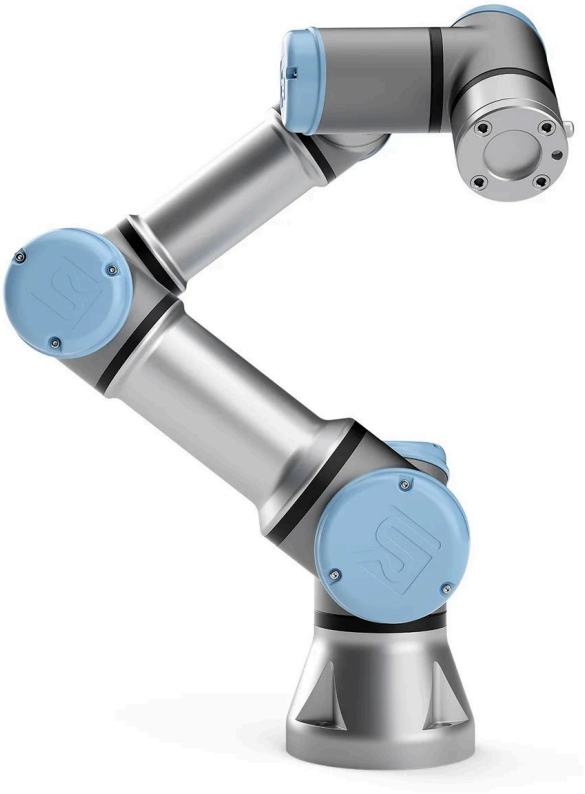
2.4 Robotic and Cobot Welding Systems

Robot and collaborative welding systems, combined with AVP positioners and seam tracking.



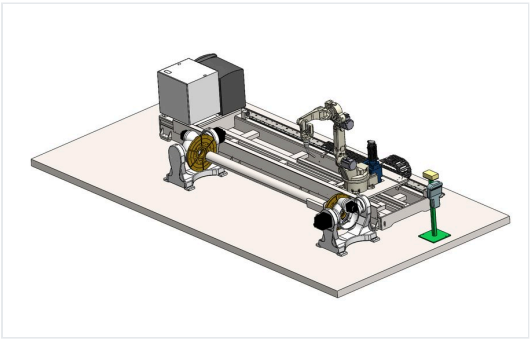
Description

Robotic and collaborative (cobot) welding systems from AVP combine the robot with our own positioning equipment and seam tracking, so that the whole welding task is solved as one system.

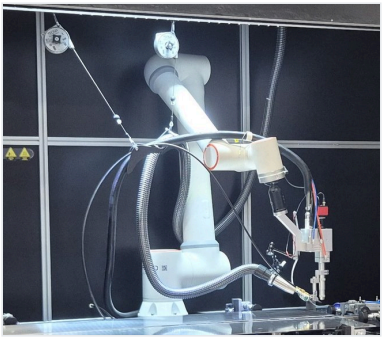
Features

- Robot or cobot welding system
- AVP positioners and turntables (page 30)
- Seam tracking systems (page 47)
- Robotic gantries and linear tracks for large workpieces (page 28)

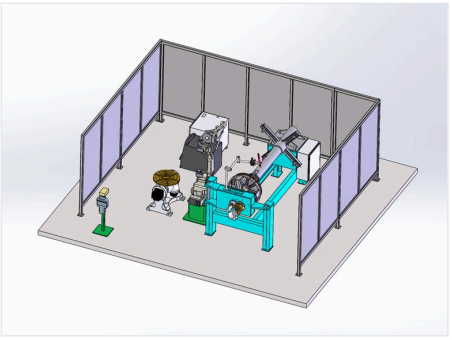
Photos



Robot on a linear track with two positioners



Cobot welding station



Robotic cell layout

2.5 Robotic Gantries and Linear Tracks

Gantry structures for robot welding

Development and complete manufacture of robust gantry structures for robot welding. Linear guides keep motion precise even beyond 20 m of travel; servo motors on all three axes run from the robot controller.

Applications Large workpieces and long seams – robot travel beyond 20 m.



Gantry structure (26 m X-axis travel, 7 m width)



Robot and welding power source

Description

We offer development and complete manufacture of robust gantry structures for welding with a robot. These structures move the welding robot over a plane in three axes. The design can be modular, which makes installation easy.

Our design ensures that the whole structure can be assembled with high accuracy. The structure usually includes a carrier (carriage) for the welding power source and the robot controller. With linear guides we achieve precise motion regardless of the travel length, even over 20 metres; shorter track lengths are also available. The servo motors of all three axes are connected to and controlled by the robot controller.

Features

- Length and width customized for each order
- Mounted on linear guides and bearings
- Robot controller, welding power source and wire feeder mounted on the gantry
- Prepared for robot mounting (the robot is mounted upside down)
- Cable chain for each axis – for all cables and hoses