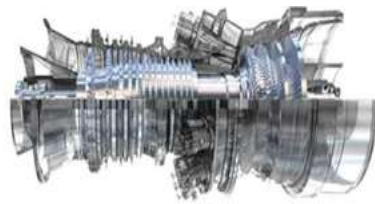


BVPL Turbine Parts Overview



BVPL Overview

1. BVPL Profile
2. Go with BVPL
3. Products and services
4. Supply chain partners
5. AS9100D certification
6. Customer testimonials
7. Contact details



BVPL Profile

- ~40 years of experience manufacturing parts for critical applications
- ~25 years of experience specializing in manufacturing blades, vanes and blisks for aero engines
- Currently manufacturing GE Frame 3, 5, 6, 7 and 9 gas turbine shrouds and diaphragms for global after market customers in US and Europe
- Currently manufacturing Rolls-Royce and Safran/CFM aircraft engine blades and vanes as an approved supplier for Hindustan Aeronautics Limited (HAL), the sole manufacturer of jet fighters in India, owned by the Indian Government
- Manufactured reverse engineered Rolls-Royce engine blades and vanes of legacy jet aircrafts for European customers
- Manufactured Siemens steam turbine blades for European customers
- Headquartered in one of the biggest industrial hubs in Asia



Go With BVPL

- **Reduced Cost**
 - Trained and qualified low cost human resources and material supply chain giving you excellent value for your money
- **20 Years of Experience**
 - Manufactured vanes, blades, shrouds and blisks for aero engines, gas turbines and steam turbines
 - Machined titanium alloys, nimonic, inconel, stainless steel and other heat resistance alloys including aluminum alloys
- **Excellent Quality**
 - AS9100D & BS EN ISO 9001:2015 certified company with excellent quality record
 - Highly skilled programmers and technicians that make complex 3D models and 5 axis simultaneous machining programs using state of the art software
- **Delightful Customer Service**
 - All of our customers that we started working with 20 years ago are still with us



Industrial Gas Turbine Shrouds and Diaphragms



Examples of GE Gas Turbine Shrouds and Diaphragms for Frames 5, 6, 7 and 9 per customer specifications
Material : SS310, SS410, SS304, SS316, HR120 etc.



Industrial Gas Turbine Nozzles



Nozzle. Material : Nickel based alloy

Aero Engine Blades



Stage 1 to 5 High Pressure Compressor Blades (Material: Titanium - TA8DV)



High Pressure Turbine and Intermediate Pressure Turbine Blades (Material: Nimonic 115)

Aero Engine Blades and Vanes

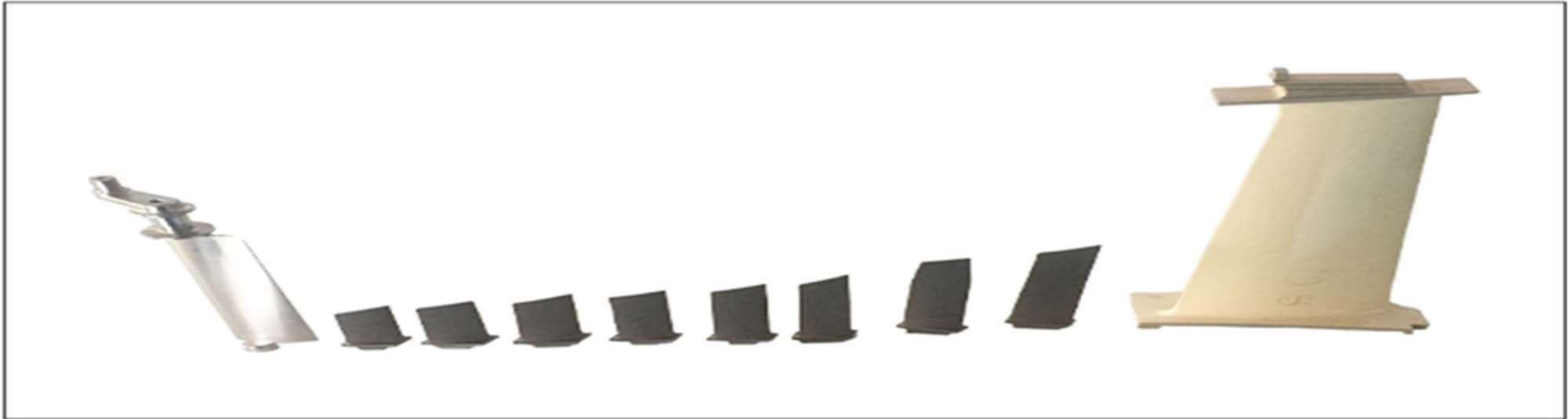


Blades (Material: Inconel and Titanium)



High Pressure and Low Pressure Aeroengine Vanes (Material: Aluminium Alloy)

Reverse Engineered Aero Engine Blades and Blisks

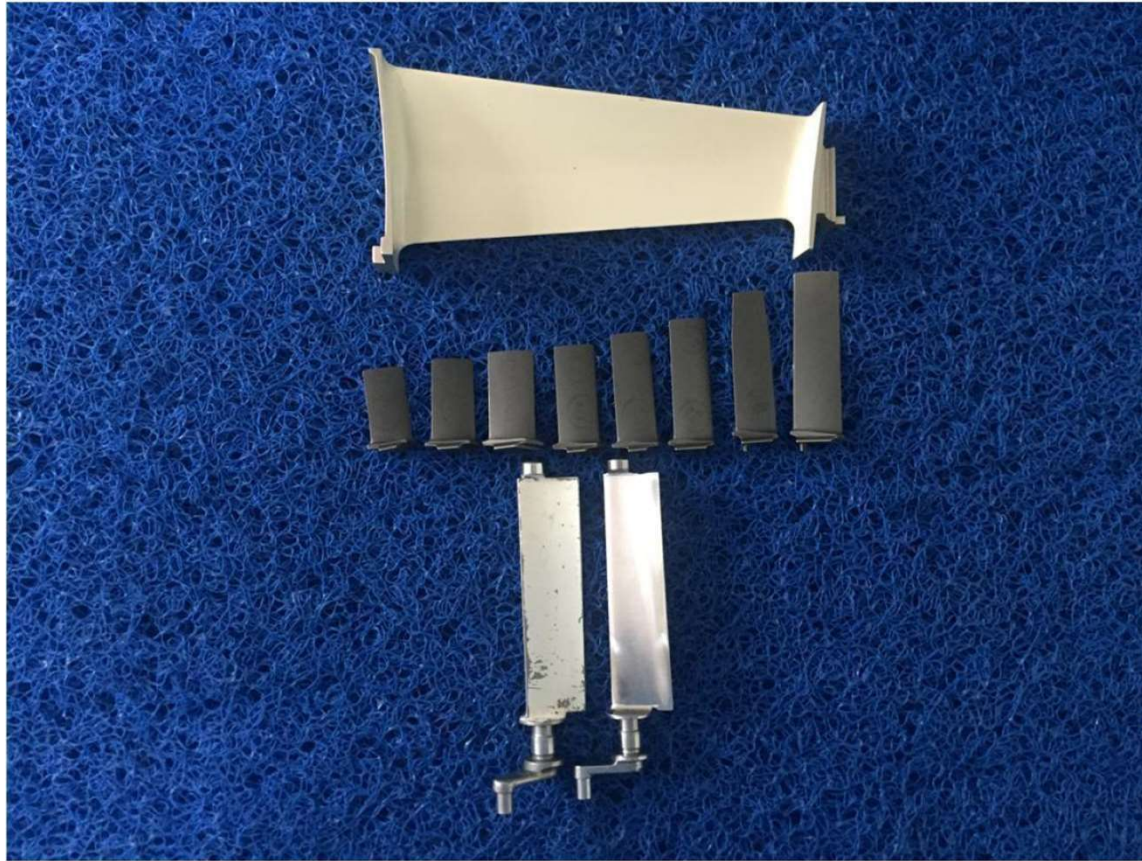


Reverse Engineered Blades by BVPL (Material : Aluminium, Stainless Steel and Titanium)



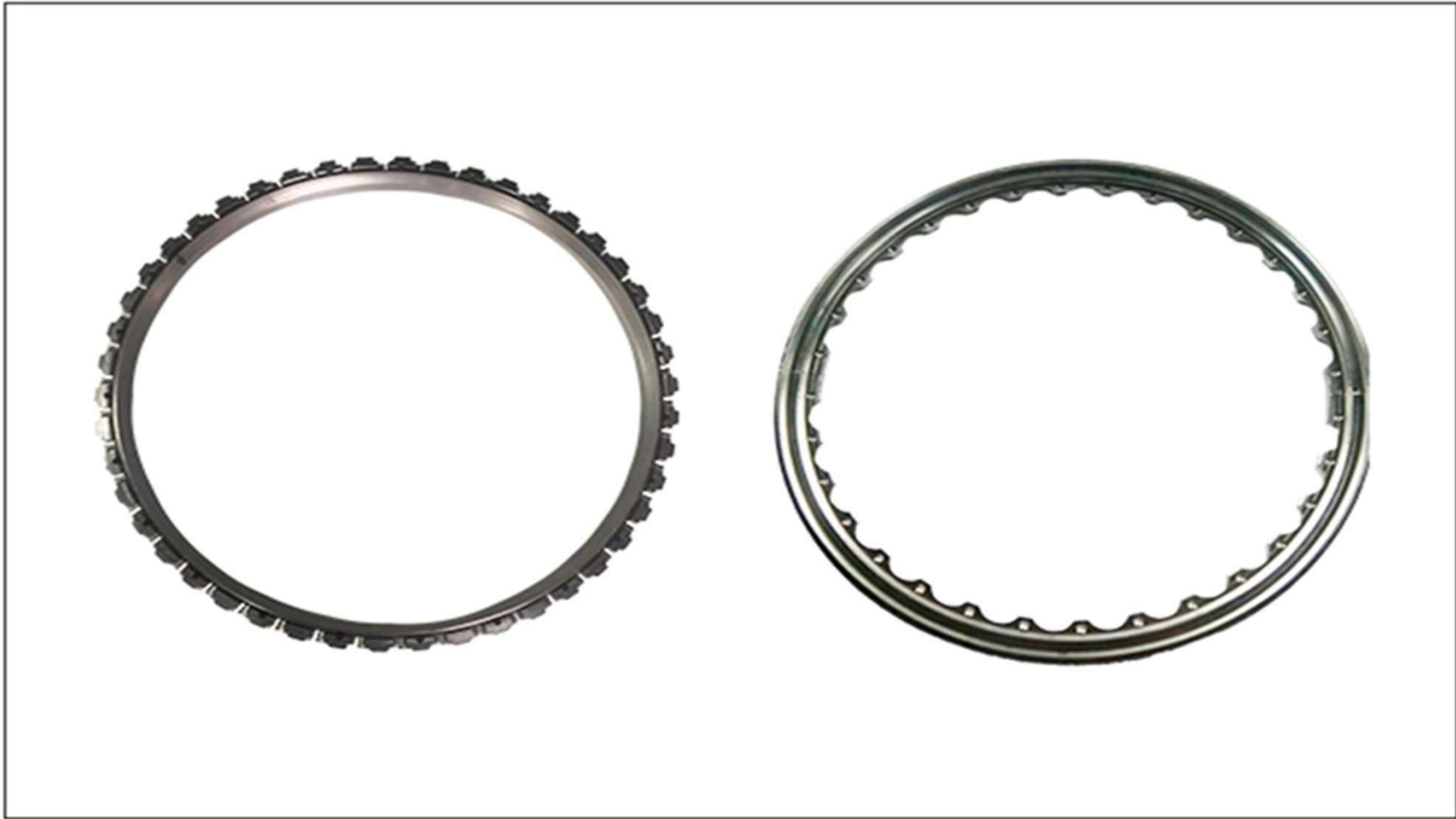
Blisks for Aero Engines Material : Stainless Steel

BVPL Compressor Blades Reverse Engineering



- The above aero engine compressor blades were reverse engineered at BVPL
- Raw materials used: Titanium Ti-6AV-4L, Stainless Steel S150 and Aluminium
- The stainless steel blade was made from forgings of Stainless Steel S150
- The other two sets of blades were manufactured using Titanium Ti-6AV-4L and Aluminium billets
- 8+ years of reverse engineering experience with 2,600+ compressor blades (picture above) manufactured for our customers in the UK for legacy Rolls-Royce Spey aircraft engines

Aero Engine Inner Rings Assembly



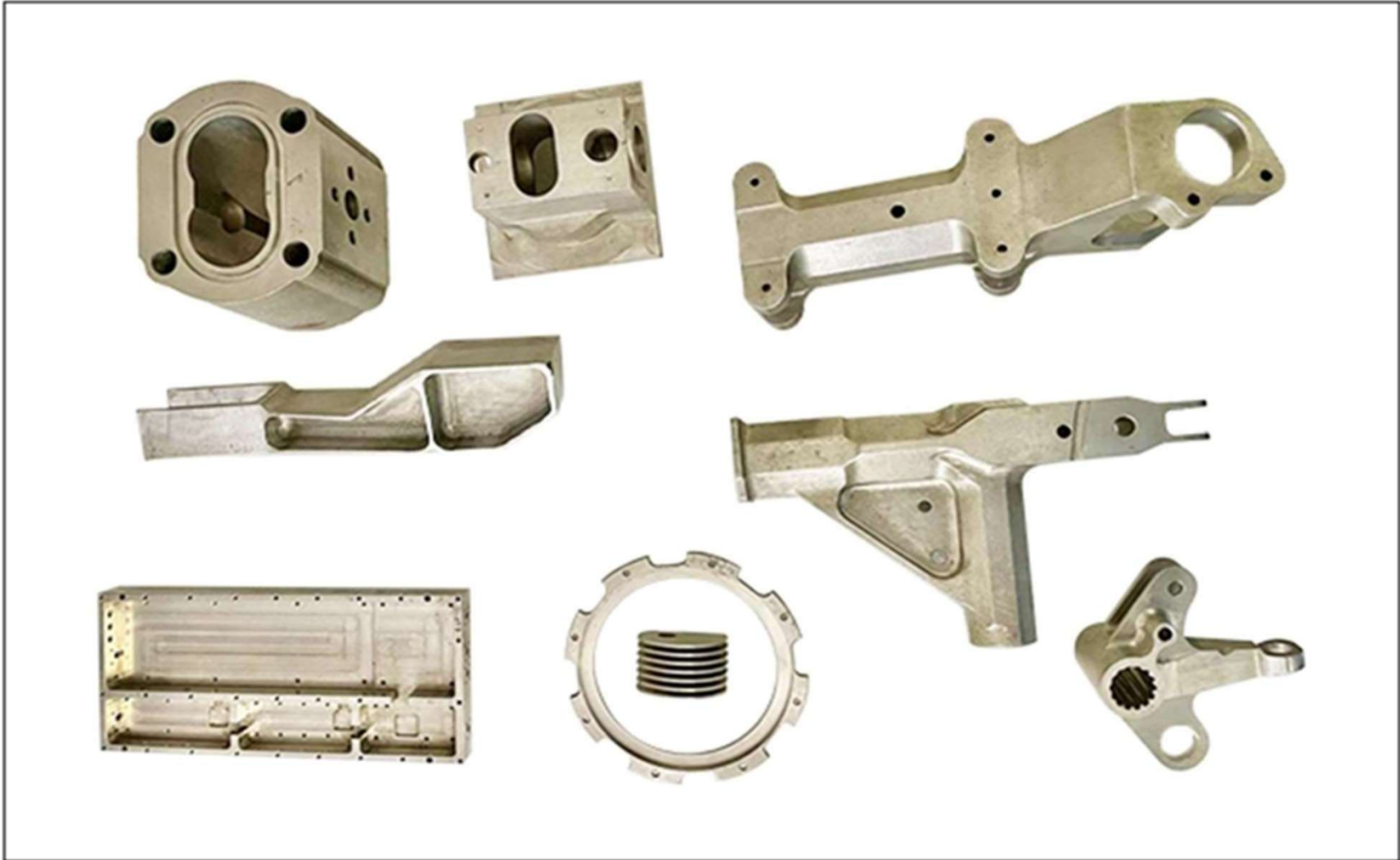
Inner rings assembly Stage 1, Stage 2 and IGV (Material: Inconel 718)

Power Generation Steam Turbine Blades



Siemens (Dresser Rand) Steam Turbine Blades
Material : SS

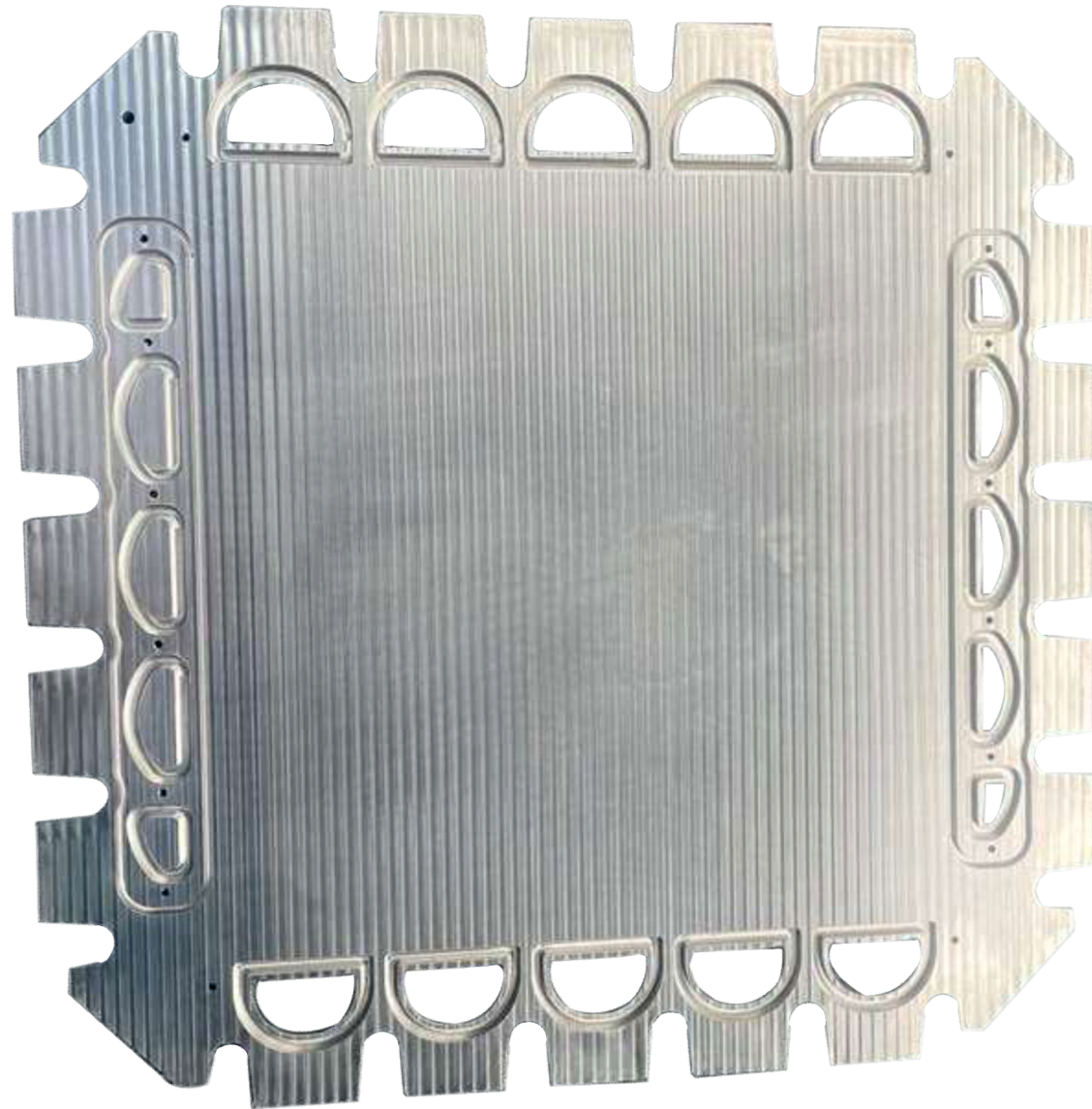
Aerostructures



Material: Aluminum

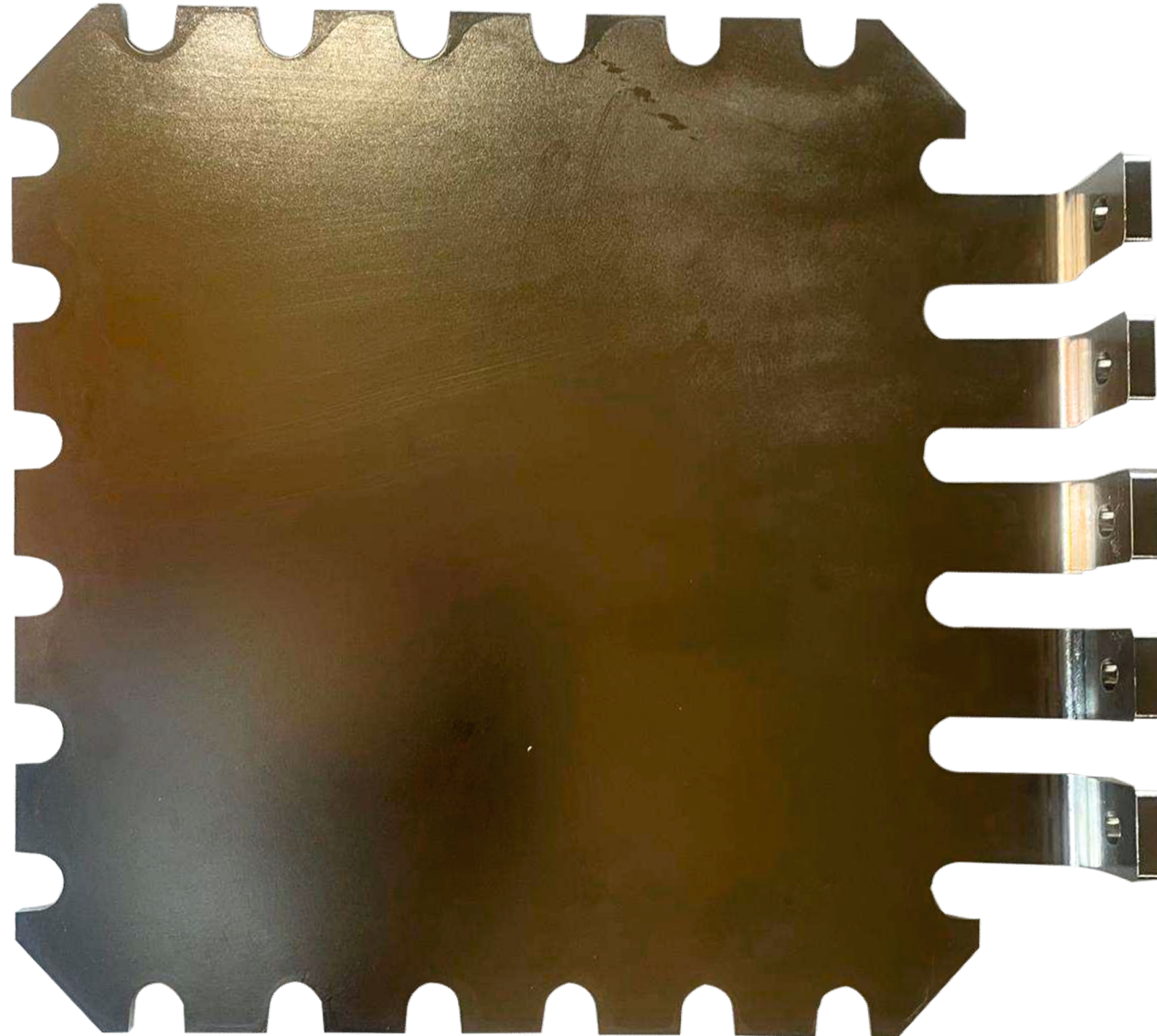


Hydrogen Electrolyzer Component



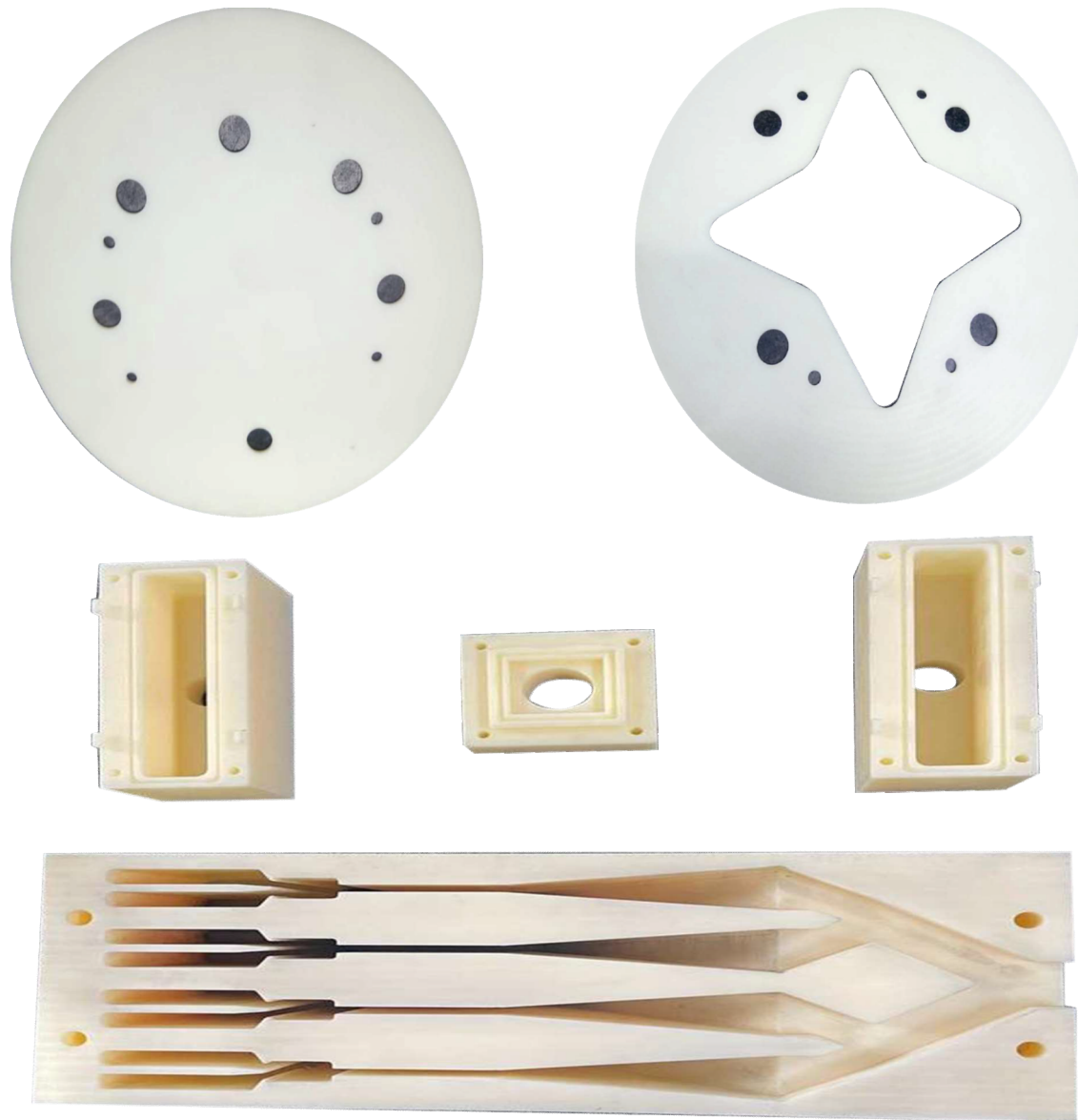
Material : Passivated SS316 Anode Bundle Bare Plate

Hydrogen Electrolyzer Component



ETP Copper Plate with Nickel Plating

Hydrogen Electrolyzer Component



Material : ABS (Acrylonitrile Butadiene Styrene) Linear Stack Assembly Components



BVPL Services

- Precision machined parts on all types of CNC machines
 - Vanes, blades, shrouds and blisks for aero engines, gas turbines and steam turbines
 - Extensive experience in machining titanium alloys, nimonic, inconel, stainless steel and other heat resistance alloys including aluminum alloy
- CAD drawings and models
- Reverse engineer any part
- Precision fabrications including ground support equipment for handling the turbine assembly area
- Forgings and castings

We will be happy to provide/source any of these services along with our customer promise of competitive price, excellent quality and delightful customer service



Supply Chain Partners

We have over 20 vendors who have been with us for over 20 years covering the following areas:

- CNC turning & machining centers
- Spark erosion
- CNC wire cut
- Jig boring
- Grinding
- General machining shops
- 3D scanning and printing



AS9100D Certification



Contact Details

1. Company Address:
Bangalore Valves Pvt. Ltd.
A-252A, Peenya 2nd stage
Bangalore - 560058
Corporate Email ID: bvpl@bvplturbineparts.com
Head Office: + 91 80 4117-1206
2. Managing Director: Kumsi Viswanath
Cell phone: + 91 984-541-7333
Email: bvpl@bvplturbineparts.com
3. Director: Thanmai Viswanath
Cell phone: + 91 734-953-6275
Email : thanmai@bvplturbineparts.com
4. Director: Nikhil Kumsi
Cell phone: + 1 623-760-6736
Email : kumsi@bvplturbineparts.com

