



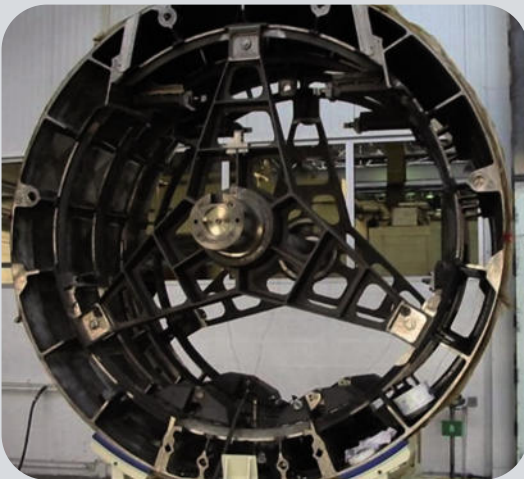
# COMPOSITE and RTM\* Users

(\*Resin Transfer Molding)

EXCLUSIVE AND COST-EFFECTIVE SOLUTIONS

## Aubert & Duval offers solutions:

- **Exclusive:** mould-units up to 20T or 12m
- **Simple:** one single cast compared to mechanically welded solutions
- **Adapted:** specific grades.  
Low and controlled thermal expansion coefficient, optimized for composites



Tooling for composite inlet of A380 engine



Mould for helicopter blades

## The new high-tech approach:



A380 Airplane



China Z8 Helicopter



Tooling for A380

- **Minimizes the cost** of tools by avoiding complex assemblies
- **Increases the mould life:**
  - > better air circulation during autoclaving
  - > elimination of internal stress
  - > excellent dimensional stability during polymerization and cooling
- **Preserves tightness during the process**



Tooling for A380 engine nacelle



# The High-Tech Foundry

## The Aubert & Duval foundry

The Aubert & Duval foundry is a dedicated workshop integrated in one of the most advanced Special Steel plants

- **Technically advanced equipment:** melting capacities of 100 kg to 40T with Electric Arc Furnace, Vacuum Induction Melting, centrifugal casting (up to 1.5T), heat treatment. Possibility of hipping.
- **Plant (R&D, Metallurgy Engineering, Quality Control)** dedicated to most demanding markets: aerospace, nuclear energy, etc.
- **Highly skilled workforce**



## As a consequence:

- **more than 180 original grades:** special steels (heat resisting materials, low thermal expansion coefficient), nickel and cobalt base alloys, ...
- **large sizes :** up to 12m (e.g. helicopter blades) and parts from 5g to 20T
- **stringent quality and Q/C,** in line with aeronautical requirements
- **short lead-times:** in the range of 10 - 12 weeks

