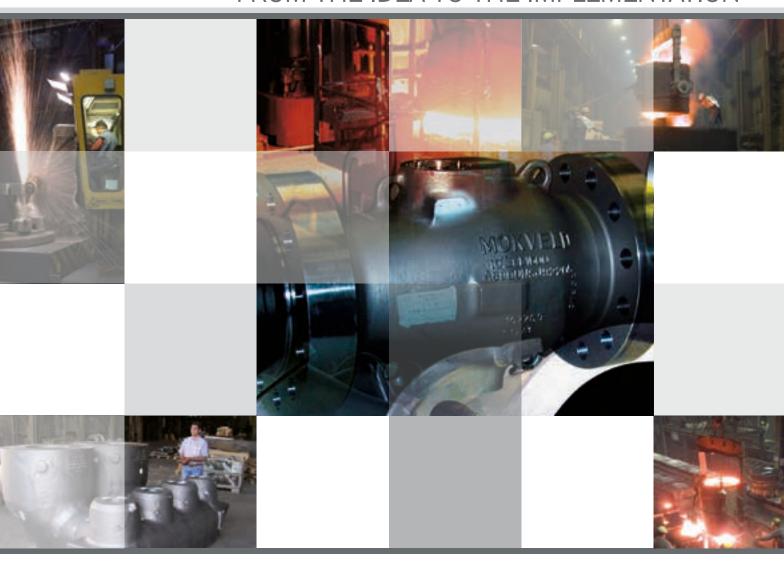
## FROM THE IDEA TO THE IMPLEMENTATION



# FROM THE IDEA TO THE IMPLEMENTATION

Pleissner Guss GmbH is one of the leading manufacturers of steel castings. The range of materials includes all cast steel grades – from unalloyed to high-alloyed as well as nickel-based alloys. Our know-how is based on many years of experience in the manufacture of components for all sectors of general mechanical engineering. A further core activity is the manufacture and processing of steel castings for industrial valves and pumps in a weight range extending from 150 kg to 12 t. From the idea to the implementation Pleissner Guss GmbH focuses especially on fulfilling customer requirements in an optimum way.

## MATERIALS' COMPETENCE

The range of materials produced by Pleissner Guss GmbH includes all grades of steel castings, from unalloyed and low-alloy steels to high-alloyed steels including Duplex and Superduplex stainless steel castings as well as 6-Mo-Austenite and Ni-based alloys. As a complement to our production range, we manufacture all common types of high-alloyed, austhenitic-structured cast iron with spheroidal carbon formation.

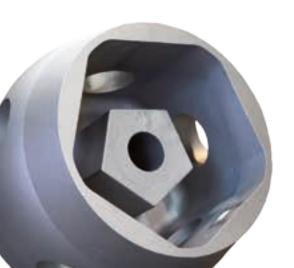
## MANUFACTURING TECHNOLOGY

The melting shop has two electric-arc-furnaces with 8 t and 10 t capacity each and a VOD system with 7 t capacity as well as three medium frequency induction furnaces (0.5 t; 1.5 t; 3 t).

The castings are produced by means of a partly mechanised cold-setting resin moulding system (1,400 x 1,000 to 2,200 x 1,200 mm) and a classical manual moulding system following the cold resin moulding process (box size max.  $4,500 \times 4,500 \times 3,000$  mm). All equipment necessary for heat treatment, testing and finishing are also available for further treatment. CNC machining centers are used to process the castings ready for installation.

### **SIMULATION**

The transparency of the casting process using state-of-the-art, computer-supported filling and solidification simulation makes it possible, already in the construction and planning phase, to exercise influence on the casting shape of future castings and to offer the best possible advice to customers. This has the additional benefit of shortening the delivery time from prototype to serial production, improving the quality and reducing costs for the customer by means of optimum casting technology.









#### HIGHEST QUALITY STANDARDS

All products of Pleissner Guss GmbH have to fulfil the highest safety standards and for this reason, in addition to comprehensive documentation accompanying our processes, stringent quality control procedures are essential. Our company is certified according to ISO 9001, ISO 14001 and ISO 50001. Naturally we are also in possession of all the common authorisations from a very wide range of classification societies, for example for the areas of pressure vessels, nuclear technology, railway components as well as shipbuilding and offshore technology.

The extensive range of equipment available in our company for non-destructive testing includes the entire spectrum of surface crack testing (DPI & MPI) and volumetric inspection by ultrasound and radiographic means. Using a 3 MeV linear accelerator walls up to 200 mm thickness can be examined. Our testing staff, qualified according to SNT-TC-1A and ISO 9712, enables us to perform all the known test requirements within the company.

In addition to being well-equipped for conducting non-destructive testing, all pre-requisites for carrying out destructive material tests are also available. Our in-house mechanical laboratory as well as a full range of metallographic equipment enable us to carry out nearly all necessary tests.

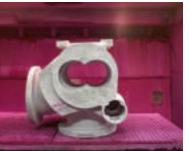
In addition to the available equipment, we also have state-of-the-art measuring and testing systems including a 3D coordinate measuring machine for components of up to  $3,300 \times 2,030 \times 1,500 \text{ mm}$  in size.

#### **OUR MARKET**

In addition to the high quality, customers of Pleissner Guss GmbH particularly appreciate the reliability and know-how which they associate with our company. Individual products are produced, for example, for the following branches of industry:

- Valves and pumps
- Power generation
- General mechanical engineering
- Shipbuilding and offshore systems
- Railway vehicle manufacturing
- Chemical industry

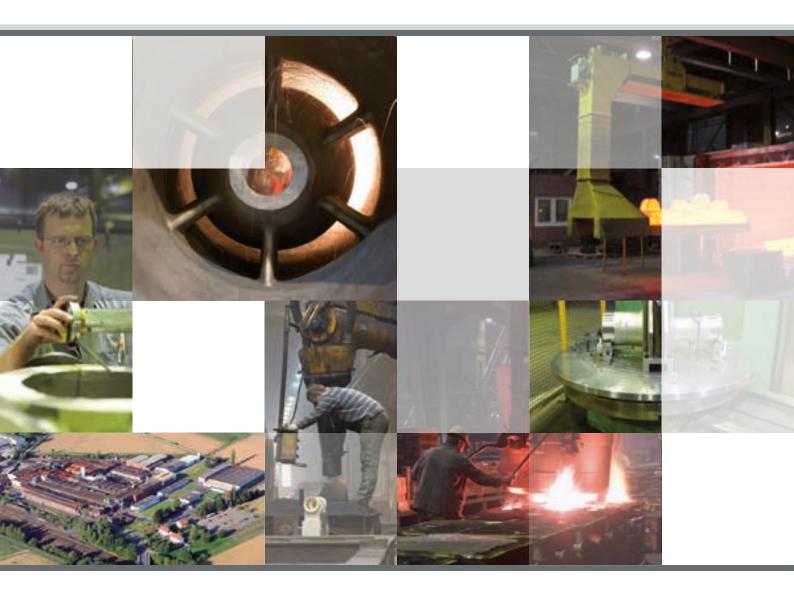
Pleissner Guss GmbH is located in the heart of Germany and supplies its products throughout the entire world. Over 50 percent of the products are exported to the EU and overseas.











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