

MECHANICAL MANUFACTURING



Welding in a glove box at GANIL

ACTIVITY DESCRIPTION

- Complex mechanical manufacturing of vacuum chambers in stainless-steel, aluminium
- Complex mechanical manufacturing of prototypes for accelerator needs (ion sources, beam diagnostics, detectors, complex vacuum chambers)
- Quality procedures
- Development of welding and machining on various materials
- Development of a new method for rhenium welding
- Development of a new aluminium flange concept
- Three dimensional metrology with high precision instruments for large scale measurements

PERMANENT STAFF

1 engineer
5 technicians

EQUIPMENT

METALWORKING

- Hydraulic power press brake
- Hydraulic bending roll
- Notcher
- Multiplane bender

WELDING

- Jacomex welding glove box
- Different welding stations: TIG, MIG, Spot

MACHINING

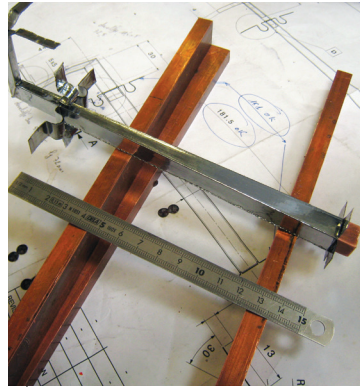
- 4 milling machines max. capacity 2m x 1m x 1m
- 4 lathes, one CNC with C axis

METROLOGY

- 2D measuring column
- Durometer
- 3 dimensional arm
- Laser tracker

SCOURING AND PASSIVATION BENCH

3D PRINTER FUNMAT HT



o Rhenium transfer tube, 2 cm thick

VALORISATION & TECHNOLOGY TRANSFER

- 1 patent for aluminium flanges in process of validation
- Know-how transfer to industry for carbon target machining
- Know-how transfer to companies for various welding techniques

VARIOUS VALORISATION POTENTIALITIES

- Know-how and technology transfer
- R&D collaboration agreement on special welding techniques
- R&D collaboration agreement for complex manufacturing of prototypes
- Training of industrial company employees