



LARGE SIZE  
METALLIC / COMPOSITES  
EQUIPMENT & STRUCTURES

Combining performance and lightness

# We combine **large dimension machining** and excellence while **reducing the mass** of embedded structures.

CNIM Systèmes Industriels (CSI) supports space and new space players in the development of new solutions. In the field of launchers, satellites and new spacecrafts, CSI has been optimizing and industrializing flight-proven equipment for more than 30 years, bringing safety, innovation and excellence.

Our product reliability is up to the technical requirements of launches and a lifetime of several years in orbit.



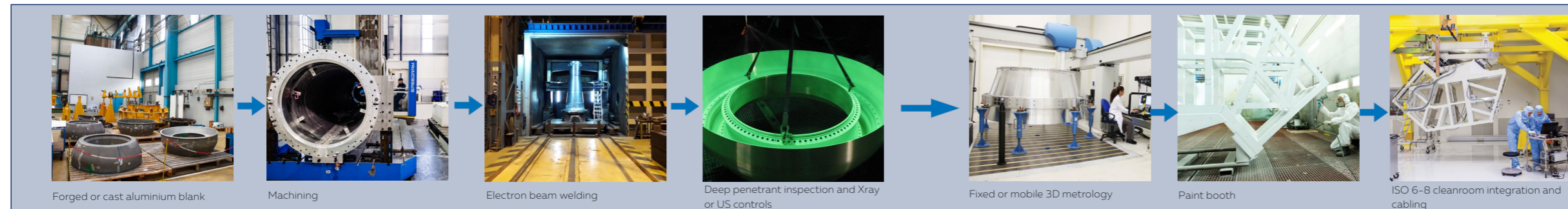
Ariane 5 nozzle housing parts

## LARGE DIMENSION & PRECISION

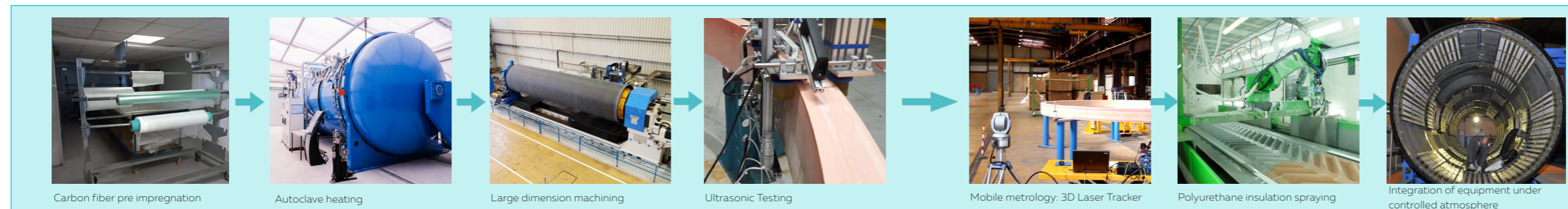
We know how to **meet the most demanding specifications** in terms of precision for large parts (a few meters in diameter). All manufacturing steps, from design to inspection, are carried out by our teams at our site in La Seyne-sur-mer.

## Manufacturing and control lines

**Metal equipment** (aluminium, stainless steel, titanium, etc.)



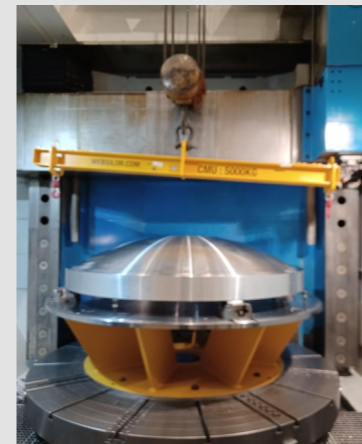
**Composite equipment**



## High-end industrial references

Our parts in aluminium or composites are qualified for critical environment.

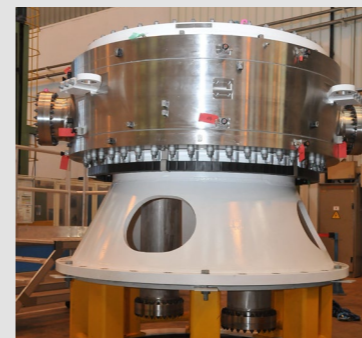
**Metals**



Cryogenic bulkhead



Ariane 5 titanium tank



Pressure equipment for very severe environment



SSHEL Ariane 5 helium tank

**Composites**



Filament wound structure with polyurethane internal elements



Reinforced composite: Liquid Resin Infusion (LRI) technique for aircraft radome (Forward Pressure Bulkhead)

## 30 YEARS FLIGHT RELIABILITY GUARANTEE

Our parts are integrated and **flight-proven** for both European launchers Ariane 5 and VEGA. Our teams are trained to meet the requirements of **European space standards**.

## CO-DESIGN AT OPTIMIZED COSTS & EXPERTISE IN NOBLE MATERIALS

**Resistance in severe environment, reducing the mass, excellent waterproofing, clean room integration...**

Our engineering and methods teams support you in the development of your metal and composite parts. We provide you the best solutions that combine technique, economy and performances. We make your design lighter and manufacture **prototype at scale 1.**

CSI co-designs and manufactures cost-optimized equipment and structures in aluminum, reusable stainless steels or composites. Our sub-assemblies are intended for launchers, satellites and ground means.

- Fairings
- Dispensers
- Bulkheads
- Crowns / Flanges
- Tanks
- Floors
- Inter-stage skirts
- Nozzle housings

## Want to work with us ?

**No investment:** our manufacturing and qualification at scale 1 means are at your service.

**Economic gain:** our composite parts are lightweight and our teams make your design compatible with industrialization for series manufacturing.

**Quality assurance:** our parts are flight-proven.

Photo credit: CSI / Stock, October 2023 edition

**ENIM**  
Systèmes Industriels

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