

Lasting Connections

CO-BRO® GUARD
THE MIG-MAG WELDING
REVOLUTIONARY
COLLABORATIVE ROBOTIC CELL





LASTING CONNECTIONS

Perfect alignment of welding machines, consumables and technologies combined with our renowned application and process know-how provide the best solution for your requirements: A tried and true connection among people, products and technologies. The result is what we promise:

Full Welding Solutions for Lasting Connections.

Our customers benefit from a partner with

- » the highest expertise in joining, rendering the best application support globally available
- » specialized and best in class product solutions for their local and global challenges
- » an absolute focus on customer needs and their success
- » a worldwide presence through factories, offices and distributors

CO-BRO® GUARD

The CO-BRO® GUARD is a revolutionary, fully enclosed collaborative robotic cell. Flexibility, easiness of use, mobility accessibility, optimal welding performance and the maximum health, safety and environment protection set CO-BRO® GUARD apart from anything else in the market.

CO-BRO® GUARD is a new high-end technology equipment for collaborative robotic MIG-MAG welding. This revolutionary system is based on a fully enclosed cell featuring a comprehensive and user-friendly software interface integrating the Böhler Welding URANOS equipment, the collaborative robotic arm and all the accessories. The collaborative robotic concept, full accessibility, easy handling, extremely easy programming and advanced fume extraction solutions come together to make the real difference.

- » Intuitive user interface for easy programming of the robotic arm – covering the lack of skilled welders and high-level operators, ensuring high quality and repeatability at the same time
- » Delivering the perfect weld seam in combination with our welding processes, industry-leading filler metals and the Böhler Arc concept
- » The design allows easy handling, full flexibility and perfect integration into the production workflow – and it's also movable with a manual forklift.
- » Plug and Play welding station thanks to a central power and utility supply
- » The exclusive GUARD enclosure
 - » Completely separates the welding from anything else in the workshop, reducing the effect of welding hazards on employees.
 - » The multiple doors and table divider provide operators with full access to all operations while welding, improving productivity and flexibility.
- » The multi-level innovative fume extraction design features allow the cell to be connected to your low vacuum extraction system or fitted with an optional integrated high vacuum fume extraction system.



 **böhler**welding
by voestalpine



FUNCTIONALITY, FLEXIBILITY AND EFFICIENCY



PLUG&PLAY

The CO-BRO® GUARD can be positioned using a conventional manual forklift, without any assembly and disassembly required; just connect power and utilities such as shielding gas and compressed air and it is immediately ready to work. No more unsafe wires and hoses lying around! No need for tedious and time-wasting disassembly and assembly of the unit.

During operations, multi-colored LEDs and acoustics indicate the working phases and possible alarms. The operator can start the operations from the 2 keypads placed on both front doors and can witness the welding thanks to the wide protective glasses



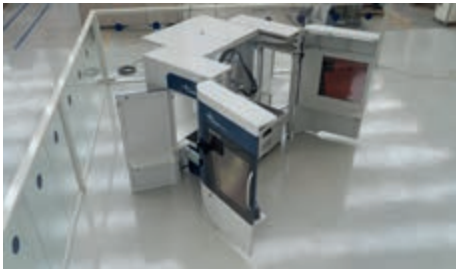
WI-FI BUTTON PAD AND TOUCHSCREEN INTERFACE

Maximum ease of use and flexibility when programming, thanks to the touchscreen pad and the movable 4-button wireless keypad, governing both the robotics and the welding process. Connections, movements and welding control programs are all extremely easy and intuitive.

The interface supports the welding process through:

- » Welding program settings
- » Real-time display of all parameters
- » Pre-loaded procedure for the most common welding jobs
- » Fault diagnosis

ACCESSIBLE AND VERSATILE EXCLUSIVE GUARD ENCLOSURE



THE REVOLUTIONARY CLOSING SYSTEM

The full flexibility and easy handling enclosure features multiple doors and a sliding roof; hence all options are available to access and load parts. Thanks to the included table divider and the intelligent alarm system, it is also possible to work with half the cell closed and the other half of the cell open for other operations, e.g. positioning a new part to be welded.

The revolutionary enclosure GUARD defines the border between the internal environment and the external environment, ensuring maximum protection for the welder and against fumes.



FUME EXTRACTION

CO-BRO® GUARD provides the set-up for the roof-mounted fume extraction system, which can be connected to a low vacuum fume extraction unit or directly to the reticulated fume ducting system.

Additionally, the under-table extraction system can be connected directly to a low-vacuum extraction unit

CO-BRO® GUARD is designed to be fitted with an optional fume extraction torch connected to a high vacuum fume extraction unit. It can be vented externally to comply with legislation and it is Integrated with the cell control system for ease of use

Best when used with the Bohler Welding low fume GUARD seamless flux cored wires.





DELIVERING THE PERFECT WELD SEAM

More than just a robot, CO-BRO® GUARD brings together the Böhler Welding expertise and the perfect integration of the collaborative robotics with the welding processes offered by the heavy-duty high-performance welding equipment URANOS NX 5000 PME. The Böhler arc concept and the premium Bohler welding consumables complete the picture. This brings the Böhler Welding technical expertise into your workshop.



BÖHLER ARC

Böhler Arc is a library of synergic lines designed on the Böhler Welding wires (solid and FCW). The operator simply selects the suitable synergic line when programming, and all is set. The welding process is immediately perfect and guarantees repeatability and constant quality



RAPIDEEP

Short and spray-arc MIG/MAG process with a special wave shape to improve penetration, maximize productivity and achieve a welding speed up to 50% faster than in a standard MIG/MAG process.



QUICKPULSE

Pulsed MIG/MAG process developed with a special wave shape to improve penetration, maximize productivity and achieve a welding speed up to 50% faster than in a standard pulsed MIG/MAG process.

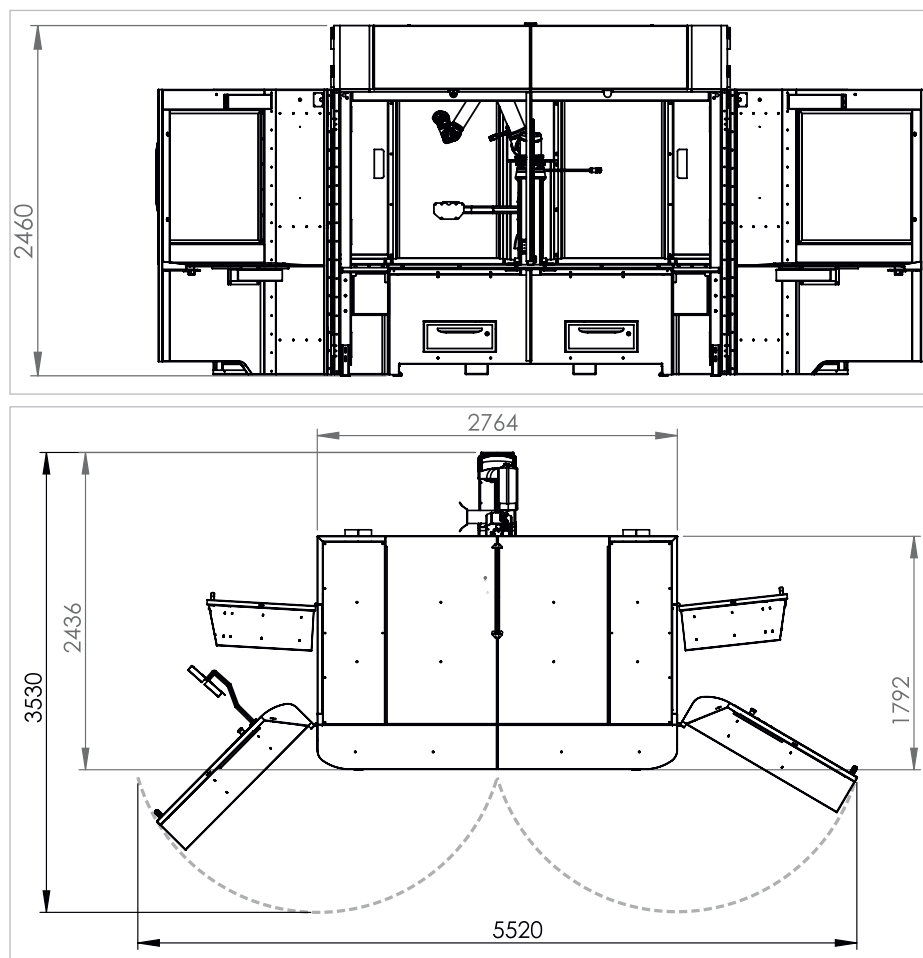


CLADPULSE

Pulsed MIG/MAG process specially for industrial cladding ensuring high-deposition rate welding arc, minimal penetration and an extremely low percentage of dilution.

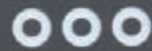
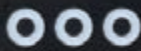
CO-BRO® GUARD

Technical Data	
Working area LxWxH [mm]	2,000 x 1,000 x 1,200 or 2 x 1,000 x 1,000 x 1,200 (with table divider)
Max. weight of the parts [kg]	1,000
Welding Equipment	URANOS NX 5000 PME
Collaborative Robot	Universal Robot UR10e
Fume extraction systems	High-vacuum (extracting torch) system integrated (optional) Low-vacuum ready
Supply Voltage	220 V AC – 50 Hz - 1,000 W – collaborative robot 220 V AC 50 Hz – 200 W – controls 3 x 400/230 V ±15 % 50 Hz 23.6/24.5 kVA welding EQ
Other utilities	Compressed air ready Additional screen for weldNet® Management system
Dimension LxWxH [mm] closed	2,764 x 1,792 (2,436) x 2,460
Dimension LxWxH [mm] open	5,520 x 3,530 x 2,460
Weight [kg]	1,600





CO-BRO®
GUARD



JOIN! voestalpine Böhler Welding

We are a leader in the welding industry with over 100 years of experience, more than 50 subsidiaries and more than 4,000 distribution partners around the world. Our extensive product portfolio and welding expertise combined with our global presence guarantees we are close when you need us. Having a profound understanding of your needs enables us to solve your demanding challenges with Full Welding Solutions - perfectly synchronized and as unique as your company.



Lasting Connections – Perfect alignment of welding machines, consumables and technologies combined with our renowned application and process know-how provide the best solution for your requirements: A true and proven connection between people, products and technologies. The result is what we promise: Full Welding Solutions for Lasting Connections.



Tailor-Made Protectivity™ – Proven under the toughest conditions: Our products protect metal surfaces from wear and corrosion. With over 70 years of experience and the broadest product portfolio in the industry, we are your preferred partner for Surface Protection solutions. We deliver what we promise: Surface Protection tailored to your needs.



In-Depth Know-How – As a manufacturer of soldering and brazing consumables, we offer proven solutions based on 60 years of industrial experience, tested processes and methods, made in Germany. This in-depth know-how makes us the internationally preferred partner to solve your soldering and brazing challenge through innovative solutions. The result is what we promise: Innovation based on in-depth know-how.

The Management System of voestalpine Böhler Welding Group GmbH, Peter-Mueller-Strasse 14-14a, 40469 Duesseldorf, Germany has been approved by Lloyd's Register Quality Assurance to: ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007, applicable to: Development, Manufacturing and Supply of Welding and Brazing Consumables. More information: www.voestalpine.com/welding



