

MACHINING FACILITIES

AEPL has added yet another facility for machining practices. It has a modern machine shop that combines the industry's most technologically advanced computerized machining practices with a highly experienced engineering and manufacturing staff. We are dedicated to providing high quality manufacturing services to our clients. Specializing in manufacturing precision machined components, sub-assemblies and assemblies, for various industries like Hydro, Oil and Gas, Aerospace, Energy, Nuclear, etc. We have earned an outstanding reputation for delivering on time, cost optimized high quality components to precise client specifications.

AEPL caters to High Precision Machining requirements for:

- Hydro Turbine Generators
- Steam Turbines
- Cryogenics
- Industrial Robotics
- Oil & Gas
- Aerospace and Space Applications
- Life Critical & Safety Applications
- Nuclear

Quality Assurance

- 3D Measuring Facilities.
- Profile Projector for Quality assurance of threads, profiles etc.
- API and other thread gauges and master gauges.
- Height gauges, Depth gauges, Micrometres, Verniers, Surface Roughness Tester and all other required instruments from Standard companies.
- Standard surface table with 5 micron Accuracy and 2000 mm x 2000 mm in size.
- All other assorted equipment as listed.

QA/QC Equipment

- Outside Micrometre 0 to 1000 mm
- Inside Micrometre 50 to 2100 mm
- Digital Depth Vernier 0 to 200 mm
- Dial Vernier Caliper 0 to 300 mm
- Bore Gauge without dials 18 to 250 mm
- Digital Height Gauge 0 to 300 mm
- Digital Vernier Caliper 0 to 150 mm
- Vernier Caliper 0 to 2000 mm
- Slip Gauges 1.0005 to 100 mm
- Electronic Surface Tester
- Surface comparators
- Threaded plug gauge: All Standard Range
- Thread Ring Gauge : All standard range.
- Between Centre Test bench : 1500 x300 mm
- Surface table: 2000 X 2000 mm AND 1000 X 630 mm
- Profile projector 40 x (with monitor and keyboard)

Vertical Machining Centers



BRIDGE TYPE CNC VERTICAL MACHINING
NX2215: 2200mm x 1500mm x 1000mm

BRIDGE TYPE CNC VERTICAL MACHINING CENTRE
CENTRE NX4222: 4200mm x 2200mm x 1000mm

CNC Turning Centers



CNC Turning Centres
ABC 1500mm x 700mm With 450mm Chuck Dia



CNC TURNING CENTRE TL250:
490mm Swing Over Bed x 360mm Turning Dia With 250mm Chuck Dia

Support Machines



Band Saw 350 mm



Radial Drill



Milling M/C with DRO



Conventional Lathe 3000 mm with DRO



Conventional Lathe 1500 mm



Band Saw 250 mm



Radial Drill 2



Conventional Lathe 1500 mm

Testing & Measuring Instruments

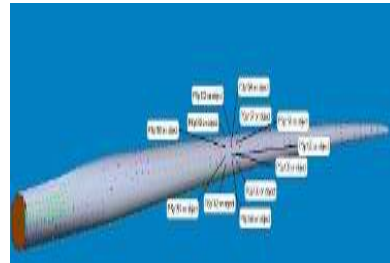


Micro flat Surface Table: 2000MM X 2000MM



Between Centre: 1500 MM X

Adopting the latest technology to ensure the desired quality



Detailed Inspection on completion of each manufacturing stage



Materials Processed

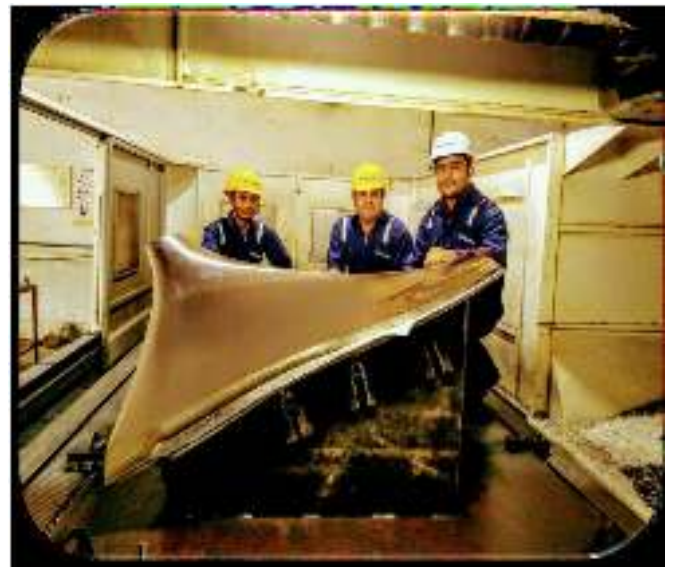
- Flaked Graphite Iron Castings.
- Alloy and Carbon Steels
- Martensitic Stainless Steels
- Austenitic Stainless Steels
- 2000, 6000 and 7000 series of high strength aluminium with more than 6 grades of tempers.
- Titanium and Inconel Alloys
- Thermo Stable Steels like H-11, H-13 etc.
- Non-ferrous self-lubricating materials.
- Carbon fibre and composites
- Ultra high density Polymers.
- Glass and Graphite filled PTFE.

Finished Products

Hydro Turbine & Generators

FRANCIS RUNNER BAND

3D machining to generate multiple blade profile from solid 13Cr forging

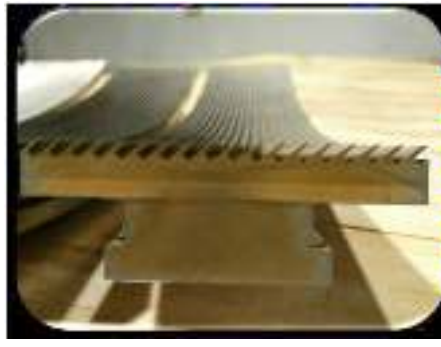
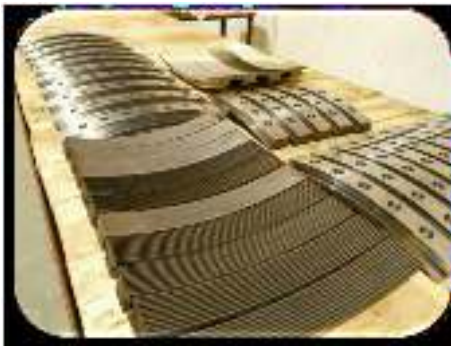




FACING PLATES

Machining of martensitic stainless steel parts with demanding geometric and surface requirements

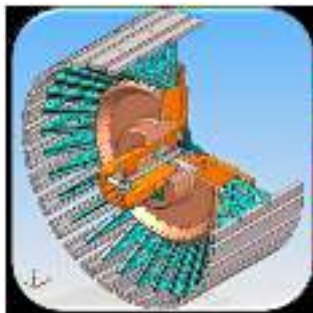
Steam Turbine & Generator



RETRACTABLE ELEMENTS

Forging, heat treatment and machining requiring very specialised manufacturing techniques.

Industrial Robotics



SUCCESSFULLY DEVELOPED AS AN IMPORT SUBSTITUTION OF M/S CONTINENTAL (GERMANY)

Industrial Robotics



BELTING & TREADING DRUM

Ultra high precision manufacturing and assembly from 7075 grade aluminium using NIOBIUM magnets



Drive system of the TRANSFER RIN

Aerospace and Space Applications



CONTOUR MACHINING OF LAY-UP
TOOL AT OUR WORKS



THIN WALLED TITANIUM AIRBORN
COMPONENT.