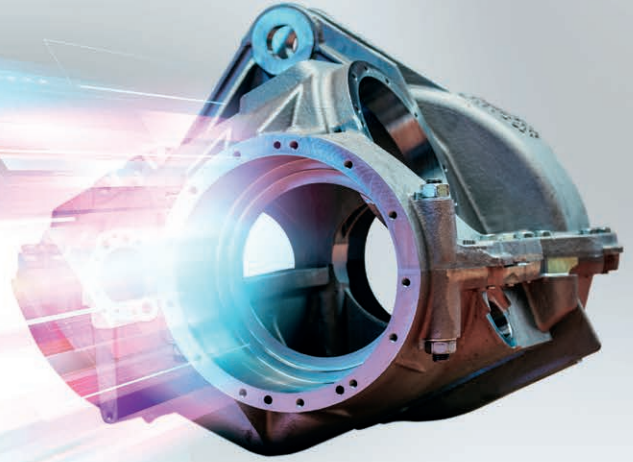


HIGH-SPEED STEEL CASTING

fastlane® – production at the speed of sand



Revolutionizing delivery time with 3D sand printing technology

fastlane® factsheet EN | 05/2024

fastlane® - WHERE HIGH-SPEED MEETS INNOVATION!

By using the latest technologies and priority treatment in the production schedule, we guarantee considerably shortened and reliable delivery times.

With fastlane®, we have eliminated the long lead times traditionally associated with casting production. Thanks to innovative 3D sand printing technology, robot welding and many other optimizations in the production process, we can now create highly precise and customized castings in record time and deliver your parts faster than ever before.

Typical areas of application

- » Time-critical cast parts, e.g. spare-parts
- » Various segments, e.g.
 - Hydro
 - Wind
 - Offshore
 - Gas / Steam
 - Nuclear
 - Oil & Gas
 - Machinery
 - Railway
 - Infrastructure

ADVANTAGES



Efficiency Increase

- » By eliminating the need for traditional mold preparation, the manufacturing process is streamlined, allowing for faster delivery of parts to customers.
- » The automated and controlled printing process ensures consistent quality and repeatability, minimizing the risk of errors or defects in the production of cast parts.



Quality Improvement

- » The design freedom of molds is almost limitless compared to the traditional wooden pattern.
- » In addition to direct printing of the sand mold in the upstream process, improved surface accuracy also reduces the time and effort required for processing.



Sustainability

- » This process also protects the environment by eliminating wooden patterns, integrating sand recycling processes and reducing logistics costs.

3D SAND PRINTING

Innovative 3D-printing process for the production of sand molds for complex castings. The innovative 3D printing process enables the production of sophisticated castings without having to make a pattern. The process is used wherever the most efficient production of customized and complex sand molds is required to make castings.

TECHNICAL DETAILS PRINTER

	Printer #1	Printer #2
Dimensions Jobbox	1800x1100x700	2600x2000x1000
Printing Rate	65–170 l/h	200–500 l/h
Time/Jobbox	min. 8 h	min. 10 h
Sand	Silica	
Resin/Hardener	Furan, Acid	
Printing Tolerances	+/- 0.35 mm	
Printing layers	2–3 sand grains (0.25–0.50 mm)	



voestalpine Foundry Group

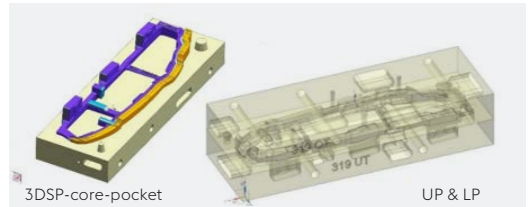
As an international player in the foundry industry, voestalpine Foundry Group, with its sites in Linz (AUT), Traisen (AUT) and the joint venture in China, has made a name for itself worldwide.

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.

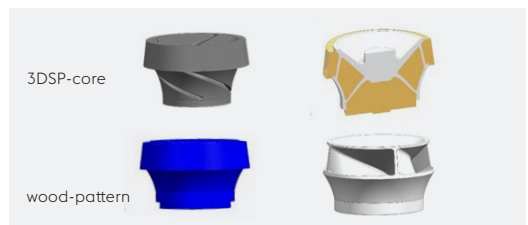
voestalpine Foundry Group

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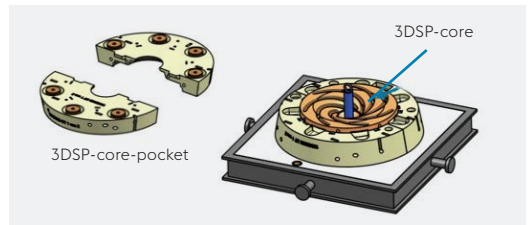
DIFFERENT 3DSP-SOLUTIONS TO GET YOUR PRODUCT FASTER



1 SINGLE PRINT
3DSP-core-pocket for UP+LP



2 HYBRID
Combination of 3DSP-core & wood-pattern ("hybrid")



3 MODULAR
3DSP-core & modular 3DSP-core-pockets



Please find further information at

