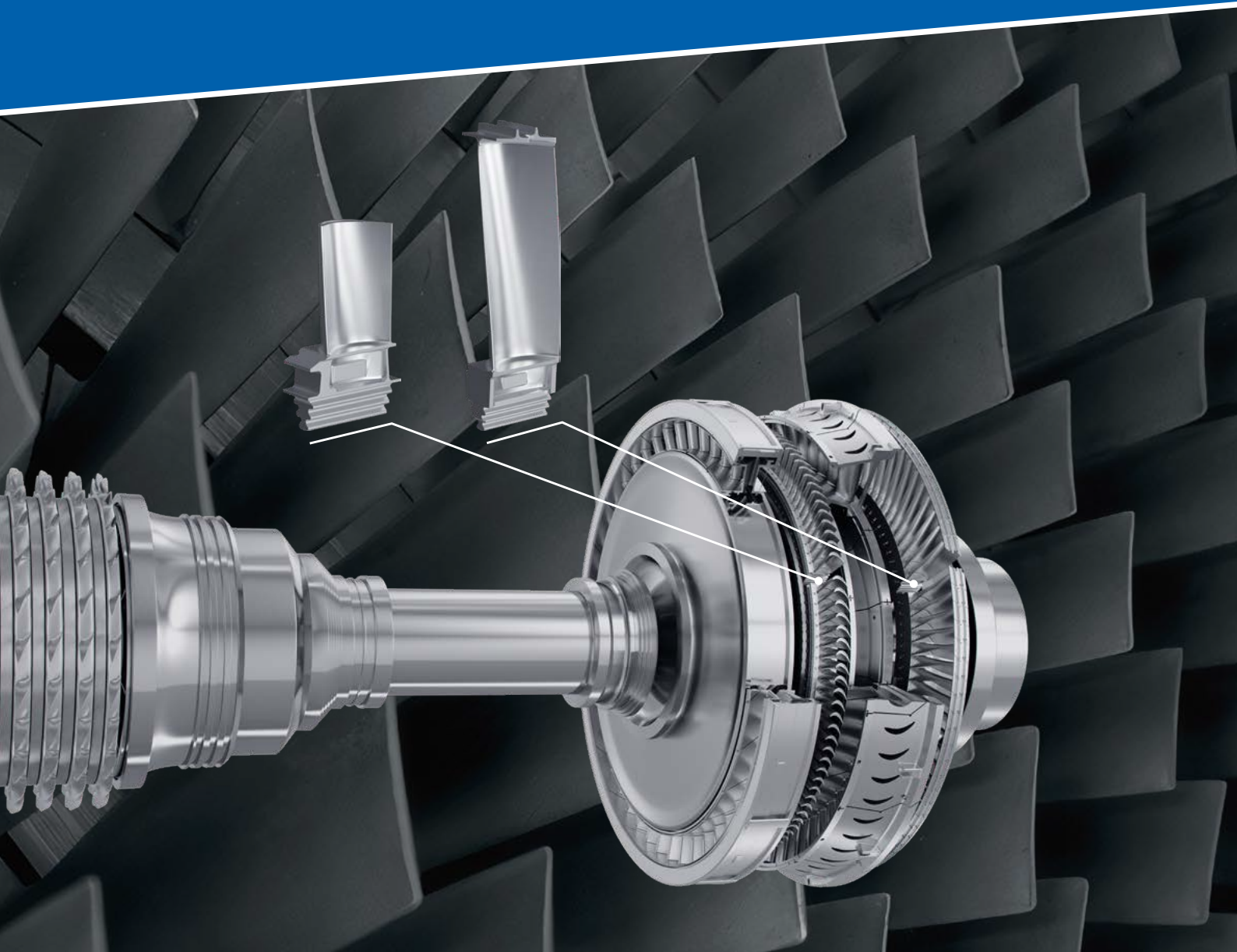


GAS TURBINE SPARE PARTS



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



OUR PORTFOLIO OF TURBINE BLADES



MS3002-1



CP MS3002



MS5001-1 OT



MS3002-2



CP MS3002



MS5001-2 OT



MS5001-1 NT



MS5002-1



CP MS5002



MS5001-2 NT



MS5002-2



CP MS5002

GE TURBINE BLADES



MS3002-1

First Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	H-J
Firing temperatures	up to 950 °C
EQV to OEM number	314B7156G007
Bucket in set	80 pcs
Alloy	EEQ 111 / IN 738LC
Coating	HVOF + Aluminizing
Weight	1.40 kg (3.09 lb)



MS3002-2

Second Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	H-J
Firing temperatures	up to 950 °C
EQV to OEM number	314B7156G003
Bucket in set	80 pcs
Alloy	IN 738LC
Coating	No
Weight	1.80 kg (3.97 lb)
Z-Welding	Applied

GE COVER PLATES



CP MS3002-1

First Stage Cover Plate

TECHNICAL SPECIFICATION

Model of turbine	H-J
Firing temperatures	up to 950 °C
EQV to OEM number	818E0715P002-005
Bucket in set	4x40 pcs
Alloy	IN 738LC
Coating	No
Weight	0.13 kg (0.28 lb)



CP MS3002-2

Second Stage Cover Plate

TECHNICAL SPECIFICATION

Model of turbine	H-J
Firing temperatures	up to 950 °C
EQV to OEM number	818E0715P006-009
Bucket in set	4x40 pcs
Alloy	IN 738LC
Coating	No
Weight	0.11 kg (0.25 lb)

GE TURBINE BLADES



MS5001-1 OT

First Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	L-P
Firing temperatures	up to 950 °C
EQV to OEM number	314B7158G003
Bucket in set	120 pcs
Alloy	IN 738LC
Coating	Aluminizing
Weight	1.20 kg (2.65 lb)



MS5001-2 OT

Second Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	P-PA
Firing temperatures	up to 950 °C
EQV to OEM number	314B7159G006
Bucket in set	90 pcs
Alloy	IN 738LC
Coating	No
Weight	2.00 kg (4.41 lb)
Z-Welding	Applied

GE TURBINE BLADES



MS5001-1 NT

First Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	P-PA
Firing temperatures	up to 950 °C
EQV to OEM number	314B7158G015
Bucket in set	120 pcs
Alloy	IN 738LC / MAR M247 /EEQ 111
Coating	HVOF
Weight	1.40 kg (3.10 lb)



MS5001-2 NT

Second Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	P-PA
Firing temperatures	up to 950 °C
EQV to OEM number	314B7159G013
Bucket in set	90 pcs
Alloy	IN 738LC
Coating	No
Weight	2.00 kg (4.41 lb)
Z-Welding	Applied

GE TURBINE BLADES



MS5002-1

First Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	A-C
Firing temperatures	up to 960 °C
EQV to OEM number	3314B7160G018
Bucket in set	80 pcs
Alloy	EEQ 111
Coating	HVOF + Aluminizing
Weight	3.80 kg (8.38 lb)



MS5002-2

Second Stage Bucket

TECHNICAL SPECIFICATION

Model of turbine	A-C/D
Firing temperatures	up to 950 °C
EQV to OEM number	314B7161G002
Bucket in set	80 pcs
Alloy	IN 738LC
Coating	No
Weight	4.40 kg (9.70 lb)
Z-Welding	Applied

GE COVER PLATES



CP MS5002

First Stage Cover Plate

TECHNICAL SPECIFICATION

Model of turbine	A-C/D
Firing temperatures	up to 950 °C
EQV to OEM number	818E0714P002-005
Bucket in set	4x40 pcs
Alloy	IN 738LC / U500
Coating	No
Weight	0.31 kg (0.69 lb)



CP MS5002

Second Stage Cover Plate

TECHNICAL SPECIFICATION

Model of turbine	A-C/D
Firing temperatures	up to 950 °C
EQV to OEM number	818E0714P006-009
Bucket in set	4x40 pcs
Alloy	IN 738LC / U500
Coating	No
Weight	0.27 kg (0.59 lb)

STATE-OF-THE-ART TESTING LABORATORY

Thanks to its equipment, our laboratory is able to perform commonly required checks of castings, such as checking the chemical composition of the material, checking the mechanical properties, checking the microstructure and checking the macrostructure.

- › Inverted light microscope Zeiss Axio Observer Z1m
- › Zeiss Stemi 2000-C stereo microscope
- › Advanced CCD Based Optical Emission Spectrometer for Metal Analysis Q4 TASMAN
- › DELTA Professional Handheld XRF Analyser Specifications



KINDS OF NON-DESTRUCTIVE TESTING & MEASURING

- › FPI testing with penetrants from mid sensitivity to high sensitivity
- › X-ray testing - film and digital radiography
- › 3D measurement
- › NADCAP certification
- › Qualified and certified staff - Responsible LII and III



OVERVIEW OF OUR PRODUCTS



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.



DOA, POA a MOA



AS 9100,
ISO 9001 a ISO 14001



Non-destructive
testing (PT, RT)



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