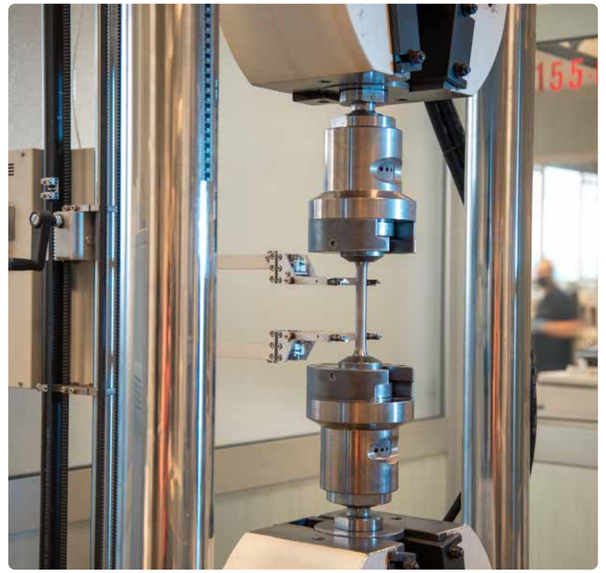
Specialisation in IATF automotive certification

We invest in our workers' health and safety and manufacture **using sustainable energy sources**. Our certifications reflect the code of ethics that accompanies our daily work and the **recent IATF certification** testifies to the quality of our production process in the manufacture of automotive components.



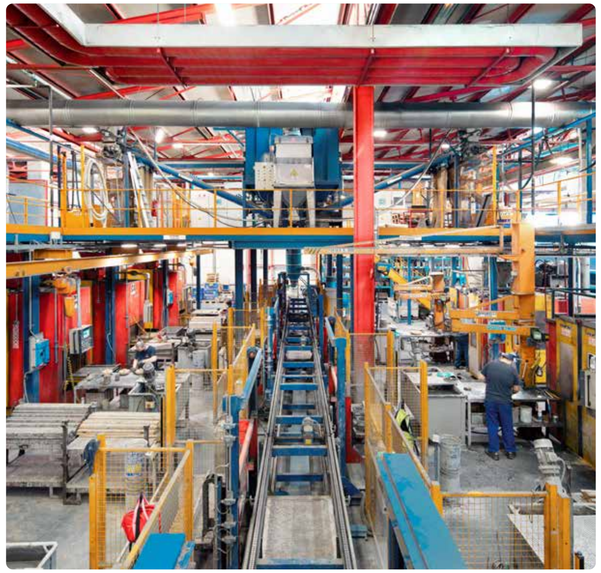
Zanardi Foundries Certifications

IATF 16949 | ISO 50001 | EMAS | ISO 14001 | ISO 45001



Zanardi Fonderie

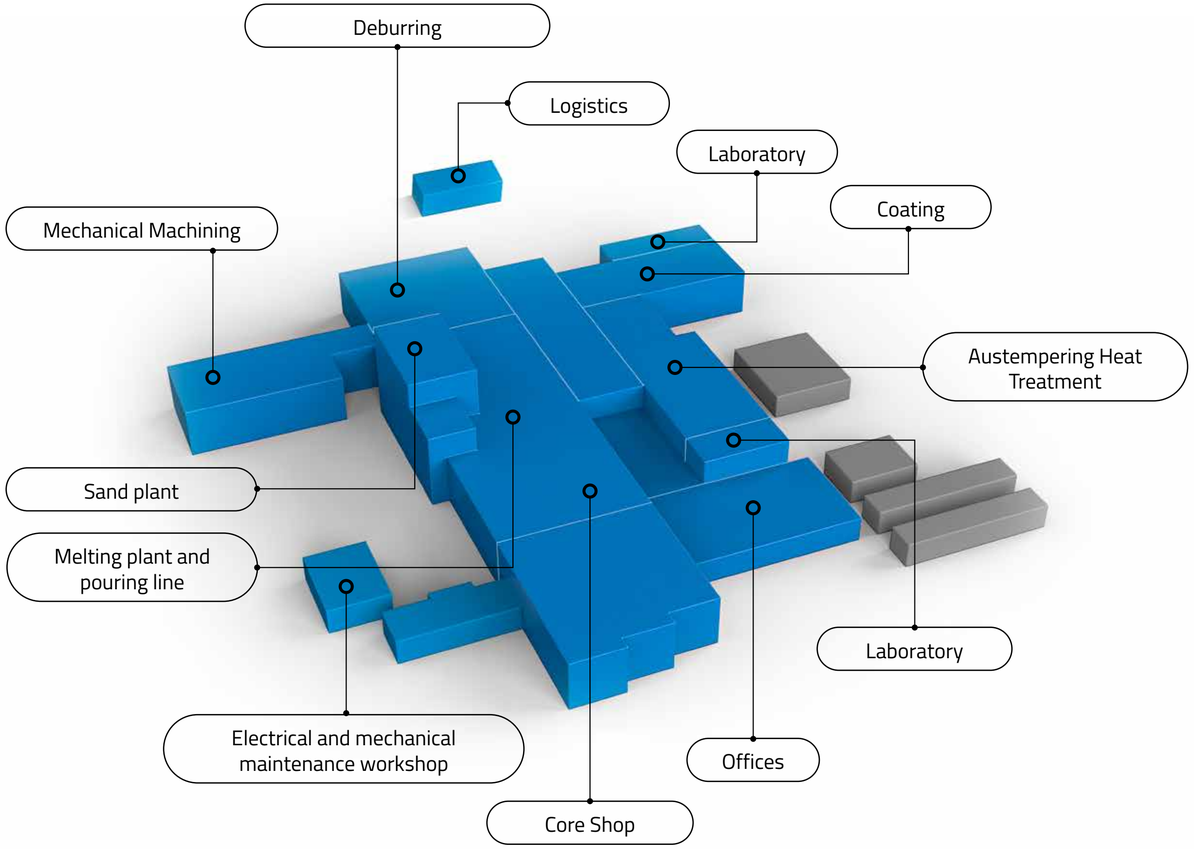
The **co-design** service
for **optimised industrial design**

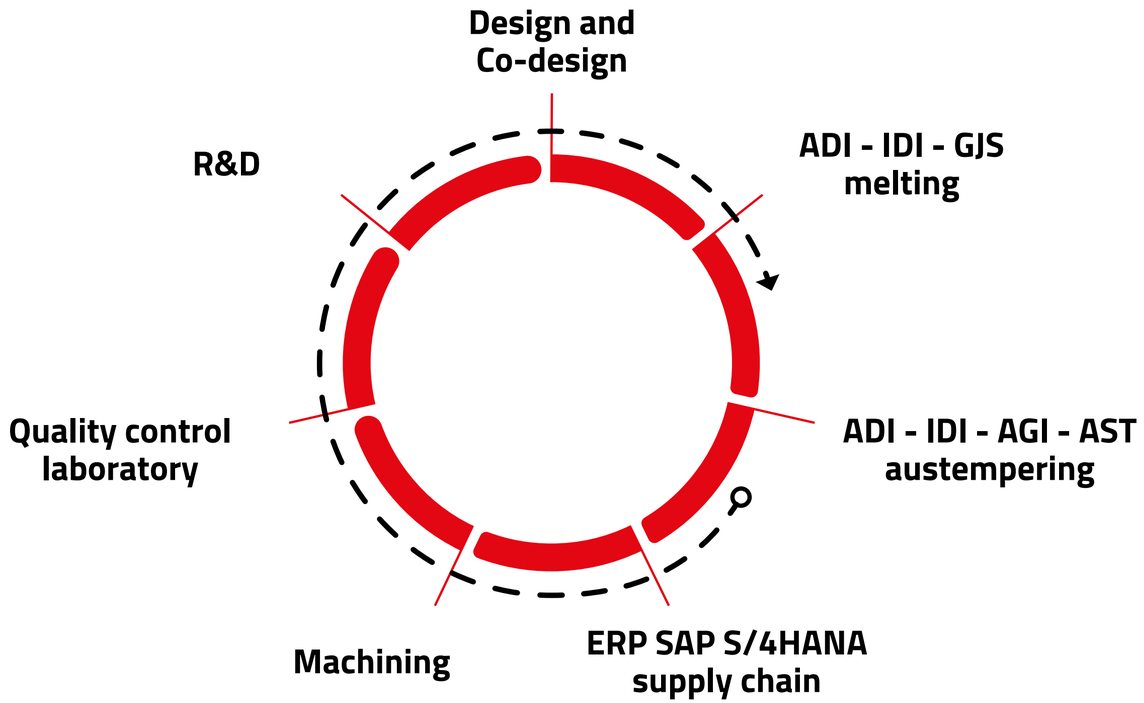


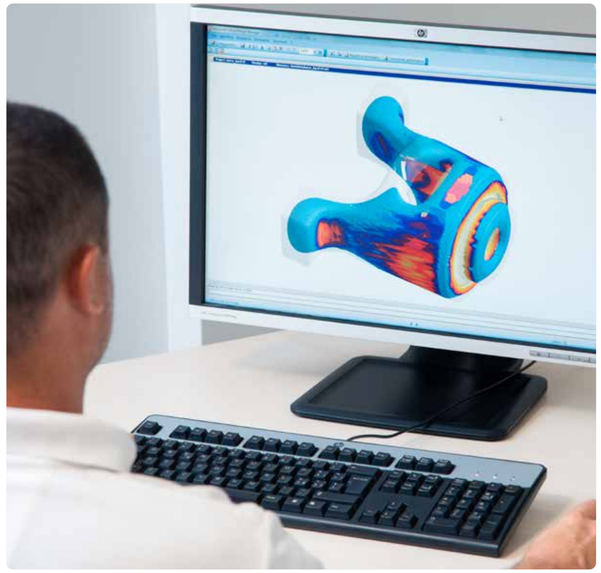
Production plant characteristics

Our castings, with an average unit weight ranging from 1 to 120 kg, are used in **applications in the automotive industry in "on road" and "off road" transport, railways, energy, construction, mining and agriculture**.

We also supply **austempering heat treatment of cast iron and steel for third parties**, for components from 1 kg up to 1000 kg. Investments in facilities and **R&D on ADI machinability** allow us to **partner with foundries in the realisation of profitable co-design projects.**







Integrated foundry process

Zanardi Fonderie's production process takes place in our sole facility in Minerbe (Verona).
We work alongside our customers from the development stage to provide **machined, controlled and certified industrial solutions** to meet the requested product requirements.

"Zanardi Academy" is a web platform aimed at **sharing the culture of the foundry process**, and the resulting materials, with entrepreneurs, designers, R&D managers, lecturers, students and researchers working in the cast iron industry.
The platform hosts content of scientific and general interest that we have created in partnership with the **DTG (Department of Management and Engineering) of the University of Padova**.

Download brochure

Zanardi Academy

Case history

Zanardi Fonderie

Sales

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www.zanardifonderie.com

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