# ROBOTIC WELDING CELL

## AND WAAM (Wire Arc Additive Manufacturing)

A YASKAWA cell made up of a MA2010 welding robot, a robot gripper MH24, a two axis positioner MT1-750 and a FRONIUS welding system TPS 400-i







### Offer .....

- ▶ Support for the design of optimised parts for WAAM (Wire Arc Additive Manufacturing) and robotic welding
- ▶ Development of parts (demonstrator, prototype)

#### Our R&D work .....

- ▶ Process development: improvement in understanding the impacts of the process on the materials and on the manufactured parts.
- ▶ Study of the influence of process parameters
- ▶ Process optimisation (robustness, in situ control, ...)
- ▶ Innovative design: development of core technology related to the DFAM methodology (Design For Additive Manufacturing) and process modelling
- ▶ Strategy development for ALM Additive Layer Manufacturing (wire) and PB - Patch Building (wire and plates) or MAM - Mosaic Additive Manufacturing

#### Characteristics

#### ROBOT EQUIPMENT

6 axes welding robot - MA 2010 (master)

 Max payload
 10 kg

 Max range
 2010 mm

6 axes manipulator robot - MH24 (slave)

Max payload 24 kg

2 axes positioner - MT1-750

Max payload 750 kg

WELDING EQUIPMENT

Welding system MIG/MAG FRONIUS - TPSi 400

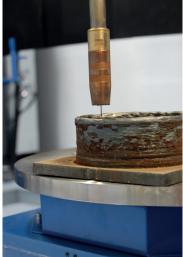
Process monitoring

Video, temperature, electric

SOFTWARE

MotoSim and IM Additive Manufacturing





#### Sales contact

business@irt-jules-verne.fr

#### **Press contact**

communication@irt-jules-verne.fr

www.irt-jules-verne.fr





