SAND CASTING

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

DESIGN, MANUFACTURING AND TESTING

OVER 50 YEARS OF EXPERIENCE

A RELIABLE PARTNER

PROCESS SIMULATION

CO-DESIGN WITH CUSTOMER ENGINEERING

Avio Aero
A GE Aviation Business

YOUR TECHNOLOGY PARTNER
SAND CASTING

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.

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

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

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 CATIA5 3D software
- Fast sample production with rapid prototyping technology
- Metallurgical and dimensional validation in accordance with customer specifications

Did you know? Sand casting behind the production process
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OUR CASTINGS

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- Design Responsibility  - Casting

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

YEARS EXPERIENCE

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