



# COMPANY PROFILE



The PBS brand is built on **200 years of history and a global reputation** for high quality engineering and production

[pbsindia.com](http://pbsindia.com)



# PRODUCTS & SERVICES



## AEROSPACE

We develop and manufacture turbine engines, APUs and ECS for the manufacturers of aerospace products from more than 30 countries around the world.



## PRECISION CASTING

We cooperate with leading world manufacturers of turbochargers, combustion turbines, aviation components etc. We produce the most technically advanced products with maximum durability.



## CRYOGENICS

We are a major supplier of cryogenic compressors and pumps for the world's leading manufacturers of cryogenic systems.



## SERVICES & MAINTENANCE

We provide first-class service performed by experienced teams of our experts. We offer our customers maximum technical support.



## POWER ENGINEERING

We have a long-standing tradition in the development, construction and implementation of turbine and industrial boiler deliveries. We provide comprehensive service and device reconstruction.



## PRECISION MACHINING

We offer precision machining of both rotating and non-rotating castings, forgings and weldments. We supply heavyweight weldments including the provision of material, heat treatment and surface treatment.



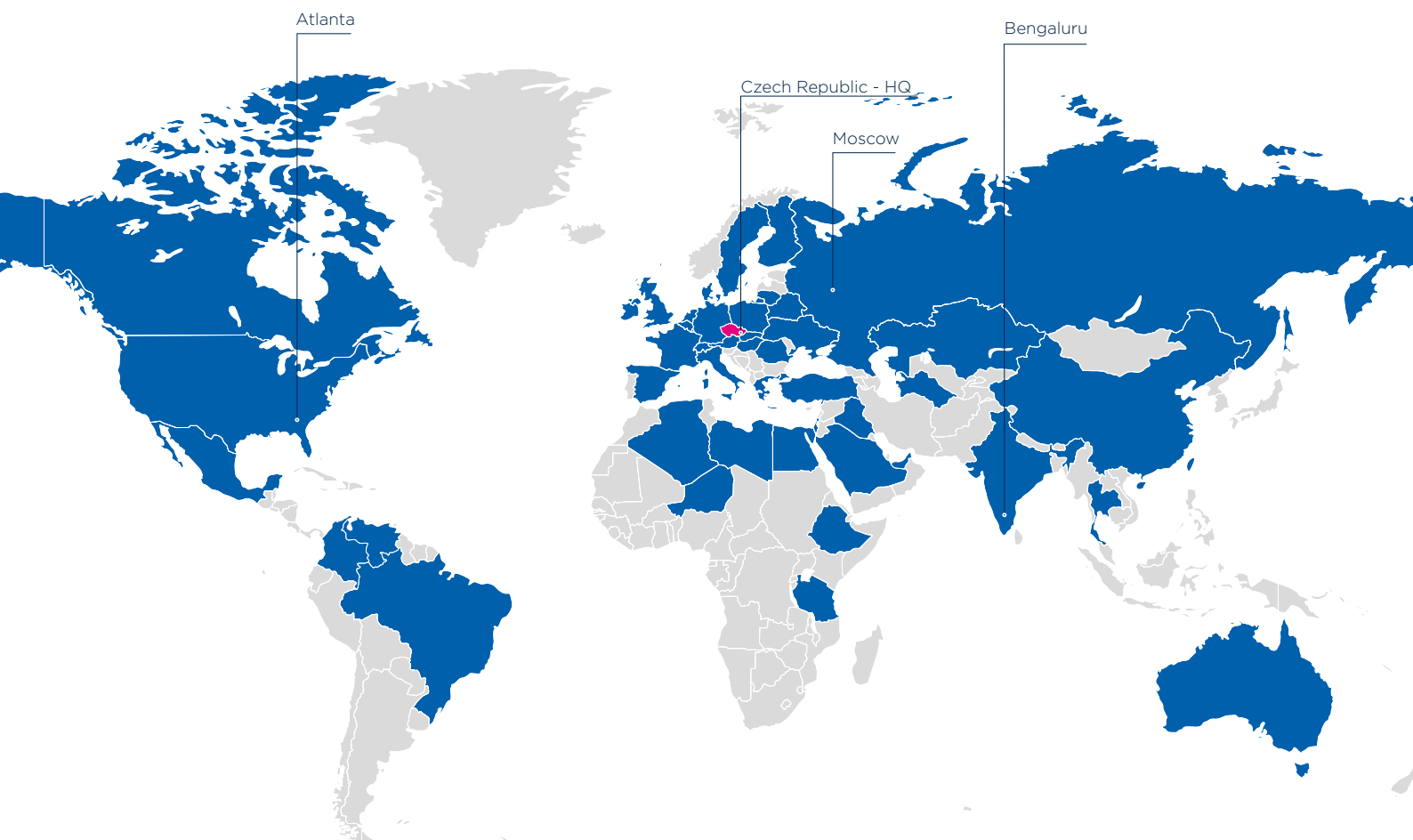
## SURFACE TREATMENTS

We are a leading supplier of galvanic surface finishes with a comprehensive range of services.

# ABOUT PBS INDIA

**PBS INDIA** is a part of **PBS GROUP**, an engineering manufacturer that operates globally in aerospace, foundry, precision engineering, cryogenics and energy with production located in the Czech Republic, Europe.

**PBS** has been in the Aerospace industry for over 50 years as a designer and manufacturer of aircraft engines, auxiliary power units, environmental control systems and specific custom-made aircraft solutions.



# AEROSPACE PRODUCTS

PBS HAS DESIGNED AND SUCCESSFULLY LAUNCHED A SERIES OF HIGH-QUALITY AND RELIABLE AEROSPACE PRODUCTS:

## Small turbine engines

are designed for UAVs, target drones, missiles, experimental aircraft and ultralight helicopters.

## Auxiliary Power Units (APU)

are designed to delivery compressed air for starting the main engines and to supply electrical power for aircraft and helicopters.

## Environmental Control Systems (ECS)

are designed to maintain a comfortable thermal environment in the cockpit, passenger cabin and cargo holds of aircraft and helicopters during ground operations and all flight modes.

|  | ADVANTAGES   | CIVIL & COMMERCIAL   |
|--|--|--|
| <p><b>TURBOJET ENGINES</b></p> <p><b>1 000+</b><br/>flying worldwide</p>                             | <ul style="list-style-type: none"> <li>→ Excellent weight/thrust ratio</li> <li>→ Compact design</li> <li>→ Low fuel consumption</li> <li>→ Electric starting system</li> <li>→ Ground or in-flight restart</li> <li>→ Short starting sequence</li> <li>→ High variability in starting positions/client requirements</li> <li>→ <b>Thrust:</b> 52 – 337 lbf</li> <li>→ <b>Weight:</b> 4.4 – 43.2 lbf</li> </ul>              | <p>UAV</p> <ul style="list-style-type: none"> <li>→ Micro-jets</li> <li>→ Transport</li> <li>→ Surveillance, Research</li> </ul>    |
| <p><b>TURBOPROP, TURBOSHAFT ENGINES 241 hp</b></p>    | <ul style="list-style-type: none"> <li>→ Light &amp; compact design</li> <li>→ High static thrust</li> <li>→ High performance, low vibrations and low noise</li> <li>→ Both tractor/push configurations</li> <li>→ Stable operation in high altitudes and temperatures</li> <li>→ Ability to start in very cold conditions without preheating</li> <li>→ <b>Power:</b> 180 kW</li> <li>→ <b>Weight:</b> 135.8 lbf</li> </ul> | <p>UAV</p> <p><b>EXPERIMENTAL</b></p> <ul style="list-style-type: none"> <li>→ Small personal aircraft</li> <li>→ Small helicopters</li> </ul>    |
| <p><b>AUXILIARY POWER UNITS (APU)</b></p> <p><b>5 500+</b><br/>installed and operating</p>          | <ul style="list-style-type: none"> <li>→ Supply of power + compressed air</li> <li>→ Unlimited number of main engine starts</li> <li>→ Continuous operation for up to 6 hours</li> <li>→ Easy maintenance</li> <li>→ <b>Nominal power:</b> 40 kVA</li> <li>→ <b>Max. bleed air quantity:</b> 62.4 lb/min</li> </ul>  | <p><i>Fixed-wing aircraft:</i></p> <p>L-39 Albatros</p> <p>L-159 ALCA</p>   <p><i>Helicopters:</i></p> <p>MI-8, MI-17</p>  |
| <p><b>ENVIRONMENTAL CONTROL SYSTEMS (ECS)</b></p> <p><b>7 000+</b><br/>installed and operating</p>  | <ul style="list-style-type: none"> <li>→ All-in-one cooling and heating</li> <li>→ Low weight, compact design</li> <li>→ No electricity requirements</li> <li>→ Ecological - no refrigerant</li> <li>→ Variability according client needs</li> <li>→ <b>Cooling power:</b> 36,900 BTU/hr</li> <li>→ <b>Heating power:</b> 211,800 BTU/hr</li> </ul>  | <p><i>Fixed-wing aircraft:</i></p> <p>L-39 Albatros</p> <p>L-159 ALCA</p>   <p><i>Helicopters:</i></p> <p>MI-8, MI-17</p>  |

# PRECISION CASTING PRODUCTS

WE COOPERATE WITH LEADING WORLD MANUFACTURERS OF TURBOCHARGERS, COMBUSTION TURBINES, AVIATION COMPONENTS AND INSULATION MATERIALS BASED ON GLASS WOOL

We are one of the leading European foundries focusing on precision casting with more than 40 years of experience. Currently, the production program consists mainly of blades and segments of stationary gas turbines, impellers turbochargers, blades and integrally-cast turbocharger wheels, castings of impellers and guide wheels for aircraft engines and castings for glass spinning. We also deliver femoral components for the health sector.

- **Air or vacuum casting**
- **From carbon steels to nickel or cobalt superalloys**
- **Range of casts dimensions: 2–20.5 in**
- **Weight range of casts: 0.33–176 lb**
- **Most technically advanced products with maximum durability**

## MILITARY & DEFENCE

### UAV

- Target drones
- Missiles
- Tactical
- Transport



### UAV

### TRAINER & COMBAT

- Small aircraft
- Small helicopters



### Trainer aircraft:

- L-159 ALCA
- L-39 Albatros



### Military helicopters:

- Mi 8, Mi 17

### Fixed-wing aircraft:

- L-39 Albatros
- L-159 ALCA



### Helicopters:

- MI-8, MI-17

## AEROSPACE & AUTOMOTIVE

Impellers and guide wheels for aircraft engines, APU and casting parts for ECS



## POWER INDUSTRY

Turbine blades and gas turbine segments



## TRANSPORTATION

Turbocharger wheels and blades



## INSULATING MATERIALS MANUFACTURERS

Spinner disks





## HIGHLIGHTS

**7**

OFFICES  
WORLDWIDE

**75%**

OF PRODUCTION  
EXPORTED

TO

**30+**

COUNTRIES

**200+**

YEARS OF HISTORY

**50+**

YEARS IN  
AEROSPACE

**800**

EMPLOYEES

**90%**

DEVELOPED,  
MANUFACTURED  
AND TESTED  
IN-HOUSE

**5+**

MIL. EUR PER YEAR  
IN RESEARCH &  
DEVELOPMENT

**7000+**

AIRCRAFT  
ENGINES, APU, ECS  
SOLD



**TRADITIONAL**  
engineering manufacturer  
with long term experience  
in the Aerospace industry



**INDEPENDENT OEM**  
with a complete range  
of in-house capabilities



**HIGH FLEXIBILITY**  
product customization  
and production



**CERTIFICATED**  
by EASA to design, produce  
and maintain turbine products  
for civil aviation



**OFFICE IN BENGALURU**  
with experienced local team



**COMMITTED**  
to provide service and life cycle  
support around the world



**RESEARCH &  
DEVELOPMENT**  
in-house capabilities



**INVESTING HEAVILY**  
in progress & further expansion

# MAJOR LICENCES AND CERTIFICATES



- EASA approval to design, manufacture and maintain turbine engines and equipment -DOA, POA, MOA
- Certificate for manufacturing and maintaining the military aerospace products MAA 056 and MAA 076 from the Czech Ministry of Defence
- Certificate of Conformity of the quality system with the requirements of ČSN EN ISO 9001:2009 and ČOS 051622 (AQAP 2110) from the Defence Standardisation, Codification, and Government Quality Assurance Authority
- Civil certificates from ARMAK and CAAC
- NADCAP for non-destructive testing (PT, RT) and chemical processes
- Certificates: AS 9100, ISO 9001, ISO 14001

## FACILITIES

Large Production Plant  
Various Advanced Technology Equipment  
Development and Testing Laboratories  
Precision Casting Foundry  
Centre for Practical Education  
Surface Treatment Facilities



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