



Lasting Connections

CO-BRO[®] FLEX
YOUR BRO TO DISCOVER
YOUR FULL POTENTIAL



voestalpine Böhler Welding
www.voestalpine.com/welding

voestalpine

ONE STEP AHEAD.



BÖHLER WELDING

Lasting Connections

As a pioneer in innovative welding consumables, Böhler Welding offers a unique product portfolio for welding worldwide. More than 2000 products are adapted continuously to the current industry specifications and customer requirements, certified by well-respected institutes and thus approved for the most demanding welding applications. As a reliable partner for customers, “lasting connections” are the brand’s philosophy in terms of both welding and people.

Our clients 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

COLLABORATIVE ROBOTIC MIG-MAG WELDING

Struggling with a shortage of welders?

Under cost pressure?

Facing tight deadlines?

Discover collaborative robotic welding. Your welders' BRO for enhancing your team's strength and flexibility. So they can focus on what they do best.

CO-BRO® is perfect for small and medium-sized companies, offering a significant cost reduction of up to 75 % and making up for the shortage of welders.

**“EXPERIENCE STRONG
WELDING SUPPORT WITH
YOUR TRUSTED BRO.”**

You will benefit from

- » **Programming made easy (or The easiest programming):** no need for additional robotic welding skills – CO-BRO® FLEX can be programmed by any welder or operator.
- » **Save up to 75 % of your welding costs** as CO-BRO® makes your welders much more efficient.
- » **The highest level of flexibility:** simultaneous work piece positioning and welding at the same time.
- » **High capacity:** suitable for large dimensions and weights of up to 1,000 kg
- » **Plug & Play:** simply connect the CO-BRO® FLEX to the power grid and start welding.



MAXIMUM FLEXIBILITY.

POSITION YOUR WORKPIECE AND WELD AT THE SAME TIME



BE MORE EFFICIENT

CO-BRO® FLEX supports you in your daily tasks. Your welders are not replaced, but your BRO makes them more efficient. When the barrier is closed, CO-BRO® FLEX switches to fully automatic high-speed mode.

ENJOY MAXIMUM FLEXIBILITY

CO-BRO® FLEX is accessible from all sides and allows easy positioning of bulky parts with complex shapes. Position your workpiece and weld simultaneously thanks to the removable table divider. The large table measuring 2 x 1 m and raised arm position provide ample space for welders.

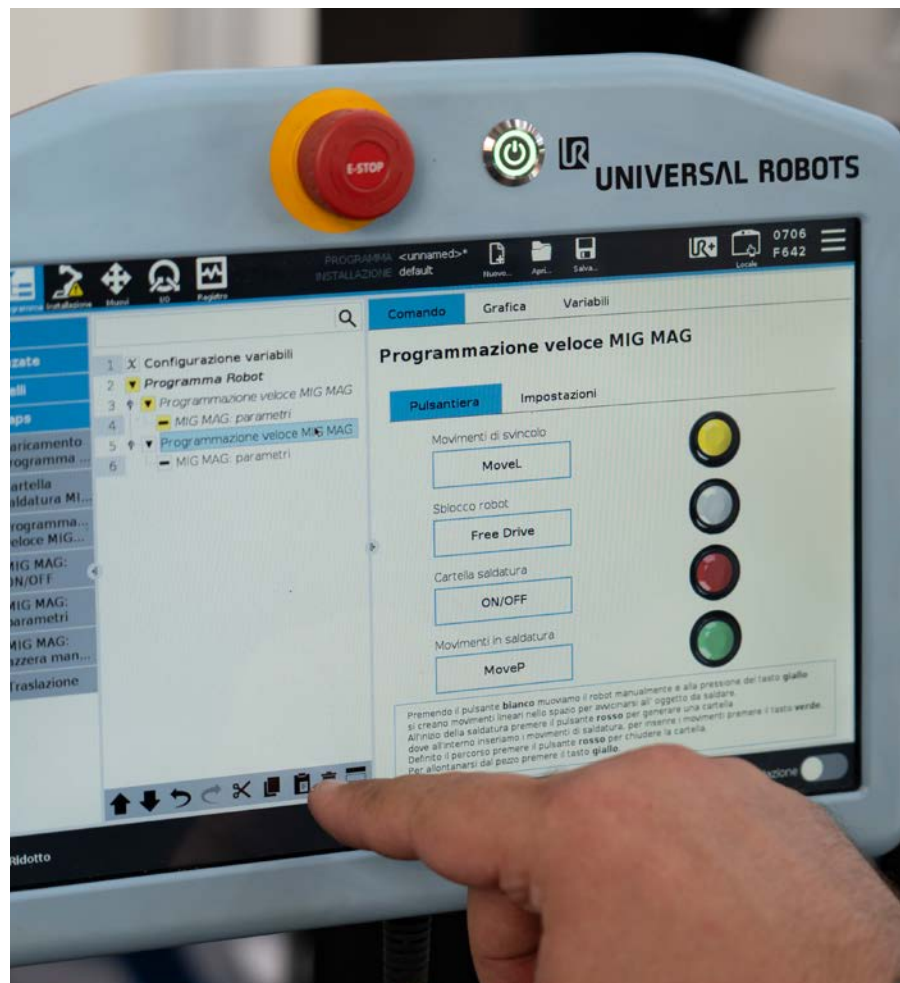
READY TO WELD – PLUG & PLAY

Simply connect the power and supply lines such as shield gas and optionally compressed air and your welding machine is ready for use. It can be easily moved with a conventional forklift.

EASY AND INTUITIVE USER PANEL

Wi-Fi button pad and touchscreen are extremely easy to use. Any welder or operator can manage the programming.

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



Follow the link to watch online the CO-BRO® FLEX video

SIMPLY
ADJUSTABLE,
VERSATILE
IN USE.





1 Robotic MIG Torch for welding up to 600 A.



2 Simple programming interface



3 Integrated table divider – simultaneous welding and positioning of the next workpiece.



Once the peripheral protection is closed, the machine turns into a full robotic station.



360°-all-round accessible peripheral protection system for the easiest positioning of bulky parts and complex shapes.



Böhler ARC is a library of synergic lines designed on the Böhler Welding wires to achieve The Perfect Weld Seam. The complete Böhler ARC line.



4 Table divider, to divide the workbench in two spaces: operations and welding.



5 **Wireless Control buttons:**
 Green – add points along the welding path
 Red – welding on and off mode
 White – active robot-free drive mode
 Yellow – linear movements



6 Practical carry all drawers.



Simply move the robotic arm to the work piece and start teaching.

MORE REACH, HIGHER PAYLOAD.

Take your welding operations to the next level with the CO-BRO® FLEX, featuring the advanced UR10e Cobot from Universal Robots.



THE CO-BRO® FLEX WITH UR10E COBOT OFFERS:

- » **Extended reach:** Cover more area and tackle larger projects.
- » **Higher payload:** Lift heavier components for improved efficiency.
- » **Precision:** Achieve precise, even welds with a repeatability of ± 0.05 mm.
- » **Versatility:** Ideal for diverse welding tasks in different industries.
- » **Increase your welding productivity with the UR10e** – more flexibility, less downtime.
- » **Choose your inverter technology.**

| | |
|---|---|
|  Reach 1,300 mm / 51.2 in |  Payload 12,5 kg / 27.55 lbs |
|  Footprint Ø 190 mm |  Weight 33,5 kg / 73.9 lbs |



“OPERATE FROM ANY POSITION – NO MATTER WHERE YOU ARE”

Wireless Control Buttons - detach the teaching controls and operate from any position, no matter where you are.

- » The YELLOW button controls linear movements towards and away from the workpiece. The last position before the welding arc is ignited is set as the starting point for the weld.
- » Press and hold the WHITE button to activate the robot's free-drive mode.
- » The RED button is used to ignite and extinguish the welding arc, automatically switching between ON and OFF modes.
- » The GREEN button is used to add points along the welding path. It only works in the “MIG MAG Welding machine: on” node and is disabled after the “MIG MAG Welding machine: off” node.



READY TO WELD.

FULLY EQUIPPED & READY TO WELD

The CO-BRO® FLEX is equipped with the Böhler Welding URANOS NX 5000 PME power source and supports several welding processes, including MIG/MAG, Pulsed MIG/MAG, TIG DC Lift and MMA. In combination with the WFR NX 1000 CLASSIC wire feeder, this configuration offers unrivaled precision and performance.

YOUR ADVANTAGES:

- » High-performance welding for demanding, heavy-duty cycles.
- » Hassle-free setup with pre-installed synergic lines tailored for various filler materials, eliminating the need for complex parameter adjustments.
- » Comprehensive software with a wide range of synergic welding programs, whether you're welding unalloyed, aluminum, stainless, or high-strength steels. Fully integrated Böhler ARC library.
- » The Böhler Welding Wire Feeder ensures smooth wire feeding, perfect for robotic applications and high-speed welding with the WFR NX 1000 Classic.
- » Key MIG/MAG functions include welding speed, arc dynamics, crater filler, spot welding, and MIG Bi-level for enhanced control and quality.
- » Exclusive MIG/MAG welding processes from Böhler Welding for the maximum welding quality and efficiency: ArcDrive, RapiDeep, PulsDrive, QuickPulse, CladPulse.





DID YOU KNOW?
Our URANOS NX power sources come with greenWave® technology to save energy consumption

PROTECT YOUR TEAM FROM WELDING FUMES.



UPGRADE YOUR
CO-BRO[®] FLEX WITH
A HIGH VACUUM FUME
EXTRACTION TORCH
AND UNIT

Ensure the Highest Health & Safety Standards for your Team

- » Protect your team with a high vacuum fume extraction torch and unit.
- » The torch connects to a compact welding fume extraction system that efficiently captures and filters welding fumes, providing over 99 % filtration efficiency.
- » The contaminated air is purified in a single-stage filtration process and can be safely redirected outside using an optional hose or duct system if desired.



DELIVERING THE PERFECT WELD SEAM

The Böhler ARC concept, proprietary high productivity welding processes and the premium Böhler welding consumables complete the picture bringing the Böhler Welding technical expertise to your workshop.

BÖHLER ARC



Böhler ARC is a library of synergic lines based on the Böhler Welding wires (solid and FCW). The operator simply selects the appropriate synergic line when programming and everything is all set. The welding process is immediately perfect, guaranteeing repeatability and consistent quality.



CURIOUS ABOUT OUR
PROCESS PERFORMANCE?
Join us on youtube

RAPIDEEP



Increase your welding speed by up to 50 % with RAPIDEEP. This innovative short and spray-arc MIG/MAG process features a unique wave shape to improve penetration, maximize productivity and significantly increase welding speed.

QUICKPULSE



Experience up to 50 % faster welding speeds with our advanced pulsed MIG/MAG process. Designed with a special wave shape, this innovative process improves penetration, maximizes productivity and outperforms standard pulsed MIG/MAG processes.

CLADPULSE



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

DIGITIZE YOUR WELDING PROCESS.

Optimize your welding process with digital solutions, allowing you to concentrate on what truly matters.

Having the right tools is essential to improve your workflow and maximize efficiency. Our digital solutions are purpose-built for you, offering total control and management over both manual and automated welding operations.

MATERIAL MANAGER

Select the perfect base materials and welding consumables, and receive welding recommendations at any time, 365 days a year. Ensure the best fit for your specific applications with real-time digital guidance.

EQUIPMENT CONFIGURATOR

Customize your ideal welding machine using our WeldNet® Equipment Configurator. From power sources and torches to cooling systems, wire feeds, carriages, and even welding programs – design the complete package tailored to your needs.

PROCESS MANAGER

Elevate your welding process to the next level with Process Manager – enhancing efficiency and precision like never before.

- » Connect the process manager to your welding equipment and gain real-time oversight and progress tracking of live welding activities, along with task management, remote adjustments, and monitoring.
- » Enjoy automated maintenance reminders, task prioritization.
- » Benefit from comprehensive cost controlling for full transparency across your workflow including personnel, materials and energy.
- » Enjoy full control of your data without the need to depend on a cloud system.





We're here to support you in optimizing your welding processes, increasing productivity and integrating them perfectly into your operations.



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weldTECH APPLICATION SERVICES.

EXPERIENCE THE EXCELLENCE

Our Technical Service Team is always ready to assist you and your team with any challenges you may face. Whether it's special welding training, support with the CO-BRO® FLEX or optimizing processes to enhance productivity – we are your dedicated partner every step of the way.

- » **Customized training**
- » **Installation and repair**
- » **Support for your CO-BRO® FLEX programming.**
- » **Tailored efficiency improvements in the welding process to meet your growing demands.**



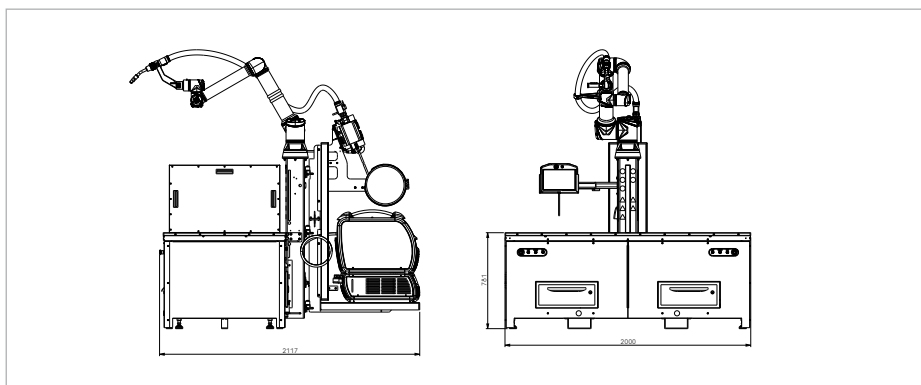
REACH OUT TO US FOR
ASSISTANCE

weldTECH Application Services |
voestalpine Böhler Welding

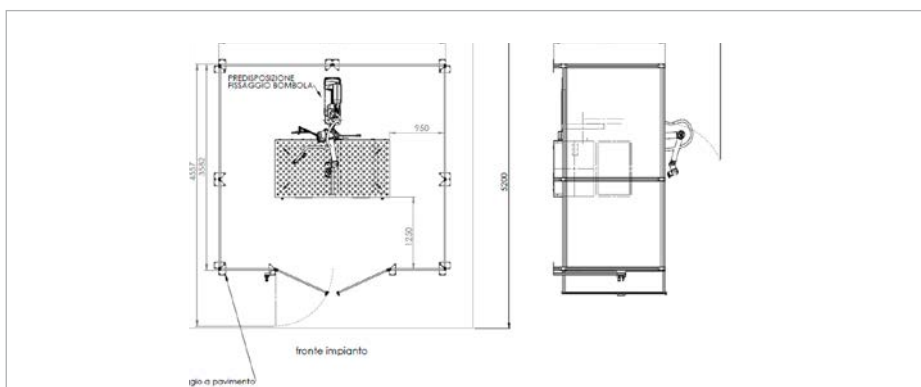


CO-BRO[®] FLEX

| Technical Data | |
|-------------------------------|---|
| Working area LxWxH [mm] | 2,000 x 1,000 x 1,200 or 2 x 1,000 x 1,200 (with divider) |
| Maximum permitted weight [kg] | 1,000 |
| Welding plant | URANOS NX 5000 PME - Water |
| Collaborative Robot | Universal Robot UR10e 6-axis collaborative robot, accuracy +/- 0.1 mm, with usable load in accordance with ISO 9283 (1300 mm arm) |
| Fume extraction systems | Integrated high vacuum (torch extraction) system (optional) ready for low vacuum (external suction) |
| Electrical utilities | 230V AC-50 Hz-1,000 W-collaborative robot 230 V AC 50 Hz-200 W-controls 3 x 400/230 V ±15 % 50 Hz 23.6/24.5 kVA welding system |
| Other utilities | Provision for compressed air Additional screen for weldNet management system [®] |
| Dimension [mm] | As per diagram |
| Weight [kg] | 1,000 |



Overall dimension of CO-BRO[®] FLEX workbench



Overall dimension of CO-BRO[®] FLEX including peripheral protection

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



