

A close-up photograph of a QINEO ArcBoT collaborative robot arm. The arm is white and blue, with the brand name 'QINEO ArcBoT' printed vertically on its upper section. It is equipped with a welding torch and is actively welding a metal component. Bright blue sparks are visible at the point of contact between the torch and the metal. The background is dark and out of focus, highlighting the robot and the welding process.

## QINEO ArcBoT Cobot Welding System

Optimum human-robot collaboration  
Your easy entry into the world of  
automated welding!

**CLOOS**

Weld your way.

## Cobot meets high-tech welding technology

The CLOOS QINEO ArcBoT offers an easy entry into the world of automated welding. With the QINEO ArcBoT, you can weld even small batch sizes economically and with consistently high quality. The high-tech MIG/MAG welding power source and the very precise Cobot complement each other perfectly. In addition to the relief of the employees – especially with monotonous, repetitive tasks – you benefit from excellent welding results due to the reproducible quality.

- ▣ **Quick programming**  
Automated welding from batch size 1
- ▣ **Simple operation**  
No previous knowledge of robot programming required
- ▣ **"Ready to weld" complete package**  
Installation ready for welding within a few hours
- ▣ **Excellent welding quality**  
Reproducible welding results for maximum efficiency
- ▣ **High economic efficiency**  
Short payback time
- ▣ **Compact design**  
Space-saving for flexible adaptation to your production environment

## Exact, intuitive and safe

A torque sensor in each axis allows the QINEO ArcBoT to be programmed and moved precisely. The intuitive operation significantly increases work efficiency. The user can make individual adjustments on the user-friendly touch control panel with macros specially developed for welding. In addition, the Freedrive option with foot switch and the intelligent safety concept guarantee sensitive and safe control of the QINEO ArcBoT. Another special feature is the simple restart after an emergency stop as no extensive unlocking or free movement of the robot is necessary.



## Highest precision:

Torque sensors in all axes



## Finger-forced stop:

Very precise power cut-off when touching the robot



## Intuitive programming:

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



## Simple restart after emergency stop:

No unlocking or free movement of the robot necessary



## Sensitive and safe control:

Foot switch for freedrive mode



## CE conformity:

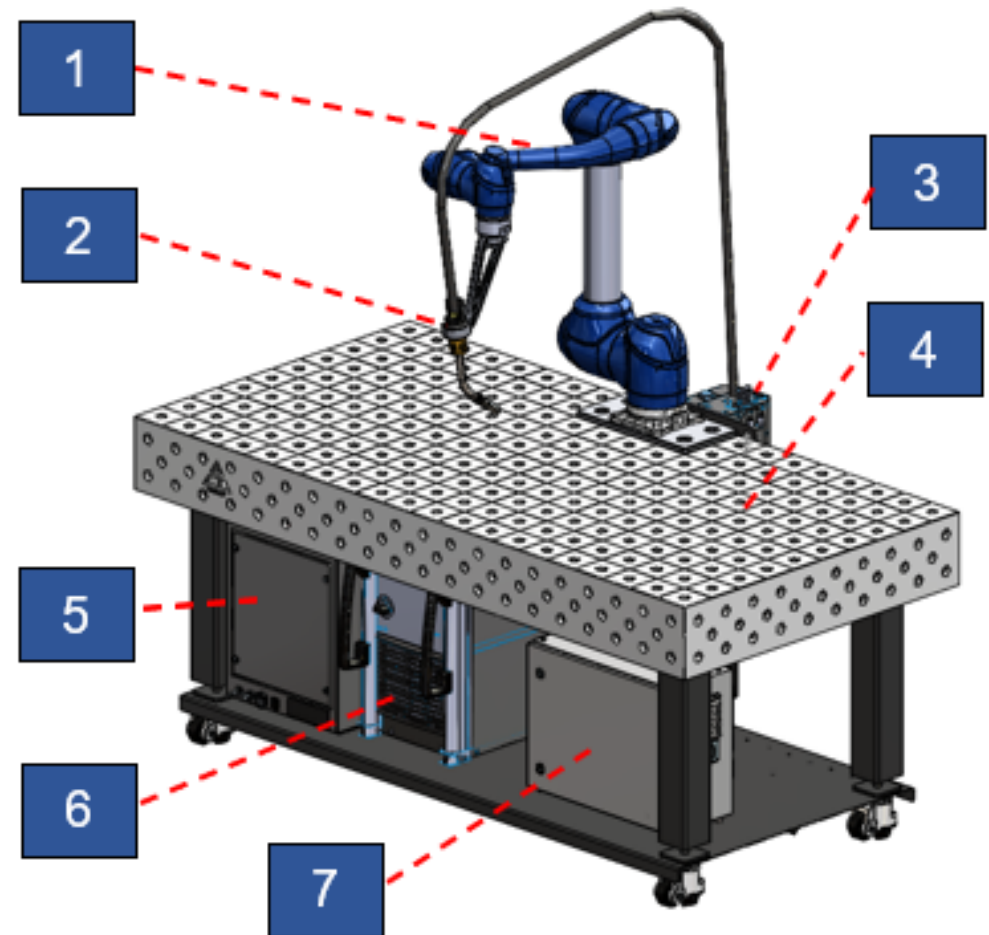
Automatic wire retraction for maximum work safety



## "Ready to weld" complete package

The QINEO ArcBot includes all components being necessary for automated welding – perfectly matched to each other and easy to mount. The compact "Ready to weld" complete package is delivered completely ready for operation which ensures a problem-free integration into existing production processes. The integrated safety components ensure the necessary personal protection. An electrically movable protective screen mounted to the optional welding table protects the surroundings from the UV radiation generated during welding.

1. Qineo ArcBoT 6-axis cobot arm with 6 torque sensors
2. 350-amp gas-cooled welding torch package
3. 4-roller wire drive unit
4. 1000mm x 2000mm mobile welding table
5. Fume Extraction unit (optional)
6. Qineo StarT 406 high-tech welding power source
7. Robot Controller



## QINEO ArcBoT – Precise and robust

The 6-axis QINEO ArcBoT has a range of 1,300 mm and a payload of up to 10 kg. 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
Pay load	10 kg
Range	1300 mm
Speed	1 m/s
Repeatability	± 0,1 mm
Operating temperature	5-45°C
Weight	33 kg
Mounting position	Floor, ceiling, walls
Protection class	IP54
Movement per axis	(Working angle/speed):
Axis 1	±360° / 120°/s
Axis 2	±360° / 120°/s
Axis 3	±160° / 180°/s
Axis 4	±360° / 225°/s
Axis 5	±360° / 225°/s
Axis 6	±360° / 225°/s

\* at an ambient temperature of 40°C



## QINEO StarT 406 Premium- High-tech welding equipment

Use the advantages of the five available CLOOS welding processes in addition to the standard processes. This allows you to start welding immediately – without a long parameter search. With the QINEO StarT406 you can use the energy-reduced, current-controlled MSG short arc process Fine Weld. Due to the minimised spatter formation, Fine Weld is suitable particularly for thin, coated plates and fine visible weld seams. Benefit from numerous optional components and functions. This makes the QINEO StarT your individual power source - exactly as you need it for your automated welding tasks

- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Extremely low-spatter Fine Weld process ensures excellent results with thin plates and fine welds
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the target with the preset five CLOOS welding processes
- Prepared for many commonly used standard interfaces
- Modular design and extensive accessories for flexible application possibilities adapted to individual requirements

QINEO StarT	QINEO StarT 406
Welding current	20 A / 15 V - 400 A / 34 V
Welding current at 60% duty cycle*	400 A
Welding current at 100% duty cycle*	350 A
Open circuit voltage	78.7 V at 3 x 400 V 74.6 V at 3 x 380 V
Mains voltage	380V - 400 V / 3 phases
Connection cable	4 x 6 mm <sup>2</sup>
Mains fuse slow-acting	32 A
Protection class	IP 23
Insulation class	F
Cooling type	F
Dimensions L/W/H	720 x 340 x 500 mm
Weight of power unit	63 kg

\* at an ambient temperature of 40°C



Welding torch



Wire drive QINEO QN-WDA-20 Eco

Wire drive unit	QINEO QN-WDA-20
Wire feed speed	max. 30 m / min
Dimensions L/W/H	342 / 203 / 215 mm
Weight	6 kg
Wire diameter	0,8.. 2.0 mm

Use the QINEO ArcBot for other welding power sources of the QINEO product series, too!



Power source QINEO StarT 406 Premium

### Fume extraction torch with filter unit

The measures required for collecting, extracting and filtering the flue gases in robotic systems are often associated with great effort. Large collection hoods with curtains, complex pipe systems and a large filter unit are necessary to extract and clean the polluted air. When extracting directly at the welding torch, the volume of polluted air is much smaller. By using the extraction welding torch system, you have to invest significantly less in extraction technology, air ducting system and filter device – with the same effect. Another advantage: Due to the significantly better energy efficiency as well as the minimised effort for cleaning and replacement of the filter components, your operating costs are considerably reduced.

#### Reduced investment volume with low operating costs

- **Reduced investment costs:**  
Elimination of the extraction hood and the air control systems
- **Minimised expenditure:** A flexible hose with a small diameter replaces the complex pipe system for discharging the contaminated air to the filter unit
- **Less space required:** Due to the smaller volume of contaminated air, a smaller filter unit is necessary
- **Lower operating costs:** Lower energy consumption (only 1.0 to 1.5 kW)
- **Optimised process flow:** No interference during loading and unloading of the workstations due to extraction hoods or exhaust air ducts





## QINEO ArcBoT at Glüpker: Economic welding of small batch sizes!

In order to weld even small batch sizes economically and with consistently high quality, the company uses three QINEO ArcBot welding systems by CLOOS. Now, the QINEO ArcBoT mainly weld smaller components up to a size of half a metre. A torque sensor in each axis allows the QINEO ArcBoTs to be programmed and moved precisely. The user can make individual adjustments on the user-friendly touch control panel with macros specially developed for welding. In addition, the Freedrive option with foot switch and the intelligent safety concept guarantee sensitive and safe control of the QINEO ArcBoT. The QINEO ArcBot Welding Systems are each equipped with the high-tech QINEO Next MIG/MAG welding power source which is characterised by versatile high-performance welding processes and excellent welding properties.

Small parts for industrial vehicles



More on CLOOS TV

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 aluminium – here you find the right welding process for every product requirement.

## Efficiency ...



### **Rapid Weld**

High-capacity MIG/MAG spray arc for efficient welding



### **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



### **Speed Weld**

Stable MIG/MAG pulsed arc for numerous applications



### **Fine Weld**

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



The way ...  
... to your success.



## Consulting

With this comprehensive “pre-service”, we take care of your project from the beginning and transfer our integrated process expertise to your component..



## Commissioning

Our specialists carry out the installation step-by-step in your production hall and test your system for faultless functionality.



## Planning

We elaborate a solution which perfectly meets your individual requirements.



## Training

We train your employees and service technicians in programming, operation and maintenance in our modern training centre.



## Design

Due to the modular design of our product series we develop customised solutions which meet all your production requirements.



## Service

Our competence team advises you on any extensions, modifications and retrofits of your existing robot and welding systems.



## Production

Welding machine and robot technology is our strength - including our core competence: the arc.

# All over the world

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Subject to technical alterations.

# CLOOS

Weld your way.

