INVESTMENT CASTING

PBS

AEROSPACE • INVESTMENT CASTING • CRYOGENICS • SURFACE TREATMENT

INVESTMENT CASTING

We are one of the leading European foundries focusing predominantly on investment casting with more than 50 years of experience.
Currently, the production program consists mainly of: blades and segments of stationary gas turbines, turbocharger wheels for automotive, impellers and guide wheels for aircraft engines and spinner discs for glass industry. We also deliver femoral components for the health sector.

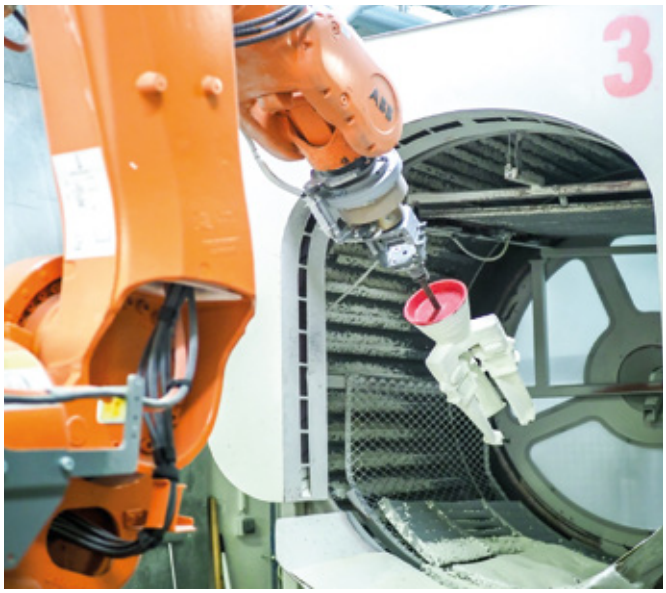


WE BRING TO MUTUAL COOPERATION

- More than 50 years of experience in investment casting
- Internal research and development capabilities
- In-house testing laboratory
- More than 100,000 highly demanding investment castings annually

WHY PBS

- We provide everything from the design, casting and machining to the final product
- Air or vacuum casting
- From carbon steels to nickel or cobalt superalloys
- Range of casts dimensions: 50.8 – 520.7 mm
- Weight range of casts: 0.15 – 50 kg
- Technically advanced products with high durability
- Reverse engineering and rapid prototyping



PRODUCT PORTFOLIO

For several decades we cooperate with leading world manufacturers of turbochargers, combustion turbines, aviation components and insulation materials based on glass wool. An individual approach to each customer is important to us.

AEROSPACE	POWER INDUSTRY	TRANSPORTATION	INSULATING MATERIALS	HEALTHCARE
Impellers and guide wheels for aircraft engines, APU and casting parts for ECS	**Gas turbine buckets and nozzles**	**Turbocharger wheels and blades**	**Spinner discs**	**Knee replacements**
Impellers diameter: 60 – 260 mm	Blades lengths: 50 – 400 mm	Wheel diameter: 50 – 400 mm	Spinner discs diameter: 300 – 520 mm	Shape: Anatomically – shaped component, L and R version
Impellers weight: max. 2.5 kg	Blades weight: max. 35 kg	Wheels weight: 0.15 – 44 kg	Spinner discs weight: 9 – 30 kg	Size: Wide size range (six sizes)
Material used: IN 713LC, MAR M247, IN 792-5A	Material used: EEQ 111, FSX 414, IN 939, IN 738LC, MAR M247	Material used: IN 713C, IN 713LC, B1914, MAR M247	Material used: Ni and Co based superalloys for glass industry: 141I, 141J, 2.4879, Co Stellite	Material used: Cobalt alloy CoCrMo (ISO 5832-4)





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

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
- Testing in our own or independent laboratories
- Non-destructive tests certified by NADCAP

WE ARE PBS

The PBS brand history in precision engineering goes 200 years deep. Today's PBS Velka Bites is an innovative engineering company focusing its activities foremost in aerospace industry. **PBS develops and manufactures turbojet, turboprop and turboshaft engines, auxiliary power units (APU) and environmental control systems (ECS).**

The PBS production program also includes precision casting, precision machining, metal finishing and last but not least production of components for cryogenics.

PBS Velka Bites is a member of PBS GROUP a.s.

EASA DOA, POA a MOA

LRQA AS 9100, ISO 9001 a ISO 14001

Nadcap ACCREDITED Non-destructive testing (PT, RT)

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