

INNOVATION, PERFORMANCE, EXCELLENCE



# ADVANCED MECHANICS IN CLEAN ENVIRONMENT

VERTICAL INTEGRATION OF YOUR PROJECTS

**ENIM**  
Systèmes Industriels





A state-of-the-art industrial tool that combines large dimensions and high precision

A unique combination of **skills** serving demanding clients

CNIM Systèmes Industriels (CSI) designs and manufactures large and high precision systems and equipment in La Seyne-sur-Mer (South of France).

**For several years now, CSI has been manufacturing, testing and integrating large mechanicals systems for demanding applications in the semiconductor industry.**

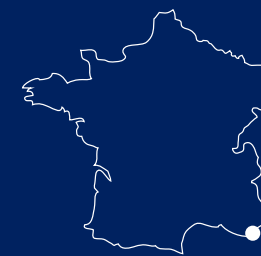
▲ **BE A LONG-TERM PARTNER**

▲ **EMBODY** INNOVATION AND PIONEERING SPIRIT

▲ **HIRE** ENTHUSIASTIC WOMEN AND MEN

▲ **INTEGRATE** ALL STAGES OF A PROJECT

▲ **USE** STATE-OF-THE-ART INDUSTRIAL EQUIPMENT



2021 KEY FIGURES

**CNIM**  
Systèmes Industriels

SERVING THE INDUSTRY  
since 1856

**€74 million**  
TURN OVER

**400**  
EMPLOYEES

**45,000 sqm**  
WORKSHOPS



# Advanced industrial facilities

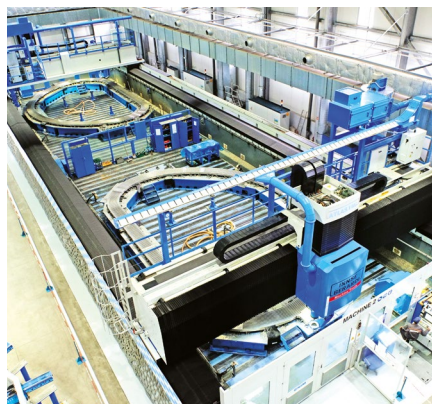
## LARGE SIZE MANUFACTURING

Our workshops are equipped with **state-of-the-art machinery** operated by qualified staff allowing us to work on large and complex parts.

Vertical lathe, double gantry milling machine, very high-speed machines, our equipment meets the needs of **high demanding industries**.



High-speed machining centers



Double gantry milling machine

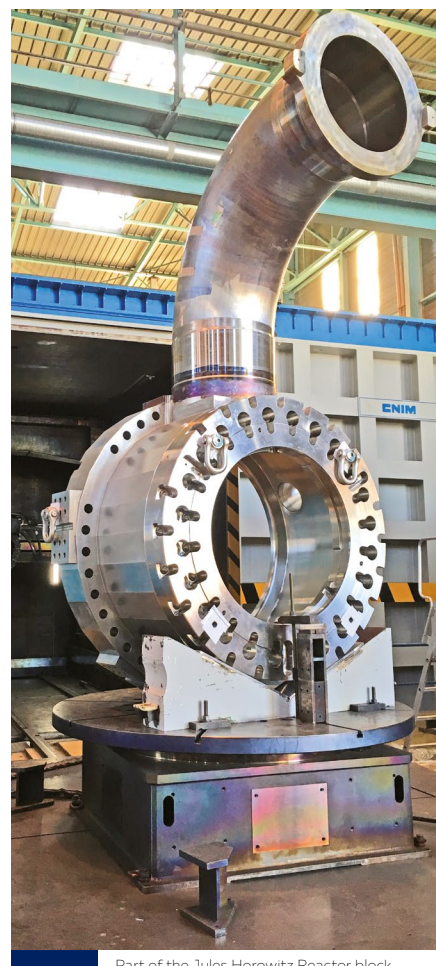


## ELECTRON-BEAM WELDING

- / Multi-material
- / High thickness
- / Local vacuum

### Welding facilities:

Volume: 230m<sup>3</sup>  
Dimension: L7,400 X W5,500 X H5,050mm  
Payload: 30 tonnes



Part of the Jules Horowitz Reactor block

# Advanced industrial tool

## 3D CONTROL

In order to guarantee the best quality to our customers, our metrology means are also adapted to large dimension.

**Our highly qualified teams** (COFFMET 3) ensure very demanding quality controls and achieve **unique levels of precision thanks to the latest generation of three-dimensional measuring machines.**



Control to the nearest 1/10<sup>th</sup> of a millimetre with the ZEISS MMZ-G machine: X4,000 X Y8,000 X Z2,000 mm

CSI has both **static** (DELTA DEA, ZEISS MMZ-G) in a temperature-controlled environment and mobile (laser tracker, poly-articulated arms) inspection equipment for very large parts.

**Our measurement accuracy complies with ISO 10360-2-5 E0/E150.**



Highly skilled staff (COFFMET 3)

## CLEAN ROOM ASSEMBLY AND INTEGRATION

Parts manufactured by CSI require strict level of cleanliness. **Clean room assembly (ISO 7 à 5), cleaning of large parts, series integration, qualification and testing...** our teams master all of these skills. Our clean and grey rooms have a total surface of 2,800 sqm.



State-of-the-art clean room

### Mastering the particle cleaning process

- / Cleaning via automated system
- / Vacuum drying
- / Mass spectrometer cleanliness control
- / Black light inspection



RGA: residual gas analysis



Frame in a grey room washing machine



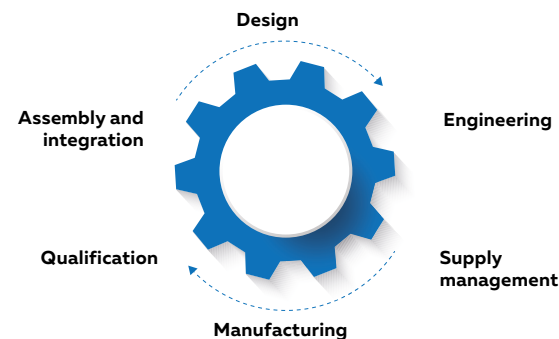
# Vertical **integration** of projects

## PROVIDING SUPPORT TO OUR CLIENTS' SPECIFIC NEEDS

CNIM Systèmes Industriels designs, industrializes and implements complex projects.

Our engineering department works upstream with clients in order to manage expectations and offer practical solutions to demanding sectors issues. For some projects, we work in **simultaneous engineering** to ensure the manufacturability of products and the mastering of their key characteristics.

Meeting our clients' technological challenges, from design to production of high value-added parts, is part of our DNA.

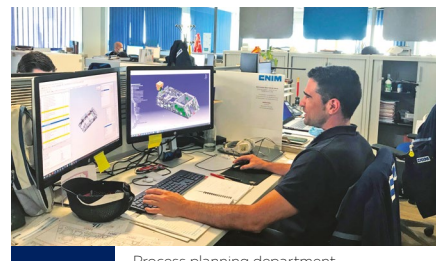


### A to Z project management

Thanks to a unique combination of know-how within our teams, we manage the projects we work on in a comprehensive way.

### CNIM Systèmes Industriels

A unique production site with direct access to the sea and a single contact person for greater efficiency

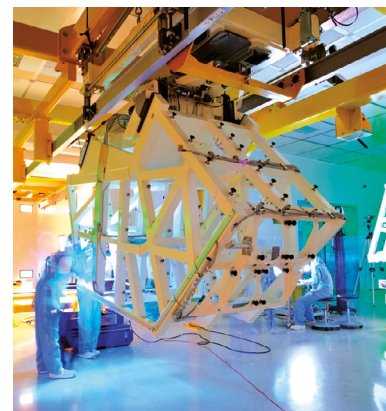
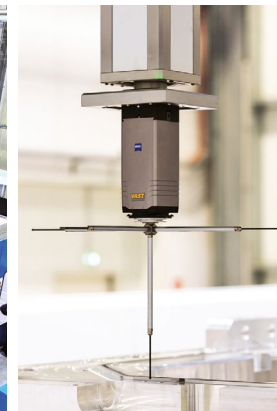
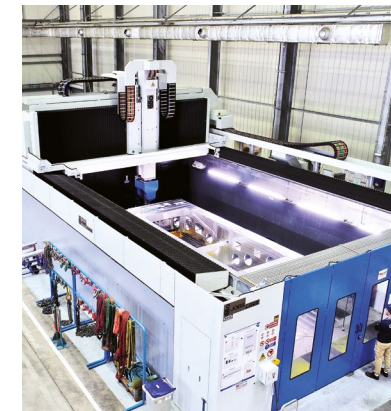


Process planning department



Virtual reality room: immersive visualization, cutaway drawings, easy 1:1 scale projection to optimize design / industrialization phases.

# References



### Frequency conversion and focusing systems of the Megajoule Laser (CEA)

- / Design
- / Manufacturing
- / Tests
- / Control
- / Assembly and installation on clients' site

ACCURACY AND STABILITY FOR CONSTRAINED ENVIRONMENTS USE.



### Machine frames for the semiconductor industry (ASML)

- / Co-design
- / Industrialization
- / Manufacturing
- / 3D control
- / Assembly and cleaning

HIGH LEVELS OF ACCURACY AND CLEANLINESS REQUIRED FOR VACUUM OPERATION OF LASERS

HOW ABOUT WORKING  
TOGETHER?

**LET'S GET IN TOUCH!**

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