FRAMES AND CASES

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

DESIGN, MANUFACTURING AND TESTING

OVER 15 YEARS OF EXPERIENCE

DESIGN
DETAILED COMPONENTS OPTIMISATION
HEAT TRANSFER ANALYSES CAPABILITY

PARTNERSHIP
A RELIABLE PARTNER

MANUFACTURING ASSEMBLY TESTING DELIVERY MRO & CRO

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.

yers experience

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

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

OUR FRAMES AND CASES

LM6000
REAR/FRONT FRAME
LM2500
REAR/FRONT FRAME
LMS100
FRONT FRAME
GEnx
LPT CASE
FAN HUB FRAME
LEAP
LPT CASE
PW308
LPT CASE
LMS100
IPT MODULE
ARIANE 5
CON, FIXED SUPPORT, SLIDING SUPPORT
PW308
TEC
PW800
TEC
SaM146
DIFFUSER CASE
APU ARGO
TURBINE HOUSING
T700
TURBINE CASE
EXHAUST CASE
FRAME PARTICLE SEP
CONTEINMENT RING

- Design Responsability
- Manufacturing

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

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