




TECHNICAL CLAUSES FOR THE IDONIAL ACQUISITION OF AN INVERTED ROBOT WELDING

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	<p>Technical clauses for the acquisition of an Inverted robot welding</p>	<p>www.idonial.com info@idonial.com T +34 984 390 060 F +34 984 390 061</p>
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TECHNICAL CLAUSES

Technical description of an Inverted robot welding:


Equipment specifications

Idonial Welding Technologies research Unit is looking for a robot to execute welding works hanging upside-down from a column. These technical specifications cover the minimum characteristics of the mentioned facility. Idonial Invite your company to attend this tender with an offer to provide a Fast and accurate welding robot for research activities.

Main technical features of the facility:

- 6 axis
- Min. Payload: 20 kg
- Min. H-reach: 1600mm
- Max. Robot Weight: 260kg
- Mounting: Floor; and Ceiling (inverted)
- Hollow shaft (if possible)
- Communication: Field bus system (I/O), ProfiNet (PLC communication), Ethernet IP (PC communication), DeviceNet (welding power source communication)
- Reduced commissioning time and risk (for example by using predefined libraries with the most common power sources: Fronius, ewm, Lincoln, Esab and Miller) (For example “drag and drop” configuration)
- Conectivity: Coordination with another robot, positioner, PLC, with external kinematic systems
- Digital I/O configuration, terminal block, offline programming,
- Online remote control (software)
- Simplified robot programming process by means of manual guidance as “Kinetiq Teaching” or “ready2 pilot”.
- Arc Sense or ComArc
- Touch Sense
- Multilayer
- Cloud based software platform (optional)
- Minimal cable length 15m.
- Safety interface for emergency stop available (ProfiSafe if possible)

Peripherals:

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1. Automatic Tool Changing system: pneumatic system for fully automatic tool change (for example WWS Abicor Binzel) for three tools.
2. Real-time Seam Finding and Tracking and system + communication interface: Large field laser sensor (visible red laser) (for example Scansonic TH6D-150- KFMC):
 - Field of view:
 - Min. Depth min. 80 mm.
 - Min. Width: 44 mm.
3. Calculation and calibration of robotic tools and fixtures (6D) (for example: Advintec TCP LEONI) (TCP sensor, TCP controller, communication and power supply, communication and Interface programs)
 - Min. Sensor Size: 120 x 1200mm
4. Anticolision system CAT3 XL
 - Adaptor flange
 - Swicht unit with connector plug (Force XL)
 - Heavy load (HL) trigger flange
 - Torch holder (ewm)
5. Two-axis positioner 1000kg
6. Three-jaw lathe chuck \varnothing min.40mm, \varnothing 700mm, centrally exciting.
7. 2 Additional axis coordinated with the robot (to be installed in the welding column: Drawing CCH 2640-BF).
 - Vertical axis: Motor (tree-phase, self-braking) 1300 rpm and 2,2 Kw
 - Horizontal axis: Motor (tree-phase, servo-ventilated) 1300 RPM and 0.37Kw.


We are not asking for a turnkey cell, in fact we already have the welding column. The system is going to be installed in a laboratory (there is no need of safety barriers or safety environment peripherals).

Please take note of the following conditions related to the supply of the equipment: Delivery Terms, After-sales services, Payment Terms

- Assembly and commissioning included.
- Customized training (operation and maintenance) for 4-5 pax. included.
- Remote support (on-site support available if needed)
- Extended 3 warranty (maintenance free of charge) from the date of customer production acceptance, with proper usage. The supplier will replace free of charge any component that becomes faulty during the warranty period (Supplier can reserve the right to charge in full at standard spare parts prices for any component which becomes faulty due to misuse). Faulty items will be returned to the supplier for inspection, repair or replacement.

The following payment option is proposed:

- 30% deposit with order
- 40% on readiness to shipment

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- 30% 60 days following commissioning

Installation in Idonial existing facility:

Assembly and commissioning included. The system should be mounted in an existing welding column (CCH 2640-BF). The system is going to be installed in a laboratory facility.

Customized training

Customized training (operation and maintenance) for 4-5 people.

Additional services:

Remote support free of charge for the first 12 months.

Extended 3-year warranty (maintenance free of charge) from the date of customer acceptance, with proper usage. The supplier will replace free of charge any component that becomes faulty during the warranty period.

Limitation period for claims for defects:

Claims for defects will be done upon the conclusion of 24 months.