

CLOOS

OINEO ArcBot

## OINEO ArcBot

powered by

## CLOOS

The cobot arc-welding system from CLOOS, your robotic welding experts

Expert cobot welder built for productive collaboration with your skilled welders.

**ArcBoT** by **CLOOS** is your easy entry into the world of expert-level automated welding. From single pieces and small batches to daily, repeat parts; insuring economic, repeatable production with consistent high quality.





#### 'Ready to Weld' complete package



**ArcBoT** by **CLOOS** comes complete and ready for your move to automated welding – all components perfectly matched in a compact `Ready to Weld` production arc-welding package.

Expert-level automated welding is now accessible to American metal fabricators.

#### **Table Dimensions**

Length
Width
Height
Capacity 28

2000mm (79") 1000mm (39") 890mm (35") 2800kg (6173lbs)

\*\*ArcBoT shown with some optional equipment



#### Simple operation

No previous knowledge of robot programming required

#### **Quick programming**

Automated welding from batch size one

#### **Compact design**

Space-saving for flexible adaptation to your production environment

#### **Excellent welding quality**

Reproducible welding results for maximum efficiency

#### **Great ROI opportunities**

High economic efficiency with short amortization time

## **Exact. Intuitive and Safe**

Torque sensing in each joint enables safe and precise **CLOOS Freedrive** lead-through teaching of welds and movement between welds. This intuitive operation significantly speeds setup on new welds, driving gains in your production welding efficiency.

Your skilled welder, using macros specifically developed for CLOOS expert welding, directs the entire process via the user-friendly, tablet interface.

CLOOS intelligent safety with automatic wire retraction and power cut-off guarantees safe setup and operation. Even restarts are safe and simple without the time-consuming need for multi-step recovery and repositioning.



# Expert-level of safety, control and performance in production cobot welding

Combining the proven, high performance of the CLOOS MIG/MAG welding power source with our precision-engineered cobot, insures the perfect delivery of production cobot welding. Relieving your skilled welders of the monotonous, repetitive tasks – while you benefit from consistent welding results and reproducible quality production.







**Highest precision** 

Torque sensors in all axes.



**Intuitive programming** 

User-friendly touch control panel with macros specially developed for welding.



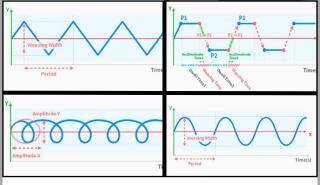
**Sensitive and safe control** 

Foot switch for freedrive mode.



Finger-forced stop & simple restart

Precise power cut-off & no unlocking the cobot on restart.



#### 4 built-in weaving patterns

Weaving patterns for all welding conditions.



## **ANSI/CE/OSHA Safety Compliance**

Automatic wire retraction for maximum operator safety.



## Precise and robust

The 6-axis QINEO ArcBoT has a range of 1,300 mm and a payload of up to 10kg. A sensitive torque sensor in each axis enables optimum weight determination of the welding equipment. This is the basis for a very sensitive positioning of the QINEO ArcBot when programming the points as well as for a precise power cut-off on contact (finger-forced stop). The QINEO ArcBoT mechanics has a very robust design and is perfectly suited for industrial welding operation.

Technical data		
Axes	6	
Payload	10kg (22lbs)	
Range	1300mm (53in)	
Speed	1m/s (197ft/min)	
Repeatability	± 0.1mm (0.004in)	
<b>Operating Temperature</b>	5-45°C (41-113°F)	
Weight	33kg (72.6lbs)	
<b>Mounting position</b>	Floor, ceiling, wall	
Type of protection	IP54	
Movement per axis	(Working angle/speed)	
Axis 1	± 360° / 120°/s	
Axis 2	± 360° / 120°/s	
Axis 3	± 360° / 180°/s	
Axis 4	± 360° / 225°/s	
Axis 5	± 360° / 225°/s	
Axis 6	± 360° / 225°/s	



With a large range of proven and innovative welding processes, we offer you solutions for the future providing excellent quality, maximum efficiency and productivity. No matter if thick or thin, steel, chrome-nickel or aluminum – here you find the right welding process for every product requirement.



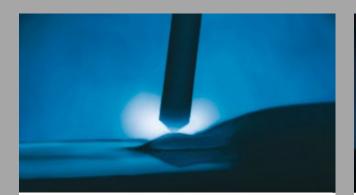
#### **Control Weld**

Reliable MIG/MAG welding process for thin and thick materials



#### **Vari Weld**

MIG/MAG pulsed arc for optimum welding results even under demanding conditions



#### **Root Weld**

Energy-reduced, controlled MIG/MAG short arc for special requirements



#### **Rapid Weld**

High-capacity MIG/MAG spray arc for efficient welding



#### **Fine Weld**

Extremely low spatter MIG/MAG short arc for mixed gas and CO<sup>2</sup> applications







This welding power source offers you an easy entry into the world of automated welding. Use the advantages of standard processes AND five available CLOOS welding processes, including Fine Weld (particularly good for thin, coated plates and fine visible weld seams). This allows you to start welding immediately - without a long parameter search.

Welding current	20A/15V - 400A/34V
Welding current at 60% dc	400A
Welding current at 100% dc	350A
Mains voltage	480V 3ph
Mains slow, fuse acting	32A
Protection type	IP23
Dimensions	720 x 340 x 500mm
	28 x 13.5 x 20"
Weight	63kg (139lbs)
Weight of cooling unit	18.5kg (41lbs)



#### QINEO QWD-R1 Eco

The high motor power ensures optimum traction of the wire feed. In addition, large roller diameters give the wire drive a high traction. Together they guarantee optimum ignition properties and a consistently high weld quality.



#### **MRW 510 Evo**

This robust robotic welding torch provides all the capacity you need for virtually all cobot applications. It has excellent cooling due to the highly efficient water circuit in the torch body, which provides a long service life for the consumables.

Model	Qineo QWD-R1 Eco
Wire feed speed	Max 30m/min (1180 ipm)
Weight	6kg (13lbs)
Wire diameter range	0.8-2.0mm (0.30-1/16")
Dimensions	342 x 203 x 215mm
	13.5 x 8 x 8.5"

Model	MRW 510evo
Colling	Water-cooled
Weight	6kg (13lbs)
Capacity, Mixed gas	520A
Capacity, CO2	570A
Duty cycle	100%
Bend angle	35° (+ 10° torch bracket)



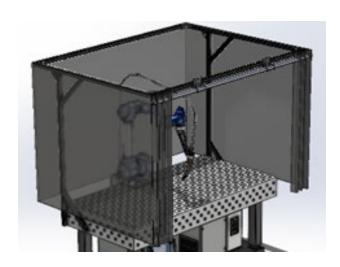
## **Optional Enhanced Safety Equipment**



**Fume Extraction Torch** 

Instead of investing in large fume collection hoods and complex piping systems, the CLOOS Fume Extraction torch allows the welding fume to be extracted directly at the welding torch. All the equipment is contained on the ArcBoT table so it does not affect the portability of the cell. You get maximum effect with minimal investment..

- ✓ Reduced Investment cost
- ✓ Minimal space requirement
- ✓ Lower operating cost
- √ No interference loading/unloading
- ✓ Up to 97% fume capture



#### **Arc Flash Protection**

This simple curtain enclosure is an inexpensive solution to protect the operators from potentially harmful arc radiation. The easy-sliding curtain allows for simple part loading/unloading. Since the frame is directly attached to the table, it moves with the system the arc flash protection is always available.

- ✓ Low Investment cost
- √ Simple operation
- ✓ Portable protection
- ✓ NFPA Fire retardant material
- ✓ Protect operator and proximity works from harmful UV radiation
- ✓ Contains welding sparks



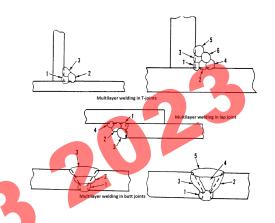
## **Upcoming Functionality**

#### **Tactile Sensing**



To correct for deviations in the part location quickly and accurately, the CLOOS tactile gas nozzle sensor checks the start and/or end positions—and corrects the programmed welding path correspondingly. The tactile gas nozzle sensor can be combined with the through-arc sensor for a very robust solution.

#### **Multi-pass Welding**



CLOOS Multi-pass software allows for the welding of multi-pass welds based on the location of the root pass. This reduces programming time and complexity for heavy welds. Once the root pass is programmed, all subsequent welds are set as an offset from the initial pass.



### All Over the World!



#### **CLOOS Robotic Welding**

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Subject to technical alterations.

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