

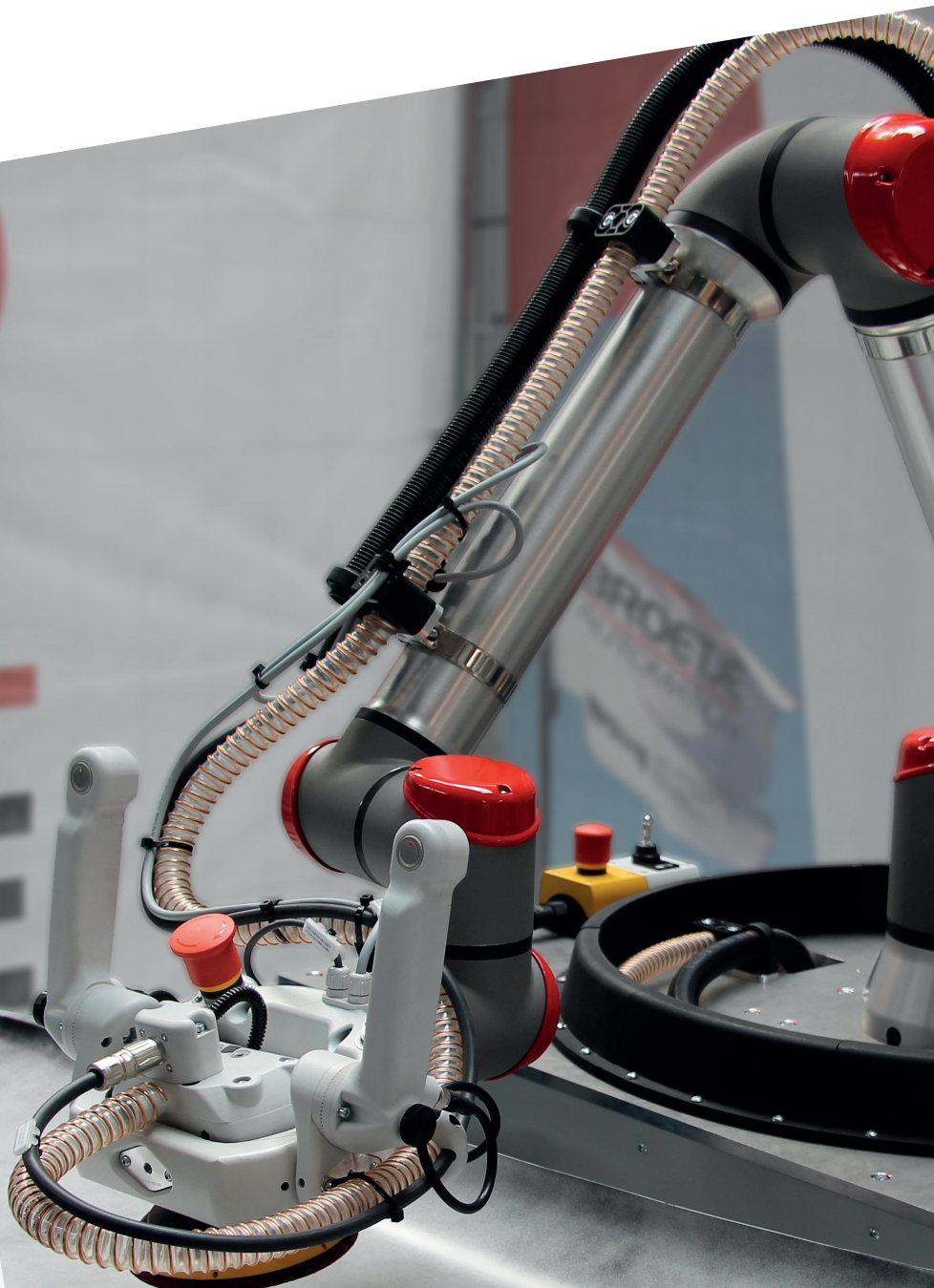
SANDING COBOT

SEMI-AUTOMATIC
SURFACE
TREATMENT



COMPOSED TO COMPETE

- High quality precision sanding Cobot on a mobile platform
- Relieves the worker of unergonomic tasks without programming
- Automatically adapts to surface





SANDING COBOT - TECHNICAL INFORMATION

Area of Application

The Sanding Cobot system provides mobile, semi-automatic surface sanding. The system leverages Broetje's modular toolbox for lightweight collaborative robotics and combines the industry-proven UR10e positioning system with an interchangeable, custom-built end effector that uses a Mirka sanding head.

No programming is required thanks to the robot's automatic path generation. The system is mounted on a mobile rolling base and can be operated by the worker without lengthy training. This allows the system to be used from lot size 1.

The Sanding Cobot system is capable of roughening surfaces of all types in preparation for painting in various industries such as aerospace, shipbuilding, automotive and wind turbine manufacturing.

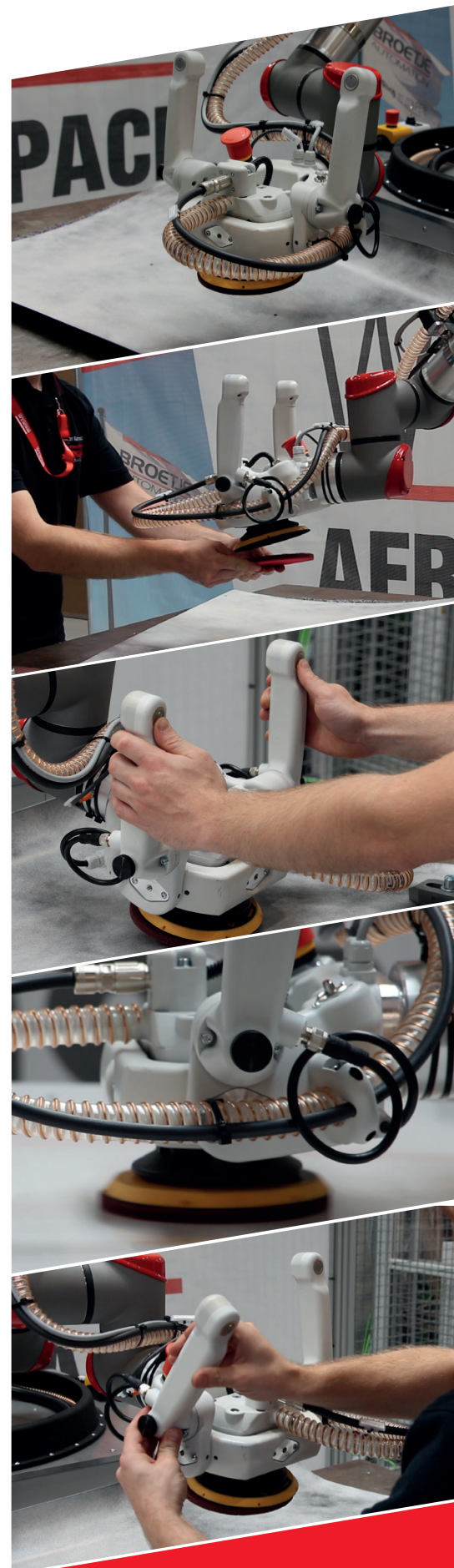
The safety system enables applications in a collaborative environment with humans.

Technical Data

Sanding End-Effector	Robotic Arm
Rotating Speed: 4000-10000 rpm	Universal Robots UR10e off the shelf
Orbit: 5 mm (excentric)	Reachability: 1300 mm
Grinding disc diameter: 77 / 125 / 150 mm	6 Axis
Standard sanding speed: 15 mm/s	Weight: approx. 35 kg, Payload: 10 kg
Sander by Mirka	Reachability: 270° on both working sides
Pressure force: 30 - 90 N	Vacuum / Power supply (230V) from the top
Gimbal for automatic adaption to surface	Fully adjustable handles

Special Features

- Full process integration by Broetje-Automation
- State-of-the-art safety systems including CE conformance in compliance with ISO TS 15066
- Force controlled robot movement
- Automatic adaption to surface
- Ideal surface contact thanks to integrated Gimbal
- No programming required
- Ergonomic working
- 2 Presets for Sanding and Polishing
- Adjustable handles
- Entire process can be controlled at the endeffector: handguiding, teach-in, start/stop, presets
- Automatic path creation
- Optional: autonomous guided vehicle platform (AGV)



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