MECHANICAL TRANSMISSIONS

ON BOARD WITH US
If you are looking for:
A reliable and winning partner
Over 50 years of experience in PGB and AGB design and manufacturing
Advanced design capabilities
A total solutions provider
International support team
An experienced casting partner
Full support for CRO and MRO activities

THEY’VE ALREADY CHOSEN US
General Electric
Rolls-Royce
Pratt&Whitney
Pratt&Whitney Canada
Eurojet
Sneuco
Italian and Brazilian Air Forces
Epi

Avio Aero
A GE Aviation Business

YOUR TECHNOLOGY PARTNER

DESIGN | SAND CASTING / ADDITIVE MANUFACTURING | MANUFACTURING | ASSEMBLY | TESTING | DELIVERY | MRO & CRO
MECHANICAL TRANSMISSIONS
POWER GEARBOXES AND ACCESSORY DRIVE TRAINS

DID YOU KNOW?
Over 50 years of experience and over 4,800 gearboxes produced every year (over 40,000 gears of different types such as Bevel, Sun, Spur, etc). Our expertise in design, manufacturing and testing is a winning element if you are looking for a reliable partner. Thanks to our design capabilities and manufacturing techniques, ranging from casting of aluminium and magnesium parts to gear machining and gearboxes assembly and testing we can deliver excellent helicopter, turboprop and aeroengine transmissions. Our engineers and highly specialized technicians offer full support and we guarantee the quality of all our products and customer care services.

BEHIND THE PRODUCTION PROCESS
- Proven track record across different products and platforms
- Extensive product range
- Excellent in-service performance
- Solid functional integration
- Cross-sector knowhow, in design, testing and control
- Verticalization of production
- Dedicated manufacturing cells
- Lean production cells
- Sample production with rapid prototyping technologies
- Leading edge technologies for cost efficiency
- Consistent quality of part thanks to stable machining/manufacturing conditions
- State-of-the-art tools to design the process

TESTS & MEASUREMENTS
- Propeller loads, oil flow rate and temperature settings
- Automatic mission simulation
- Health monitoring
- Development tests
- Certification endurance tests
- Low speed durability test
- Static fatigue testing on housing
- Thermal mapping
- PGB efficiency evaluation
- Attitude test

WE CARE, WE OVERHAUL
- ADT, LPT (NGV and case) and oil tank - GEnx
- ADT, LPT (nozzle) - GE90
- AGB, Oil pump and Oil tank - V2500
- ADT and Oil tank - Trent900

TAKE A LOOK AT WHAT WE CAN DO

ALL AROUND DESIGN
- Co-design with customer engineering
- Integrated gearbox analysis
- High power density gearbox design
- Integration with engine lube and fuel systems
- Whole system modeling and dynamics assessment
- Low part count design for improved reliability
- Fireproof design
- Air/oil system technologies
- Advanced gear design methodologies [including tooth topography optimization based on true stress calculation]
- Bi-helical gears
- High and low speed planetary systems
- Split torque architecture
- Offset planetary architecture
- Robust bevel gear optimisation
- High strength bearing materials
- Integral bearing races
- Health monitoring system
- Damage tolerance and 3D crack propagation
- Virtual testing
- Hot hardiness steel
- Castings design and melting process simulation
- Assembly tool concept definition, design and construction
- Light alloy housing with integral cored lines

BEHIND THE PRODUCTION PROCESS
- Proven track record across different products and platforms
- Extensive product range
- Excellent in-service performance
- Solid functional integration
- Cross-sector knowhow, in design, testing and control
- Verticalization of production
- Dedicated manufacturing cells
- Lean production cells
- Sample production with rapid prototyping technologies
- Leading edge technologies for cost efficiency
- Consistent quality of part thanks to stable machining/manufacturing conditions
- State-of-the-art tools to design the process

TESTS & MEASUREMENTS
- Propeller loads, oil flow rate and temperature settings
- Automatic mission simulation
- Health monitoring
- Development tests
- Certification endurance tests
- Low speed durability test
- Static fatigue testing on housing
- Thermal mapping
- PGB efficiency evaluation
- Attitude test

WE CARE, WE OVERHAUL
- ADT, LPT (NGV and case) and oil tank - GEnx
- ADT, LPT (nozzle) - GE90
- AGB, Oil pump and Oil tank - V2500
- ADT and Oil tank - Trent900

DID YOU KNOW?
Over 50 years of experience and over 4,800 gearboxes produced every year (over 40,000 gears of different types such as Bevel, Sun, Spur, etc). Our expertise in design, manufacturing and testing is a winning element if you are looking for a reliable partner. Thanks to our design capabilities and manufacturing techniques, ranging from casting of aluminium and magnesium parts to gear machining and gearboxes assembly and testing we can deliver excellent helicopter, turboprop and aeroengine transmissions. Our engineers and highly specialized technicians offer full support and we guarantee the quality of all our products and customer care services.

CONNECT WITH US
transmissions@avioaero.com - www.avioaero.com

OUR MECHANICAL TRANSMISSIONS

<table>
<thead>
<tr>
<th>OUR MECHANICAL TRANSMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP400</td>
</tr>
<tr>
<td>PW1100</td>
</tr>
<tr>
<td>PW1500</td>
</tr>
<tr>
<td>PW150</td>
</tr>
<tr>
<td>EC 175</td>
</tr>
<tr>
<td>PW800</td>
</tr>
<tr>
<td>LM6000</td>
</tr>
</tbody>
</table>

- Design Responsibility
- Manufacturing
- Casting
- CRO

RIVALTA DI TORINO (ITALY)
167,000 Sqm specialised in Design and Machining

BORGARETTO/BEINASCO (ITALY)
25,000 Sqm specialised in Casting

HARBIN (CHINA)
27,000 Sqm specialised in Machining

TURIN (ITALY)
12,000 Sqm specialised in Testing

POMIGLIANO D’ARCO (ITALY)
78,000 Sqm specialised in CRO
ON BOARD WITH US
If you are looking for:
Over 35 years of experience in turbines design and production
A reliable partner
Concurrent design
A solutions provider
International team support
An experienced Additive Manufacturing partner
A great design specialist and manufacturer
Careful support for CRO and MRO activities

THEY'VE ALREADY CHOSEN US
General Electric
Rolls-Royce
Pratt & Whitney Canada
CFM International

Avio Aero
A GE Aviation Business

DESIGN  SAND CASTING / ADDITIVE MANUFACTURING  MANUFACTURING  ASSEMBLY  TESTING  DELIVERY  MRO & CRO  YOUR TECHNOLOGY PARTNER
TAKE A LOOK AT WHAT WE CAN DO

ALL AROUND DESIGN
- Extensive turbine database
- Multidisciplinary design approach
- Multi-objective parametric optimisation
- Validation by experimental tests
- Strong research network

- Parametric CAD generation
- Detailed components optimisation
- Components design and certification
- Advanced aeromechanics tools
- Module management

ALL AROUND TECHNOLOGY
- TiAl blades by EBM
- Innovative low noise technologies
- High aspect ratio airfoil mistuning
- Aggressive DUCT & Functional TRF
- 3D patented optimal profiles
- Tip timing for health monitoring
- Acoustic liners by ALM
- Net shape hipping

BEHIND THE PRODUCTION PROCESS
- Proven track record across different products
- Extensive product range
- Excellent in-service performance
- Solid functional integration
- Cross-sector knowhow, in design phase, testing and control
- Verticalisation of production
- Light alloy housing with integral cored lines
- Dedicated manufacturing cells

TESTS & MEASUREMENTS
- Cold flow in Turin (Italy) to characterise turbine aerodynamic & aero acoustic behaviour at design point & in off design conditions, using the fluid-dynamic similarity
  - 2.7 bar inlet pressure, 28 Kg/s max massflow, 0.85 bar minimum discharge pressure, 9000 rpm, 3200 kW max power
- Multipassage Cascade test rig: to characterise airfoils aerodynamic behaviour varying geometrical & aerodynamic parameters, using the fluid-dynamic similarity
- Soon a Cold flow facility in Zielonka (Poland):
  - 7.5 bar inlet pressure, 80 kg/s max massflow, 0.24 bar min discharge pressure, 5000 rpm (extendible to 15000 rmp with additional GBX and HS brake system), 13000 kW max power
- also for SAS flow injection, acoustic measurements & analyses and provision for dual spool system
- Spin-rig in Torino for Synchronous and Asynchronous vibration. In-Vacuum Dynamic Characterisation of mech damping for tuned and mistuned bladed-disks
- Burner Rig in Brindisi
  - Mid/High temperature test (up to 2000K) on cooled airfoil cascade for cooling efficiency and thermal fatigue measurements
- Shaker for blades HCF investigation:
  - multiple characteristic vibration loading up to 2kHz, 35 kN max load
- Laser holography system for component modeshapes identification

OUR TURBOMACHINERY

<table>
<thead>
<tr>
<th>Turbomachinery</th>
<th>Modular Design Responsibility</th>
<th>Submodules Design Responsibility</th>
<th>Components Design Responsibility</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>EJ200</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>RB199</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>T700</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LMS100</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>PW308</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>GEnx-1B</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>GEnx-2B</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>GE90</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>CF6</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Trent500</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Leap</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>CFM56</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

DID YOU KNOW?
With over 35 years of experience, our expertise in design, manufacturing and testing is a winning element if you are looking for a reliable partner.
High-level competence in design, multi-technique manufacturing, such as with 3D printing, and testing allows us to deliver reliable, top-of-the-class products. Our engineers and highly specialized technicians offer full support and we guarantee the quality of all our products and customer care services.

CONNECT WITH US
 turbomachinery@avioaero.com - www.avioaero.com

RIVALTA DI TORINO (ITALY)
167,000 Sqm specialised in Design and Machining

TURIN (ITALY)
12,000 Sqm specialised in Testing

POMIGLIANO D’ARCO (ITALY)
78,000 Sqm specialised in CRO

BRINDISI (ITALY)
50,900 Sqm specialised in MRO

BIELSKO-BIALA (POLAND)
78,000 Sqm specialised in Design and Machining
If you are looking for:
- A reliable partner
- Advanced design capabilities
- A solutions provider
- International team support
- A great design specialist and manufacturer
- Careful support for CRO activities

They've already chosen us:
- General Electric
- Rolls-Royce
- Pratt & Whitney
- Pratt & Whitney Canada
- Eurojet
- Snecma
- Italian Air Forces
- Brazilian Air Forces

Combustors

Design, Manufacturing, and Testing

Design Sand Casting / Additive Manufacturing

Manufacturing

Assembly

Testing

Delivery

MRO & CRO

Your Technology Partner
BEHIND THE PRODUCTION PROCESS
- Laser drilling with in process permeability control
- Additive manufacturing
- Dome forming simulation
- Complex shape forming
- Welding: EBW, GTAW, RSW
- Plasma spray coating
- Vacuum brazing
- Machining
- NDT: FPI, X-Ray, US

TESTS & MEASUREMENTS
- In-house and research network complementary capabilities
- Different facility configurations for tubular and full annular combustor
- Tests at low pressure conditions
- Tests at sub-atmospheric conditions
- Aerodynamic, pressure drop test and exit velocity profile
- Ignition & lean blow-out limits (LP and sub-atm.) with video-recording system
- Emissions combustion test [LP, MP, HP]
- Thermal test
- Water (liquid/vapor) injection test
- Assembly and instrumentations with thermocouples, pressure, strain gauges, rakes, dynamic transducers
- Thermal paints
- Visual, boroscopic and NDT inspections
- Rig parts design & procurement
- LDV flow field investigation
- PDPA (spray characteristics)
- IS Thermo-acoustics response analysis
- Liquid crystal method for heat transfer coeff. measurement
- Effusion cooling - acoustic interaction investigation
- Integration and combustor technology validation
ON BOARD WITH US
If you are looking for:
- Gravity precision sand casting
- Aluminium and magnesium alloys
- A reliable and experienced partner
- Design capabilities
- A solutions provider
- International team support

THEY’VE ALREADY CHOSEN US
- General Electric
- Alenia
- Pratt & Whitney
- Eurojet
- Hispano Suiza
- Agusta
- Alstom
- Eurocopter
- Techspace

Avio Aero
A GE Aviation Business
YOUR TECHNOLOGY PARTNER
SAND CASTING

TAKE A LOOK AT WHAT WE CAN DO

ALL AROUND DESIGN
- Co-design with customer engineering
- Process simulation
- Optimization of gating and feeding system
- Metallurgical defect prediction and real time defect resolution
- Tool concept definition, design and construction
- UG and CATIA3 3D software
- Fast sample production with rapid prototyping technology
- Metallurgical and dimensional validation in accordance with customer specifications

BEHIND THE PRODUCTION PROCESS
- Gravity precision sand casting: aluminium and magnesium alloys
- Low turbulence casting: large and complex aluminium alloys castings with high quality requirements
- Differential pressure sand casting: complex castings in highly reactive magnesium alloys
- Moulding equipment for self-hardening sand moulds (Al/Mg)
- Blow machines for cores production (5 to 65lt)
- Melting furnace (Al/Mg)
- Stand by furnaces for aluminium casting
- Electrical ladle
- Shot blasting shake out machine
- Thermal shake out oven
- Heat treatment furnaces

DID YOU KNOW?

Our plant in Borgaretto - Beinasco (Turin) in Italy, a few kilometers from our Headquarters and machining plant in Rivalta, is equipped to offer the technology and capabilities to design and produce a wide quantity of premium aluminium and magnesium castings of different sizes for the aerospace and high performance transport vehicle industries. From the turbofan GEnx for B787 and 747-8 to the powerful turboprop TP400 in aluminium and magnesium. Concurrent engineering, co-design, process simulation, years of experience, high quality and delivery on time is what we offer. Our technologies and ability to work with you as a perfect partner will leave you fully satisfied.

Aluminium: A357 Be free (Fe<0,1%); A357; A356; C355
Magnesium: RZ5; QE22; WE43; Elektron 21

OUR SAND CASTING PLANT IS LOCATED IN:

BORGARETTO/BEINASCO (ITALY)
25,000 Sqm specialised in Sand Casting

CONNECT WITH US
sandcasting@avioaero.com - www.avioaero.com
Avio Aero is strongly active in the value chain and controls the entire qualification process.

**ON BOARD WITH US**
Avio Aero is a GE Aviation Business.

**THEY’VE ALREADY CHOSEN US**
- Agusta Westland
- Alenia Aermacchi
- GE Oil&Gas
- Selex

**OVER 10 YEARS OF EXPERIENCE**

**ADDITIVE MANUFACTURING**

**DESIGN**
Electron Beam Melting Technology

**DIRECT METAL LASER SINTERING TECHNOLOGY**

**A RELIABLE PARTNER**

**DESIGN, MANUFACTURING AND TESTING**

**MANUFACTURING**

**POWDER MANUFACTURER**

**MATERIAL DEALER**

**SYSTEM**

**PART PRODUCTION**

**PART FINISHING**
ALL AROUND DESIGN
- Total freeform without design limits (Design For Functionality instead of Design for Manufacturing)
- Production of pieces with undercuts and complex features difficult to produce with traditional production systems
- Reduced project and manufacturing times and costs
- As designers and producers we are able to redesign your product and suggest more efficient and decisive solutions

BEHIND THE PRODUCTION PROCESS
- In aviation, we design components such as TiAl turbine blades for aircraft engines and deoilers. We have recently started working in the helicopter market, producing exhaust and intake ducts
- Our portfolio includes examples of important supplies to various OEM sub-contractors primarily fixed-wing and rotorcraft
- Our non-aeronautical customer portfolio is highly diversified: from the Oil & Gas sector to the Racing segment (F1 and MOTO GP)

ADVANTAGES
- FREEDOM OF DESIGN
  - AM can produce an object of virtually any shape
  - Increasing object complexity will not increase production costs
- WEIGHT REDUCTION & PERFORMANCE IMPROVEMENT
  - AM adds material only where it is needed
  - AM enables weight reduction via topological optimization
  - Integration of multiple part numbers in one
- COST REDUCTION
  - Significant scrap rate reduction vs. traditional casting
  - .Lighter means cheaper
  - No vendor tooling
- MECHANICAL PROPERTIES
  - Mechanical properties better than casting
- LEAN MANUFACTURING
  - Lead time reduction
  - WIP Optimisation

DID YOU KNOW?
- We offer proven leadership in Additive Manufacturing processing, using DMLS (Direct Metal Laser Sintering) and EBM (Electron Beam Melting) technologies.
- A leading player in Europe as regards the use of these technologies in the aerospace field.
- We exclusively use ultra-light alloy TiAl (Titanium Aluminide) with the EBM technology. For us, Additive Manufacturing is already a process for mass production, not just prototyping.
- We offer complete service, including designs in concurrent engineering, for custom-designed components produced using Additive Engineering technology.

OUR PLANT
- We use two different technologies in our plant:
  - **EBM** (Electron Beam Melting) using an electron beam to melt the material
  - **DMLS** (Direct Metal Laser Sintering) using a laser beam source to melt the material

  - **EBM**
    - Only applicable to electrical conductive materials
    - High Power (3 kW)
    - Relative hot process (700-1000°C)
    - Less stress, less distortion
    - Fine microstructure
    - Better material properties
    - Under vacuum
    - Recyclability of powders
    - No contamination
    - Stable process
    - Surface finishing c. Ra 15 µ

  - **DMLS**
    - Low Power (400W)
    - Relative cold process (30-200°C)
    - No vacuum (controlled atmosphere)
    - Rich material portfolio
    - Surface finishing c. Ra 4 µ

OUR PRODUCTS
- BLADES
- DEOILERS
- DUCTS
- BURNERS
- COILS
- AIRCRAFT STRUCTURES
- SPACE PROPULSION

OUR ADDITIVE MANUFACTURING PLANT IS LOCATED IN:
- CAMERI (ITALY)
- 2,400 Sqm specialised in Additive Manufacturing

CONNECT WITH US
- additive@avioaero.com - www.avioaero.com
ON BOARD WITH US
If you are looking for:
- Careful support for MRO and CRO activities
- A reliable partner
- A solutions provider
- International team support
- A great design specialist and manufacturer
we can develop and industrialize specific repairs for your products.

THEY’VE ALREADY CHOSEN US
- General Electric
- Rolls-Royce
- Pratt and Whitney
- Snecma

- Italian Air Force
- Brazilian Air Force
- Royal Netherlands Air Force
DID YOU KNOW?
We are a reliable partner in all the activities we follow: from design to delivery. We are national champions for MRO activities in Italy and Brazil. EJ200, T700, Spey Mk 807 and LM2500 are just examples of the engines we are responsible for.

Our CRO activities revolve around the components we design and produce for the GEnx, GE90, Trent900 and V2500 engines. Our engineers and highly specialised technicians are ready to support and guarantee the quality of all our CRO and MRO activities.

We also offer Airlines support activities: get in touch with us to see how we can help.

WE DO MRO ON THE FOLLOWING ENGINES

<table>
<thead>
<tr>
<th>Engine</th>
<th>CRO Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>EJ200</td>
<td>Spey Mk 807</td>
</tr>
<tr>
<td>AE2100</td>
<td>CT-7</td>
</tr>
<tr>
<td>J85</td>
<td>T700</td>
</tr>
<tr>
<td>LM2500</td>
<td>RB199</td>
</tr>
<tr>
<td>Pegasus</td>
<td></td>
</tr>
</tbody>
</table>

OUR MRO&CRO PLANTS ARE LOCATED IN:

- **POMIGLIANO D’ARCO (ITALY)**
  78,000 Sqm specialised in CRO

- **BRINDISI (ITALY)**
  50,900 Sqm specialised in MRO

- **PETROPOLIS (BRAZIL)**
  3,500 Sqm specialised in MRO

**WEeldonrdcro@avioaero.com - www.avioaero.com**
ON BOARD WITH US
If you are looking for:
- A reliable partner
- Advanced design capabilities
- A solutions provider
- International team support
- A great design specialist and manufacturer
Production of Casings and Frames with diameter > 800 mm

THEY'VE ALREADY CHOOSEN US
- General Electric
- Pratt & Whitney
- CFM
- Snecma

Avio Aero
A GE Aviation Business
YOUR TECHNOLOGY PARTNER
**FRAMES AND CASES**

**DID YOU KNOW?**

Over 15 years of experience on machining processes of Superalloy (Inconel718, Waspaloy etc.) and production of LPT casings and frames. We are sure that our expertise in the design, manufacture and testing is a winning element that makes us an extremely reliable partner.

**15 YEARS EXPERIENCE**

**CONNECT WITH US**
framesandcases@avioaero.com - www.avioaero.com

---

**FRAMES AND CASES**

**TAKE A LOOK AT WHAT WE CAN DO**

**ALL AROUND DESIGN**

- Components design and certification
- Parametric CAD generation
- Detailed components optimisation
- Multidisciplinary design approach
- Heat transfer analyses capability for thermal map assessment
- Durability LCF assessment via 2D and 3D FEA
- Buckling assessment via 3D FEA
- Creep and strength assessment via 2D / 3D FEA
- Validation via experimental tests

**DISTINCTIVE TECHNOLOGIES**

- CAD/CAM Tool path Design and Simulation
- Ultra High Pressure Coolant (up 300 bar)
- Automatic thickness measurement with robotic ultrasonic sensor
- Probe for automatic in-process measurements and toolpath adjustment

**BEHIND THE PRODUCTION PROCESS**

- CAD/CAM tool path design and simulation
- Vertical Lathe (turning diam. Allowed: from 400 to 2500 mm)
- Milling center (Milling capabilities: 5000*2000*1500 mm)
- Welding (TIG, EBW, Arco Plasma, Resistance Welding)
- Brazing, manual and in furnace
- Automatic deburring robotic cell
- Heat treatment [Under vacuum and air furnaces]
- Surface treatment [Sand blasting, shoot peening]
- Hardness check
- Dryer station
- Xray inspection (diam. 1000* 600 mm)
- FPI station
- Cleaning station
- Flushing & checking residul contamination station
- CMM for dimensional & geometrical inspection

---

**OUR FRAMES AND CASES**

<table>
<thead>
<tr>
<th>LM6000 REAR/FRONT FRAME</th>
<th>PW308 LPT CASE</th>
<th>PW800 TEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LM2500 REAR/FRONT FRAME</td>
<td>LMS100 IPT MODULE</td>
<td>PW308 TEC</td>
</tr>
<tr>
<td>LMS100 FRONT FRAME</td>
<td>ARIANE 5 CONE, FIXED SUPPORT SLIDING SUPPORT</td>
<td>PW800 TEC</td>
</tr>
<tr>
<td>GEnx LPT CASE FAN HUB FRAME</td>
<td>ARIANE 5 TURBINE HOUSING TEC</td>
<td></td>
</tr>
<tr>
<td>LEAP LPT CASE</td>
<td>PW800 TEC</td>
<td></td>
</tr>
</tbody>
</table>

**SaM146 DIFFUSER CASE**

**APU ARGO TURBINE HOUSING TEC**

**T700 TURBINE CASE EXHAUST CASE FRAME PARTICLE SEP CONTEINMENT RING**

---

**BEYOND THE PRODUCTION PROCESS**

- CAD/CAM tool path design and simulation
- Vertical Lathe (turning diam. Allowed: from 400 to 2500 mm)
- Milling center (Milling capabilities: 5000*2000*1500 mm)
- Welding (TIG, EBW, Arco Plasma, Resistance Welding)
- Brazing, manual and in furnace
- Automatic deburring robotic cell
- Heat treatment [Under vacuum and air furnaces]
- Surface treatment [Sand blasting, shoot peening]
- Hardness check
- Dryer station
- Xray inspection (diam. 1000* 600 mm)
- FPI station
- Cleaning station
- Flushing & checking residul contamination station
- CMM for dimensional & geometrical inspection

---

**OUR FRAMES AND CASES PLANTS ARE LOCATED IN:**

**POMIGLIANO D’ARCO (ITALY)**
78,000 Sqm specialised in Machining

**BRINDISI (ITALY)**
54,000 Sqm specialised in Machining