

# TURBOCHARGER WHEELS

COMPLETE IN-HOUSE DESIGN & PRODUCTION



[pbs.cz](https://pbs.cz)

# INVESTMENT CASTING

PBS, a Czech company with a 200-year history, has been specializing in investment casting since 1969 and is the European leader in this technology. We focus on precision casting of superalloys for gas and steam turbines, the paper industry and medical femoral components.

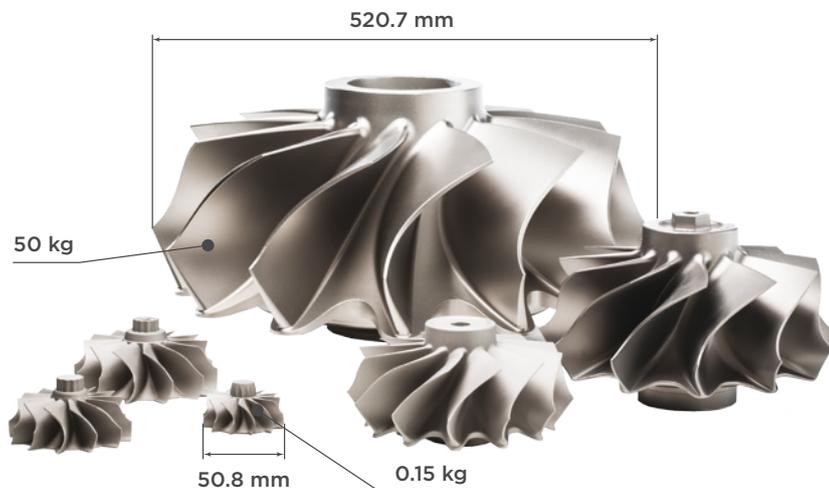
Our advanced technologies, including vacuum and open furnaces, enable us to produce a wide range of materials, including steel alloys. With a reputation for reliability and expertise, we continually evolve to meet our customers' needs and deliver high quality products.

## WHY PBS

- › We provide everything from design, casting and machining to the final product
- › From carbon steels to nickel or cobalt superalloys
- › Technically advanced products with high durability
- › Reverse engineering and rapid prototyping
- › For several decades, we have been cooperating with leading world manufacturers of turbochargers, combustion turbines, aviation components and insulation materials based on glass wool

## PRODUCTION POSIBILITIES

- › Dimension range of casts: 30 – 600 mm
- › Weight range of casts: 0.05 – 50 kg
- › Superalloys
- › Air or vacuum casting
- › Surface roughness: Ra 3,2 µm



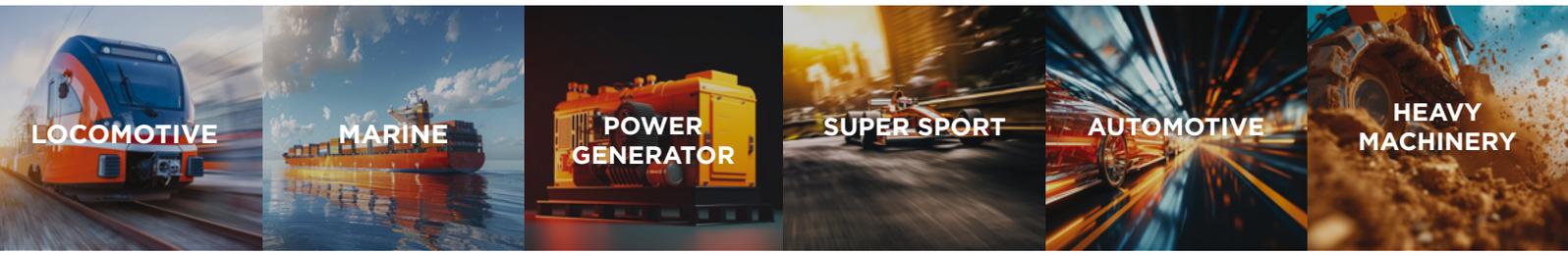
**INC 713**  
**INC 738**  
**MAR M247**  
**B1914**

## FOUNDRY TECHNOLOGY

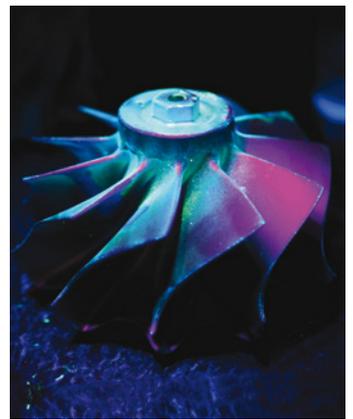
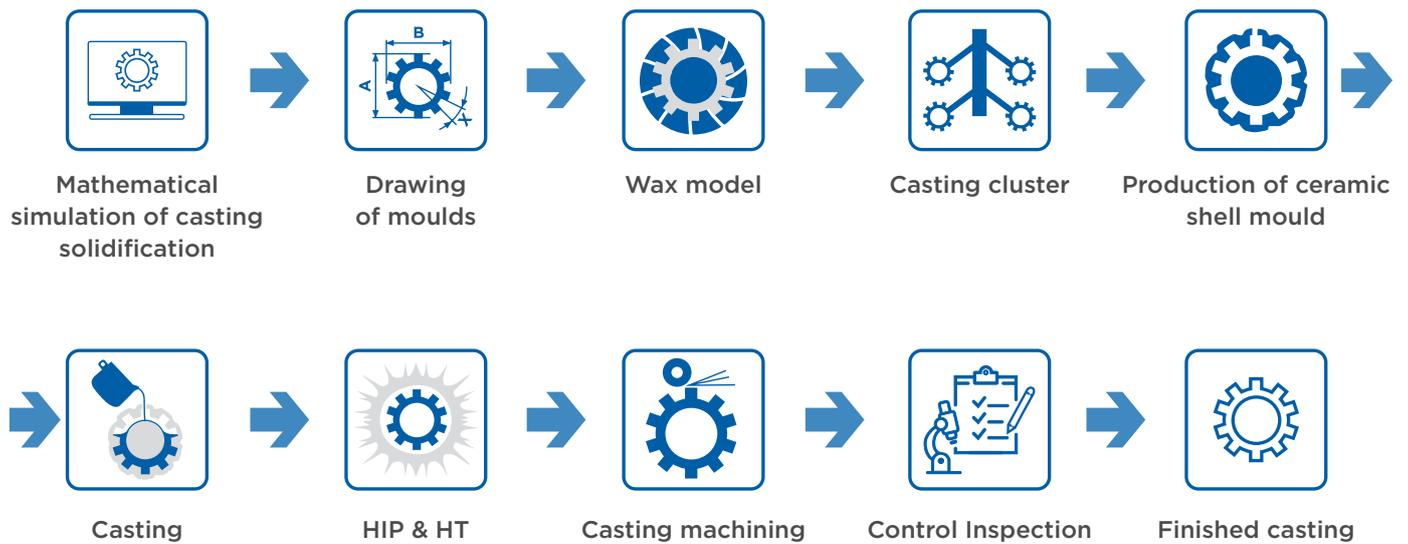
- › 10 injection moulding machines
- › 2 robotic coating lines
- › 2 boilerclaves for smelting
- › 4 carousel gas annealing furnaces
- › 2 electronic resistance annealing furnaces
- › 7 vacuum furnaces
- › 9 blasting machines



# APPLICATION



## PRODUCTION PROCESS



## ADDITIONAL SERVICES

- › Special types of heat treatment
  - In a protective atmosphere of argon, nitrogen or vacuum
  - Hot isostatic pressing (HIP)
- › Machining and balancing
- › Production of model equipment
- › Removing ceramic cores in a leaching autoclave
- › 3D measurement
- › Chemical and mechanical tests and analysis
- › Micro and macro analysis
- › Testing in our own or independent laboratories
- › Non-destructive tests certified by NADCAP

# ABOUT US

PBS is a globally recognized engineering brand with a history of over two hundred years.

The company specializes in the R&D and manufacturing of turbine engines, APUs, and ECS systems designed for unmanned aerial vehicles, medium helicopters, and airplanes.

PBS also develops and produces cryogenic equipment for the world's largest manufacturers of gas liquefaction systems.

PBS Foundry is one of the leading suppliers of nickel and cobalt-based superalloy castings in Europe.



DOA



POA & MOA



AS 9100,  
ISO 9001 & ISO 14001



Non-destructive  
testing (PT, RT)



[pbs.cz](http://pbs.cz)



[casting@pbs.cz](mailto:casting@pbs.cz)

