ebroacero













quality builds trust

Quality Control

We have the means to carry out **non-destructive testing** (NDT) such as ultrasonic, magnetic particles, penetrating liquids, dimensional controls, and radiographic testing, at various steps in the production process.

All staff in charge of these different testing procedures hold the professional qualification required by standard EN ISO 9712.

Laboratories

To guarantee the product quality requirements, EBROACERO, S.A. has on its premises a **laboratory for chemical analysis** by emission spectrometer, as well as a **mechanical-testing laboratory**. Our equipments are calibrated in accordance with international quality standards.

customized service tailored solutions

In the Technical Department, our team is readily available to work with our customers on the design of each part. The **technological commitment** of this division applies the latest melting simulation techniques to meet the quality requirements, considers the best pattern design, and decides on the most suitable work method for each part.

Our highly qualified laboratory staff works with our customers to advise them on the material qualities and heat treatments that are best suited to each case.



ebroacero

about ebroacero

Since its foundation, in 1963, EBROACERO, S.A., has focused its activity on the manufacturing of steel and alloyed steel castings, for multiple industrial applications.

Over the years, Ebroacero, S.A., has adapted and evolved, making various investments that allows us to be in line with new technologies. We currently have the most modern means of production and control, as well as a highly qualified team that undergoes constant refresher training. We earn **each customer's trust** by adjusting us to their needs, supplying castings that meet the **highest quality** standards under **highly competitive** conditions and always within the **agreed deadlines**.

We meet the requirements of each market, and we export our products around the world.





ebroacero ... means quality

In a world where the industrial environment is getting more and more globalised, **quality** makes the difference.

Our Integrated Quality and Environmental Management System, is designed in accordance with the focus, guidelines, and requirements set out by reference standards UNE-EN ISO 9001 and UNE-EN ISO 14001.

Our **Quality Policy** involves the whole organisation, with the permanent challenge of continuous improvement. We are certified by the most prestigious international entities, such as **ABS**, **Lloyd's Register**, **DNV Bureau Veritas**, **and RMRS**, which enables us to meet our customers' requirements.

Strategic

lines

suitable technique: **moulding**

Specialised in hand moulding, Ebroacero has on-site facilities with different types of sand for making moulds and cores (silica, chromite, zirconium, and olivine) that are mixed with various binding agents (bentonites, silicates, phuranic and phenolic resins, etc.).

There are three different moulding lines:

Hand moulding: with moulding boxes and pits for parts up to $7000 \text{ mm} \times 7000 \text{ mm}$;

Machine moulding: for series production, with four moulding machines for boxes up to 650 mm × 800 mm;

Shell moulding: for precision and lightweight series production, enabling work with plates of 500 mm × 500 mm.



steels and their treatments

EBROACERO S.A. manufactures steel in compliance with various international regulations (EN, UNE, ASTM, DIN, BS, AFNOR, etc.) and in accordance with the specifications provided by its clients.

For steel melting, EBROACERO, S.A., has two basic-process electric arc furnaces with inert-gas

injection through the base. This enables a complete reduction of gasses and impurity contents in the steels, as well as a reduction in phosphorus, sulphur, and other residual contents in accordance with the most demanding standards.

WE EXPORT TO OVER

30 COUNTRIES



TYPE OF STEEL	CHARACTERISTICS	MAXIMUM WEIGH
Carbon Steel	Supplied normalised, or quenched and tempered.	14.000 kg.
Low-alloy steels	 High-resistance. Heat-resistant. High tenacity at low temperatures. Supplied normalised and tempered, or quenched and tempered. 	14.000 kg.
Martensitic and austenitic stainless steels	Supplied normalised, and tempered or quenched and tempered. Martensitic stainless steels with carbon content of < 0.06%.	8.000 kg.
Refractory steels		8.000 kg.
Wear-resistant manganese steel	Supplied tempered	9.500 kg.



CAPACITY tonnes/month



heat treatments

EBROACERO, S.A., has all sorts of on-site facilities required by different types of manufactured steel,

- Annealing
- Normalising
- ·Water-quenching or air-quenching
- ·Hyper-tempering of stainless steel or manganese steel
- Tempering
- Stress relieving

To do so, we have in our premises four gas-fired heat treatment furnaces with electronicallycontrolled heat-treatment curves and monitored ambient and contact temperature on the treated parts.

machining

The trend amongst our most important customers to acquire fully finished and machined castings has led us, over the last years, to equip our facilities with machines and tools with enough capacity to machine all the parts we cast.

We have vertical lathes for parts of diameters up to 8 500 mm × 2 600 mm high, as well as CNC milling machines with a CAD - CAM programme up to:

 $X = 18\ 000\ mm$ | $Y = 4\ 000\ mm$ | $Z = 800\ mm$.

Programmable Gear Hobbing Machine for gears up to 7 060 mm maximum diameter, module 50, and height 2 200 mm.





more than **stee**









At EBROACERO we fully identify with the industrial and technological development of our time. Our goal is to be the market leader in castings and machined parts with the highest quality requirements, always minimising environmental impacts and protecting the environment.

Our activity is subject to **Integrated Environmental Authorisation**, which we have held since 2007.

We are Authorised Waste Managers since 2015.

A set of periodic controls are carried out at Ebroacero by the regulatory bodies and external laboratories to ensure compliance with the requirements set out in the Integrated Environmental Authorisation.

We involve all our staff by promoting a working environment that fosters the update and specialisation of human resources, as well as the development of technological innovations and processes, along with creative and innovative ideas. We promote a work setting that reduces risks to a minimum, encourages staff safety and on-going staff training, fostering team-working, and creating a setting in which each person can give the best.

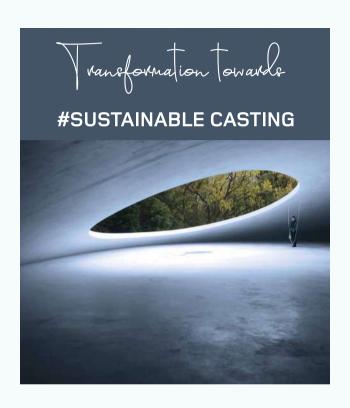
We hold ISO 9001 and ISO 14001 certifications and make sure we minimise the environmental impact of our activity.

the markets that we cover

Our products are used by all types of manufacturers of machinery and industrial equipment, and are mainly intended for:

Power generation • Sugar • Cement • Naval • Offshore • Steel plants • Industrial plants • Crushing • Valves

We cover the requirements of each market, and our activity in international markets increases year after year. The quality of our products is recognised and appreciated worldwide.

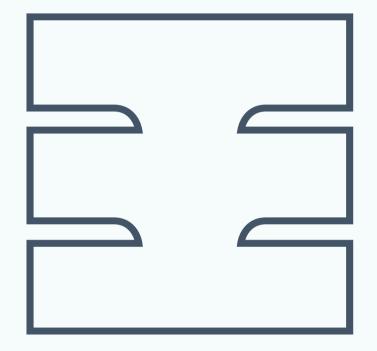














Ebroacero, S.A. • C/ Argualas, 20 50012 Zaragoza • España www.ebroacero.com

Tel. +34 976 564 625 comercial@ebroacero.com





