

A robotic arm with a blue and white body, labeled 'QINEO ArcBoT', is shown in a welding position. The arm is holding a welding torch with a red and black handle, which is emitting a bright blue light and sparks as it welds a metal component. The background is dark and out of focus.

## 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



## Optimum personal protection:

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. 4-roller wire drive unit
2. Wire feed system
3. QINEO ArcBoT
4. Fume extraction welding torch
5. Optional welding table
6. Optional manual linear axis
7. QINEO operating module
8. QINEO Welding power source



## QINEO ArcBoT – Precise and robust

The 6-axis QINEO ArcBoT QN-AB-130-10 has a range of 1,300 mm and a payload of up to 10 kg. With the QN-AB-170-6, a second ArcBoT mechanics with a reach of 1,700 mm and a payload of 6 kg is available. 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	QN-AB-130-10	QN-AB-170-6
Axes	6	6
Pay load	10 kg	6 kg
Range	1300 mm	1700 mm
Speed	1 m/s	1 m/s
Repeatability	± 0,05 mm	± 0,1 mm
Operating temperature	0-45°C	0-45°C
Weight	34 kg	35.5 kg
Mounting position	Floor, ceiling, walls	Floor, ceiling, walls
Protection class	IP54	IP54
<b>Movement per axis</b>	<b>(Working angle/speed):</b>	
Axis 1	±360° / 120°/s	±360° / 100°/s
Axis 2	±360° / 120°/s	±360° / 100°/s
Axis 3	±160° / 180°/s	±160° / 150°/s
Axis 4	±360° / 225°/s	±360° / 225°/s
Axis 5	±360° / 225°/s	±360° / 225°/s
Axis 6	±360° / 225°/s	±360° / 225°/s

\* at an ambient temperature of 40°C



*This illustration shows optional equipment!*

# QINEO ArcBoT Cobot Welding System

qineo

## 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 StarT 406 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
Weight of cooling module	28 kg
Weight of Eco cooling module	18.5 kg

\* at an ambient temperature of 40°C

Wire drive unit	QINEO QN-WDA-20 Eco
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!



Welding torch



Wire drive QINEO QN-WDA-20 Eco



Power source QINEO StarT 406 Premium



Cooling module



Carriage

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Weld your way.

## QINEO QuesT: High-tech welding power source for demanding TIG tasks

Start your next TIG mission with QINEO QuesT: The new high-tech welding power source solves highly demanding TIG tasks reliably and efficiently. The QINEO QuesT is characterised by precise ignition properties and optimal process functions. The stable arc which is easy to control over the entire power range guarantees excellent welding results. With TIG pulsing, you benefit from the fast transitions even with large capacity differences – and thus obtain perfect welds. The Deep Pulse function stabilises and focuses the arc so that the arc pressure is increased. This can result in both deep penetration for thick sheets and high speeds for thin sheets. A multitude of optional components and functions make the QINEO QuesT to be your individual power source – exactly how you need it for your welding tasks.

- **Excellent ignition properties** from 3 amps upwards
- **Optimum process functions** for best welding results
- **Fast transitions** even with large capacity differences (TIG pulses)
- **Stable and focused arc** for deep penetration or high welding speeds (Deep Pulse up to 20 kHz)
- **Modular design** for individual adjustment of the QINEO QuesT to your needs
- **Comfortable operating concept** for easy, quick and intuitive handling
- **Digital networking** with all common industrial interfaces
- **High-quality components** and a robust design in proven CLOOS quality



Welding torch



Power source QINEO QuesT 402 DC



Cooling module



Carriage

### QINEO QuesT

QINEO QuesT	QINEO QuesT 402 DC
Welding current	3 A / 10.1 V - 400 A / 26.0 V
Welding current at 60% duty cycle*	400 A / 26.0 V
Welding current at 100% duty cycle*	350 A / 24.0 V
Open circuit voltage	80V
Mains voltage	380V - 480 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	819 x 348 x 667 mm
Weight	74 kg

\* at an ambient temperature of 40°C



### Optional: Fume extraction torch with filter unit

The measures required for collecting, extracting and filtering the fumes in robot 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)



## 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.



More on CLOOS TV

Small parts for industrial vehicles



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



### TIG Weld

TIG process for clean and precise welding

# All over the world

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Subject to technical alterations.

# CLOOS

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