



NUCLEAR POWER

Steel Castings That Unleash Energy

Power for generations – safe, precise, sustainable.

Nuclear Power factsheet EN | 07/2025

STEEL CASTING SOLUTIONS FOR NUCLEAR PEAK PERFORMANCE

In the nuclear industry, every detail counts – safety, precision, and durability are non-negotiable. Our steel castings set global benchmarks for components that must meet the highest demands.

In nuclear technology, CO₂ reduction, maximum safety, and the ability to produce exceptionally large cast components are key. With castings up to 200 tons, state-of-the-art manufacturing, and certified quality, we supply components for the global market. Our foundries are among the few worldwide that fully meet these requirements – proof of quality, expertise, and innovation.

Typical applications:

- » Outer and inner casings for steam turbines
- » Valve housings and covers
- » Blade carriers
- » Additional components upon request

ADVANTAGES



Increased efficiency

- » High precision through accurate casting
- » In-house expertise from model to inspection
- » Customer-specific project support



Quality

- » Certified processes according to international nuclear standards
- » 100% documented quality assurance
- » Decades of experience with critical cast components



Sustainability

- » Resource-efficient production through optimized casting processes
- » Contribution to CO₂ reduction through durable, low-maintenance components

fastlane®

By using the latest technologies and prioritizing production scheduling, we guarantee up to 60 % faster and reliable delivery times.

Our fastlane®-Service represents a significant advancement in casting production by increasing efficiency, improving quality, and simultaneously promoting sustainable practices.



TECHNOLOGY

» 3D Sand Printing (3DSP)

Our innovative 3D printing process enables the production of highly complex castings without the need for traditional patterns. This precise and efficient method for manufacturing custom sand molds is ideal for intricate and specialized cast components.

» Robot Welding

With our certified, fully automated MAG welding process, we set new standards in manufacturing. Advanced techniques like laser cladding, integrated into state-of-the-art robotic systems, are propelling production technology into a new era.

» Digital Foundry

Through our ongoing "Digital Foundry" program, we continuously enhance our processes - driving efficiency, precision, and innovation in casting production.



voestalpine Foundry Group

As an international player in the foundry industry, voestalpine Foundry Group, with its sites in Linz (AUT), Traisen (AUT) and the joint venture in China, has made a name for itself worldwide.

With a broad portfolio of steel castings, including nickel-based alloys, it offers customized solutions in areas ranging from energy production, such as hydro, offshore/wind or oil & gas, to machinery and railroad systems. By using state-of-the-art technologies and increasingly focusing on climate-friendly production processes, voestalpine Foundry Group is the first choice for cast products of the highest quality, in a weight range from a few kilograms to 200 tons.

voestalpine Foundry Group

voestalpine-Straße 3
4020 Linz, Austria
www.voestalpine.com/giesserei-gruppe/en

CONTACT



HAUKE DOMRÖS

T. +43/664/883 21 708
Hauke.Domroes@voestalpine.com

Please find further
information at:



voestalpine

ONE STEP AHEAD.