QINEO

Product overview 2023

High-quality power sources for MIG/MAG and TIG welding: Powerful, comfortable and suitable for universal use

CLOOS

Weld your way.

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QINEO power sources for MIG/MAG welding

CLOOS

Solving new tasks

The perfect solution for every requirement

The new MIG/MAG multiprocess QINEO NexT 452 DC welding machine expands the established CLOOS product portfolio. Benefit from many utilisation possibilities - from the basic welding machine for manual welding to the multiprocess welding machine for automated robot welding. No matter if manual or automated welding, thin or thick materials or materials requiring an A/C Solution – the QINEO NexT offers the perfect solution for every task.

Modularity

The configuration possibilities of the QINEO NexT are as flexible as the welding applications are versatile. This is guaranteed by the consistently modular product concept. From the capacity class to the wire tip, each QINEO NexT is customised. A QINEO NexT, exactly as you need it to cope with your tasks quickly and efficiently.

Operation

Welding torch

Wire drive unit

Power unit

Cooling module

Substructure

QINEO NexT 452 AC Premium

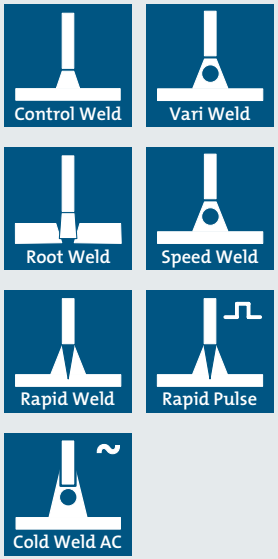
- High-quality inverter technology for excellent weld quality
- Very wide range of applications due to the Cold Weld AC welding process
- Robust housing and good user-friendly operation guarantee a high availability
- Prepared for all commonly used standard interfaces
- The Premium operating module, designed for the highest level of welding
- A wide range of accessories guarantees that the NexT can be adapted to your needs

Application

Capacity

450 A
60%
duty cycle

Processes



CLOOS

QINEO NexT 452/602/612 Premium

- High-quality inverter technology for excellent weld quality
- Robust housing and good user-friendly operation guarantee a high availability
- Prepared for all commonly used standard interfaces
- The Premium operating module, designed for the highest level of welding
- A wide range of accessories guarantees that the NexT can be adapted to your needs

Application

Capacity

450 A 60% duty cycle

600 A 60% duty cycle

600 A 100% duty cycle

Processes

QINEO NexT 452/602 Master

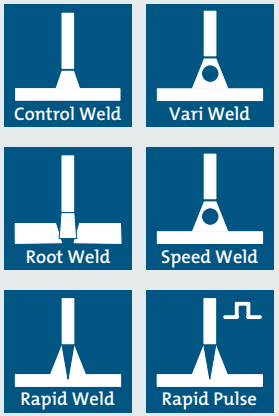
- High-quality inverter technology for excellent weld quality
- Robust housing and good user-friendly operation guarantee a high availability
- Choose the wire drive that best suits the welding task!
- The MasterPlus Compact operating module ensures a simple operation of the QINEO NexT
- A wide range of accessories guarantees that the NexT can be adapted to your needs

Application

Capacity

450 A	600 A
60% duty cycle	60% duty cycle

Processes



QINEO NexT 456 Premium

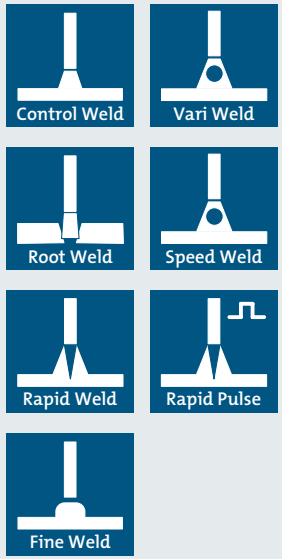
- High-quality inverter technology for excellent weld quality
- Extremely low-spatter Fine Weld process ensures excellent results with thin plates and fine welds
- Robust housing and good user-friendly operation guarantee a high availability
- Prepared for all commonly used standard interfaces
- The Premium operating module, designed for the highest level of welding
- A wide range of accessories guarantees that the NexT can be adapted to your needs

Application

Capacity

450 A
60%
duty cycle

Processes



QINEO NexT 456 Master

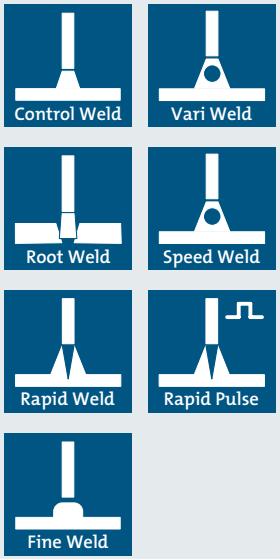
- High-quality inverter technology for excellent weld quality
- Extremely low-spatter Fine Weld process ensures excellent results with thin plates and fine welds
- Robust housing and good user-friendly operation guarantee a high availability
- Prepared for all commonly used standard interfaces
- The Premium operating module, designed for the highest level of welding
- A wide range of accessories guarantees that the NexT can be adapted to your needs

Application

Capacity

450 A
60%
duty cycle

Processes



Flexible application possibilities

The right QINEO for your application

		Application		Process							Processes											
		Manual welding	Automated welding	MIG/MAG Single wire	MIG/MAG Single wire pulse	MIG/MAG Single wire AC	MIG/MAG Tandem	MIG Brazing	TIG DC	TIG AC/DC	Tandem Weld	Vari Weld	Speed Weld	Root Weld	Rapid Weld	Rapid Pulse Weld	MoTion Vari Weld	MoTion Control Weld	Control Weld	Cold Weld	Fine Weld	Laser Hybrid Weld
QINEO NexT 452 AC Premium			X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X		
QINEO NexT 452/602/612 Premium			X	X	X		X	X			X	X	X	X	X	X	X	X	X			
QINEO NexT 456 Premium			X	X	X							X	X	X	X	X			X		X	

Flexible application possibilities

The right QINEO for your application

		Application		Process							Processes											
		Manual welding	Automated welding	MIG/MAG Single wire	MIG/MAG Single wire pulse	MIG/MAG Single wire AC	MIG/MAG Tandem	MIG Brazing	TIG DC	TIG AC/DC	Tandem Weld	Vari Weld	Speed Weld	Root Weld	Rapid Weld	Rapid Pulse Weld	MoTion Vari Weld	MoTion Control Weld	Control Weld	Cold Weld	Fine Weld	Laser Hybrid Weld
QINEO NexT 452/602 Master		X		X	X							X	X	X	X	X			X			
QINEO NexT 456 Master		X		X	X							X	X	X	X	X			X		X	

Technical data

The most important performance features at a glance

QINEO NexT	QINEO NexT 452 AC Premium	QINEO NexT 612 Premium	QINEO NexT 452 Premium/Master	QINEO NexT 602 Premium/Master	QINEO NexT 456 Premium/Master
Welding current	25 A / 15 V - 450 A / 36.5 V	15 A - 600 A	25A/15V - 450A/36.5V	25A/15V - 600A/44V	15 A - 450 A
Welding current at 60% duty cycle*	450 A / 36.5 V		450 A / 36.5 V	600 A / 44 V	450 A / 36,5 V
Welding current at 100% duty cycle*	350 A / 31.5 V	600 A / 44 V	350 A / 31.5 V	500 A / 39 V	350 A / 31,5 V
Open circuit voltage	75V	76 V - 96 V	80V	80V	76 V - 94 V
Mains voltage	380 V - 480 V / 3 phases	380 V - 480 V / 3 phases	380 V - 480 V / 3 phases	380 V - 480 V / 3 phases	380 V - 480 V / 3 phases
Connection cable	4 x 6 mm²	4 x 10 mm²	4 x 6 mm²	4 x 10 mm²	4 x 6 mm2
Mains fuse slow-acting	32 A	63 A	32 A	50 A	32 A
Protection class	IP 23	IP 23	IP 23	IP 23	IP 23
Insulation class	F	F	F	F	F
Cooling type	F	F	F	F	F
Dimensions L/W/H	720 x 340 x 782 mm	700 x 340 x 255 mm	720 x 340 x 500 mm	720 x 340 x 500 mm	720 x 340 x 500 mm
Weight of power unit	92 kg	63 kg	63 kg	65 kg	63 kg
Weight of cooling module	28 kg	28 kg	28 kg	28 kg	28 kg

Simply better welding

The MIG/MAG welding power source QINEO StarT offers an easy entry into the world of modern welding technology. Due to the excellent price-performance ratio, you can weld any workpiece at economic conditions. The heart of the QINEO StarT is an inverter power unit developed by CLOOS which clocks with a high frequency. This allows an even better arc control for excellent results: Due to the modular system with the Eco, Master and Premium versions you make the QINEO StarT to be your individual welding system. The QINEO StarT convinces with its easy, quick and intuitive operation. You benefit from the comfortable operating concept that you can adapt to your individual requirements. In addition, the QINEO StarT is characterised by high-quality components and a robust design – as technology leader we guarantee maximum performance in proven CLOOS quality.

Modularity

The configuration possibilities of the QINEO StarT are as flexible as the welding applications are versatile. This is guaranteed by the consistently modular product concept. From the capacity class to the wire tip, each QINEO StarT is customised. A QINEO StarT, exactly as you need it to cope with your tasks quickly and efficiently.

Operation

Welding torch

Wire drive unit

Power unit

Cooling module

Substructure

QINEO StarT 406 Premium

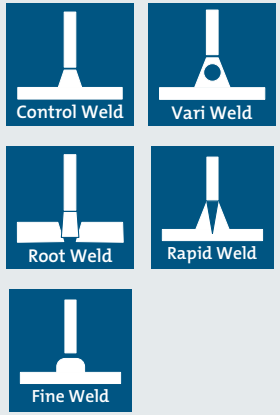
- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Extremely low-spatter Fine Weld process ensures excellent results with thin plates and fine welds
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the 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

Application

Capacity

450 A
60%
duty cycle

Processes



QINEO StarT 406 Master

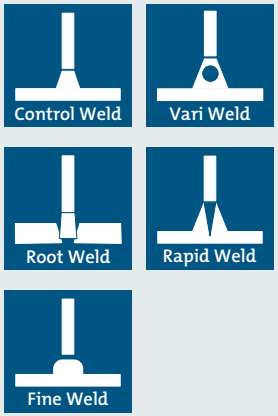
- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Extremely low-spatter Fine Weld process ensures excellent results with thin plates and fine welds
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the 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

Application

Capacity

400 A
60%
duty cycle

Processes



QINEO StarT Premium

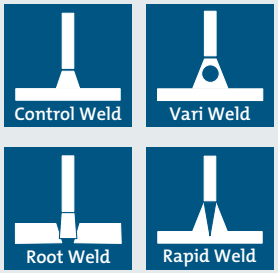
- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the target with the preset four CLOOS welding processes
- Prepared for many commonly used standard interfaces
- Modular design and extensive accessories for flexible application possibilities adapted to individual requirements

Application

Capacity

500 A
60%
duty cycle

Processes



QINEO StarT Master

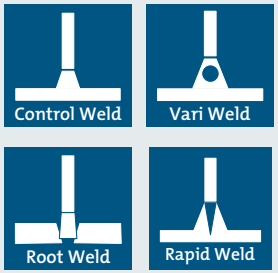
- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the target with the preset four CLOOS welding processes
- Choose the wire drive that best suits the welding task
- Modular design and extensive accessories for flexible application possibilities adapted to individual requirements

Application

Capacity

400 A	500 A
60% duty cycle	60% duty cycle

Processes



QINEO StarT Compact Master

- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the target with the preset four CLOOS welding processes
- Choose the wire drive that best suits the welding task
- Modular design and extensive accessories for flexible application possibilities adapted to individual requirements

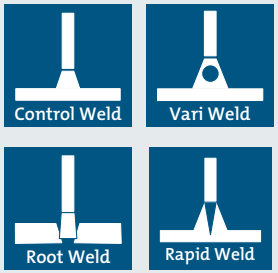
Application

Capacity

400 A
60%
duty cycle

500 A
60%
duty cycle

Processes



QINEO StarT Eco

- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the target with the preset four CLOOS welding processes
- Choose the wire drive that best suits the welding task
- Modular design and extensive accessories for flexible application possibilities adapted to individual requirements

Application

Capacity

400 A	500 A
60% duty cycle	60% duty cycle

Processes

QINEO StarT Compact Eco

- High-quality components with optimum price/ performance ratio and excellent welding characteristics
- Simple, quick and intuitive operation with the MasterPlus Compact operating module
- Faster to the target with the preset four CLOOS welding processes
- Choose the wire drive that best suits the welding task
- Modular design and extensive accessories for flexible application possibilities adapted to individual requirements

Application

Capacity

400 A
60%
duty cycle

500 A
60%
duty cycle

Processes

Flexible application possibilities

The right QINEO for your application

		Application		Process							Processes									
		Manual welding	Automated welding	MIG/MAG Single wire	MIG/MAG Single wire pulse	MIG/MAG Single wire AC	MIG/MAG Tandem	MIG Brazing	TIG DC	TIG AC/DC	Tandem Weld	Vari Weld	Speed Weld	Root Weld	Rapid Weld	MoTion Vari Weld	MoTion Control Weld	Control Weld	Cold Weld	Fine Weld	Laser Hybrid Weld
QINEO StarT 406 Premium			X	X								X		X	X			X		X	
QINEO StarT 406 Master		X		X								X		X	X			X		X	
QINEO StarT 402/502 Premium			X	X								X		X	X			X			

Flexible application possibilities

The right QINEO for your application

		Application		Process							Processes									
		Manual welding	Automated welding	MIG/MAG Single wire	MIG/MAG Single wire pulse	MIG/MAG Single wire AC	MIG/MAG Tandem	MIG Brazing	TIG DC	TIG AC/DC	Tandem Weld	Vari Weld	Speed Weld	Root Weld	Rapid Weld	MoTion Vari Weld	MoTion Control Weld	Control Weld	Cold Weld	Fine Weld	Laser Hybrid Weld
QINEO StarT 402/502 Master		X		X								X		X	X			X			
QINEO StarT 402/502 Compact Master		X		X								X		X	X			X			
QINEO StarT 402/502 Eco		X		X										X	X			X			
QINEO StarT 402/502 Compact Eco		X		X										X	X			X			

Technical data

The most important performance features at a glance

QINEO StarT	QINEO StarT 406 Premium/Master	QINEO StarT 402 Premium/Master/Eco	QINEO StarT 502 Premium/Master/Eco
Welding current	20 A / 15 V - 400 A / 34 V	20 A / 15 V - 400 A / 34 V	20 A / 15 V - 500 A / 39 V
Welding current at 60% duty cycle*	400 A		500 A
Welding current at 100% duty cycle	350 A	400 A	400 A
Open circuit voltage	78.7 V at 3 x 400 V 74.6 V at 3 x 380 V	78.7 V at 3 x 400 V 74.6 V at 3 x 380 V	78.7 V at 3 x 400 V 74.6 V at 3 x 380 V
Mains voltage	380V - 400 V / 3 phases	380V - 400 V / 3 phases	380V - 400 V / 3 phases
Connection cable	4 x 6 mm2	4 x 6 mm2	4 x 6 mm2
Mains fuse slow-acting	32 A	32 A	32 A
Protection class	IP 23	IP 23	IP 23
Insulation class	F	F	F
Cooling type	F	F	F
Dimensions L/W/H	720 x 340 x 500 mm	720 x 340 x 500 mm	720 x 340 x 500 mm
Weight of power unit	63 kg	63 kg	63 kg
Weight of cooling module	28 kg	28 kg	28 kg
Weight of Eco cooling module	18.5 kg	18.5 kg	18.5 kg

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Manual welding

The QINEO welding power sources for manual welding are optimally equipped for versatile applications. Whether light and compact machines for repair welding on construction sites or the most powerful power sources for industrial use - the diverse range of QINEO welding machines offers you the optimum solution for your manual welding tasks. All welding units are infinitely variable and have a powerful inverter. You can also benefit from the simple operation - the synergy curves supplied for all common materials make using the QINEO welding machines child's play!

QINEO Pulse Pro

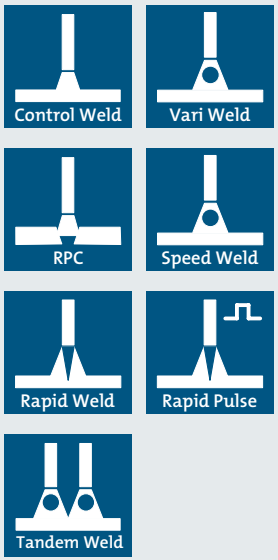
- Powerful and versatile: Three capacity classes with seven different welding processes
- Precision by technology: Two independent fine adjustments for the perfect arc
- Compensation of the external circuit influences
- Best quality: Optimum ignition and welding characteristics
- Flexibility: Operating panel in power source, wire drive or remote control according to requirement

Application

Capacity

400 A	600 A
60% duty cycle	60% duty cycle

Processes



Technical data

The most important performance features at a glance

QINEO Pulse Pro	QINEO Pulse 451 Pro	QINEO Pulse 601 Pro
Welding current	40 A - 450 A	40 A - 600 A
Welding current at 60 % duty cycle	450 A / 36.5 V	600 A / 44 V
Welding current at 100 % duty cycle	350 A / 31.5 V	465 A / 37.5 V
Open circuit voltage	75V	87V
Mains voltage	400 V / 50 Hz / 3 phases	400 V / 50 Hz / 3 phases
Special voltages	380 V / 415 V / 440 V / 480 V / 500 V	380 V / 415 V / 440 V / 480 V / 500 V
Connection cable	4 x 6 mm^2	4 x 10 mm^2
Mains protection	32 A	50 A
Protection class	IP 23	IP 23
Insulation class	F	F
Cooling type	F	F
Dimensions L/W/H (without wire drive)	1226 x 630 x 741 mm	1226 x 630 x 741 mm
Weight (without wire drive)	194 kg	234 kg
Maximum track width	approx. 552 mm	approx. 552 mm
Operating modes	2-cycle, 4-cycle, Super-4-cycle, spot welding/interval external start (with operating modules MASTER PLUS and PREMIUM)	

QINEO QinTron

- Efficient: Excellent price/performance ratio and enormous energy-saving possibilities
- Flexible: Modular design for different welding processes and applications in one machine
- User-friendly: Comfortable operating concept for easy, quick and intuitive handling
- Integrated job memory for welding parameters ensures reproducible weld quality
- Robust: High-quality components and a robust design for indoor and outdoor applications at rough conditions

Application

Capacity

400 A
60%
duty cycle

500 A
60%
duty cycle

600 A
60%
duty cycle

Processes

Technical data

The most important performance features at a glance

QINEO QinTron	QinTron 400 QinTron Pulse 400	QinTron 500 QinTron Pulse 500	QinTron 600 QinTron Pulse 600
Welding current	20A/15V - 400A/36V	20A/15V - 500A/40V	20A/20V - 600A/44V
Welding current 40% duty cycle	–	–	600 A
Welding current 60% duty cycle	400 A	500 A	500 A
Welding current 100% duty cycle	400 A	400 A	400 A
Same power in the processes MIG/MAG, TIG (with Liftstart), stick electrode and gouging			
Open circuit voltage	64V	64V	64V
Mains voltage	380V-460V	380V-460V	380V-460V
Connection cable	4 x 6 mm²	4 x 6 mm²	4 x 6 mm²
Mains fuse/400V slow-acting	35 A	35 A	35 A
Protection class	IP 23	IP 23	IP 23
Insulation class	F	F	F
Cooling type	F	F	F
Dimensions L/W/H (basic machine)	740 x 350 x 430 mm	740 x 350 x 430 mm	740 x 350 x 430 mm
Weight (basic machine)	50.7	50.7	50.7

QINEO Micro Pulse 200 C / 300 C

- Versatile applications: A solution for all welding tasks
- Synergy mode: Quick setting of the welding parameters
- Easy to use: Synergy characteristic curves are included in the delivery
- Optimum power and weight ratio Light, easy to use and very powerful
- Robust construction: High level of stability of the devices

Application

Capacity

200 A
35%
duty cycle

300 A
35%
duty cycle

Processes

Spray Arc

Short Arc

Puls Arc

Technical data

The most important performance features at a glance

QINEO Micro Pulse	Micro Pulse 200 C	Micro Pulse 300 C
Welding current	5 A - 200 A	20 A - 300 A
Welding current at 35% duty cycle*	200 A	300 A
Welding current at 100% duty cycle	140 A	200 A
Open circuit voltage	65V	60V
Mains voltage (plug 5-pol. CEE)	230V	3 x 400 V
Connection cable	3 x 2,5 mm^2	4 x 2,5 mm^2
Mains fuse slow-acting	25 A	16 A
Protection class	IP 23 S	IP 23 S
Insulation class	H	H
Kind of cooling (torch)	gas-cooled	Gas cooled, water cooled
Dimensions L/W/H mm	500 x 280 x 420	560 x 280 x 390
Weight	17 kg	24 kg

*) at 40°C ambient temperature

QINEO Micro 300 C

- Versatile applications: A solution for all welding tasks
- Synergy mode: Quick setting of the welding parameters
- Easy to use: Synergy characteristic curves are included in the delivery
- Optimum power and weight ratio Light, easy to use and very powerful
- Robust construction: High level of stability of the devices

Application

Capacity

300 A
35%
duty cycle

Processes

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Technical data

The most important performance features at a glance

QINEO Micro	Micro 300 C
Welding current	20 A - 300 A
Welding current at 35% duty cycle*	300 A
Welding current at 100% duty cycle	200 A
Open circuit voltage	53V
Mains voltage (plug 5-pol. CEE)	3 x 400 V
Connection cable	4 x 2,5 mm^2
Mains fuse slow-acting	16 A
Protection class	IP 23 S
Insulation class	H
Kind of cooling (torch)	Gas cooled, water cooled
Dimensions L/W/H mm	560 x 280 x 390
Weight	21 kg

*) at 40°C ambient temperature

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The right torch for every requirement

The CLOOS welding torches are as versatile as the welding power sources. We have the suitable welding torch for each capacity class and for every requirement of manual welding.
The robust MHW manual welding torches are available in the capacity classes of 400 A, 500 A and 600 A. The generation of manual welding torches convinces by an excellent cooling due to the highly efficient water circuit in the torch body. This allows a very long service life of the consumables. All capacity classes have the same ergonomic handle and are slip-proof in the hand of the welder because of silicone inlays.

MHW manual welding torches

MHW-310

MHW-410 / MHW-510

Benefit from the CLOOS accessories:

- Excellent quality: Original accessories for faultless functionality
- Long service life: Reliable technology guarantees economic operation
- Highest availability: Quick delivery due to global service network

Manual welding torches	MHW-310	MHW-410	MHW-510
Type of cooling	Liquid-cooled	Liquid-cooled	Liquid-cooled
Capacity with mixed gas	310 A	410 A	520 A
Capacity with CO_2	350 A	450 A	570 A
Duty cycle	100%	100%	100%
Wire thicknesses	0.8-1.6	0.8-1.6	0.8-1.6
Equipped for wire	1.2	1.2	1.2
Bending angle	45°	45°	45°
Length cable assembly	3 m, 4 m, 5 m	3 m, 4 m, 5 m	3 m, 4 m, 5 m
Connection	CLOOS SZ, EURO	CLOOS SZ, EURO	CLOOS SZ, EURO

MHW-FEx manual welding torches with integrated welding fume extraction

Welding fume extraction

- Comply with the occupational exposure limit value according to Hazardous Substance Ordinance (GefStoffV).
- Protect your empoyees from harmful welding fumes.
- Profit from clean air and a better working environment.

Manual welding torches	MHG-FEx-250	MHG-FEx-300	MHW-FEx-320	MHW-FEx-500
Type of cooling	Gas-cooled		Liquid-cooled	
Capacity with mixed gas	250 A	300 A	320 A	500 A
Capacity with CO_2	280 A	320 A	360 A	550 A
Duty cycle	100%	100%	100%	100%
Wire thicknesses	0.8-1.2 mm	0.8-1.6 mm	0.8-1.6 mm	0.8-1.6 mm
Equipped for wire	1.0 mm	1.0 mm	1.0 mm	1.2 mm
Bending angle	45°	45°	45°	45°
Length cable assembly	3 m, 4 m, 5 m	3 m, 4 m, 5 m	3 m, 4 m, 5 m	3 m, 4 m, 5 m
Connection	EURO	EURO	EURO	EURO

Torch conditions

Standard welding torch Eco

Overview of your advantages:

- **Optimum gas coverage at the most compact design:** Good accessibility also in narrow components
- **Ergonomic handle:** Optimum handling and minimised strain on the wrists
- **High cooling capacity due to efficient water flow:** Maximum service life

Torch operating module Master

Additional advantages compared to the Eco version:

- **LED lamp:** Optimum illumination of the weld also in a poorly illuminated environment
- **Two-touch torch for up/down function:** Capacity adjustment, fine adjustment or Job switching before and during welding
- **Ergonomic triggers:** Perfectly adjusted pressure point of the triggers for a shake-free setting during welding even when wearing gloves

Torch operating module Premium

Additional advantages compared to the Eco and Master version:

- **4-touch torch with LED display:** Call and adjustment of all welding-relevant values
- **Individual parameter adaptation:** Adjustment of two parameters during welding and up to ten freely configurable setting parameters
- **Texts and symbols in the display:** Better understandability for the welder
- **Freely configurable trigger combinations:** For a maximum user-friendliness

qineo

The right function always at the right place

The operating sites of the welder can be very different. He has other demands on an operation at a stationary working place than when welding in a closed room (for example boiler or container). The QINEO operating concept offers a solution for every requirement. As an alternative to placing the operating module in the wire drive or in the power source, you can choose between the integrated remote control in the welding torch and a compact remote control with all the functions. You can also choose between operating modules for manual welding and for automated welding. This gives you a large selection of functions, tailored to your individual use of the QINEO. Convince yourself of the very simple, quick and intuitive operation of the QINEO welding power sources!

QINEO operating modules

Anywhere: RPU

Compact and handy:
RCPlus remote control

Integrated in the
welding power source

Integrated in the wire drive
unit

Remote control in the
welding torch

QINEO MasterPlus Compact

QINEO MasterPlus operating module – manual welding in perfection

The MasterPlus operating module offers all functions for the demanding manual welding. The focus during development was on the easiest operation and the clear representation on the display. Jobs allows the storage of individual parameter settings and ensure reproducibility of the weld quality in the framework of the welding instructions (WPS). Five freely programmable quick save memories guarantee direct access to the most important personal jobs and easy handling. As an option, it is possible to supply a USB connector for loading and saving of jobs, characteristic curves and configurations as well as a Personal Access Key (PAK) for the easy access to the user management.

- Intuitive operation: Clear display for maximum ease of operation, optimised for manual welding
- Job favourites: Very quick access to the five most important personal settings
- Memory for four welding circuits: The same welding settings at different workstations ensure the weld quality without an additional calibration of the set welding parameters

QINEO Premium

QINEO Premium operating module – sophisticated automation

The QINEO Premium operating module offers many functions and is designed for the highest level of automated welding tasks.
The operation is easy and intuitive due to a modern 5.7“ LCD display with lateral function keys and three handwheels. Jobs allows the storage of individual parameter settings and ensure reproducibility of the weld quality in the framework of the welding instructions (WPS). The Premium operating module enables an easy programming and monitoring of extensive welding tasks. An integrated SD card slot allows loading and saving of jobs, characteristic curves and configurations.

- Intuitive operation: Clear display with lateral function keys and three handwheels simplifies the setting of complex welding tasks
- Diagnostic functions: A fast commissioning and a perfect support of the service staff during maintenance ensures a high availability
- Memory for four welding circuits: The same welding settings at different workstations ensure the weld quality without an additional calibration of the set welding parameters

qineo

QINEO Wire drive units

Flexible enlargement of the working space
With the CLOOS wire drive units you enlarge your working space independent of the welding power source. Benefit from the wide range of wire drive units for manual and automated welding. Here you find the suitable design for every requirement. All models are characterised by robust four-roller drives and powerful drive motors.

The QINEO Wire Drive Units

QINEO QN-WDP-50 Eco / QINEO QN-WDP-50

Portable wire drive unit in a plastic housing.

Extremely light-weight for mobile use in workshops and during installation. The wire drive unit is used with a connection cable assembly. We adapt the length of the connection cable assembly to the requirements. The operating module is protectively integrated in the wire drive housing. So the welder can do all required settings directly and without unnecessary useless routes. The wire drive is prepared to take up a 15 kg wire coil.

- Mobile and lightweight
- Compact for manhole operation
- Extends the welder's range

QINEO QN-WDC-50

Movable wire drive unit in a metal housing.

Very robust for mobile industrial use. The wire drive unit is either hinge-mounted on the power source or connected with a connection cable assembly. We adapt the length of the connection cable assembly to the requirements. For floor use, the wire drive has four wheels. The operating module is protectively integrated in the wire drive housing. So the welder can do all required settings directly and without unnecessary useless routes. The wire drive is prepared to take up a 15 kg wire coil.

- Robust and with wheels
- Extends the welder's range

QINEO QN-WDA-50

Powerful 4-roller drive for automated application

The QINEO QN-WDA-50 is mounted near the robot and feeds the welding wires over a distance of up to ten meters in a powerful and slip-free way. For larger wire feed distances the DuoDrive, mounted directly at the hand flange of the robot, and the additional QWD-B wire drive unit, fixed at the wire drum, are available.

- Designed for automated welding, mounted in welding systems
- Excellent welding results due to a powerful and slip-free wire feed.

QINEO QN-WDA-R

Compact, powerful wire drive unit for automated application

The QINEO QN-WDA-R is mounted directly at the robot and feeds the welding wires in a powerful and slip-free way thus ensuring optimum welding results. For the feed of soft welding wires the DuoDrive, mounted directly at the hand flange of the robot, and the additional QWD-B wire drive unit, fixed at the wire drum, are available.

- Designed for automated welding, mounted at the robot arm
- Excellent welding results due to a powerful and slip-free wire feed.
- The compact design allows mounting at the robot mechanics.

QINEO QWD-B

Additional wire drive unit mounted at the wire drum supports the wire feed together with a QWD-A or AR.

The QWD-B draws the welding wire out of a wire drum and threads it into the liner with controlled feeding speed. A feeding distance of up to 30 meters is possible.

- Additional wire drive unit for feeding distances of up to 30 meters
- Safe wire feed over a distance of up to 30 meters between wire drum and main wire drive unit

QINEO QN-WDA-50

QINEO QN-WDA-R

QINEO QWD-B

Technical data

The most important performance features at a glance

QINEO WDP/WDC	QINEO WDP-50 Eco	QINEO WDP-50	QINEO WDC-50
Design	External wire drive	External wire drive	External wire drive
Wire feed speed	max. 30 m/min	max. 30 m/min	max. 30 m/min
Dimensions	732/236/385 mm	732/255/400 mm	685/340/235 mm
Weight	13 kg	16 kg	22 kg
Wire diameter	0.8-2.0 mm	0.8-2.0 mm	0.8-2.0 mm

QINEO WDA/QWD	QINEO WDA-50	QINEO WDA-R	QINEO QWD-B
Design	External wire drive	External wire drive	Additional wire drive
Wire feed speed	max. 30 m/min	max. 30 m/min	max. 30 m/min
Dimensions	350/270/230 mm	320/200/200 mm	300/260/180 mm
Weight	8.3 kg	7.5 kg	6.2 kg
Wire diameter	0.8-2.0 mm	0.8-2.0 mm	0.8-2.0 mm

* at an ambient temperature of 40°C

qineo

QINEO interfaces: Compatibility and safe communication

The QINEO series has a large number of interfaces. Whether for exchanging and archiving process data, updating characteristic curves or communicating with a robot controller: Almost everything is possible. The QINEO Data Manager QDM software in particular offers you a wide range of possibilities. In addition, the C-Gate opens the door to Industry 4.0 for you. This allows you to integrate the QINEO welding power sources into your networked production. The QINEO gets along perfectly with the CLOOS QIROX-QC2/3 robot controller. This takes over the complete operation and programming of the QINEO welding power sources, integrates the functions completely into the sequence programme of the robot system, controls the welding process and processes process data.
From simple signal exchange via the peripheral socket to the integration of the QINEO into a completely networked production - the QINEO welding power sources offer the right interface for your individual requirements.

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The right interface for your application

		QINEO Pulse Pro	QINEO QuesT	QINEO StarT Eco	QINEO StarT Master	QINEO StarT Premium	QINEO StarT 406 Premium	QINEO NexT 456 Master	QINEO NexT Master	QINEO NexT Premium AC	QINEO NexT Premium
Integration in C-Gate / Integration in QDM	Ethernet	S	S	S	S	S	S	S	S	S	S
System interface for QIROX robot systems with all functions	QIROX Interface (incl. CAN , GDS, NS)	O	O	–	–	O	O	–	–	O	O
System interface for QIROX robot systems (only CAN) / Interface to external Bus modules	Peripheral socket with CAN	O	O	–	–	O	O	–	–	O	O
Simple interface for Start / Stop / Arc existing from external controller	Peripheral socket	O	O	O	O	O	O	O	O	O	O
ProfiBus module for integration in any robot controller or PLC	ProfiBus	O	O	–	–	O	O	–	–	O	O
ProfiNet module for integration in any robot controller or PLC	ProfiNet	O	O	–	–	O	O	–	–	O	O
DeviceNet module for integration in any robot controller or PLC	DeviceNet	O	O	–	–	O	O	–	–	O	O
Universal I/O interface for integration in any robot controller or PLC	OMI	O	O	–	–	O	O	–	–	O	O

EtherNet IP on request

S = Standard | O = Option | – not available

qineo

QINEO machines for TIG welding

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.

Modularity

The configuration possibilities of the QINEO QuesT are as flexible as the welding applications are versatile. This is guaranteed by the consistently modular product concept. From the capacity class to the wire tip, each QINEO QuesT is customised. A QINEO QuesT, exactly as you need it to cope with your tasks quickly and efficiently.

Operation

Welding torch

Wire drive unit

Power unit

Cooling module

Substructure

External HF ignition

QINEO QuesT 402/552 Premium

- Excellent ignition properties even under difficult conditions
- Excellent control behaviour enables a stable arc over the entire setting range
- **Fast transitions** even with large capacity differences (TIG pulses)
- Deep-Pulse-Funktion produces a stabilised and focused arc for deep penetration or high welding speeds (Deep Pulse up to 20 kHz)
- **Modular design** and extensive accessories for individual adjustment of the QINEO QuesT to your needs
- Digital networking with all common industrial interfaces
- Optimal interface enables access to all setting options of the QINEO QuesT from the robot controller
- Programming via the robot controller accelerates and simplifies the integration of the QINEO QuesT into the program flow
- **High-quality components** and a robust design in proven CLOOS quality

Application

Capacity

400 A	550 A
35% duty cycle	35% duty cycle

Processes

QINEO QuesT 402/552 Master

- Excellent ignition properties even under difficult conditions
- Deep-Pulse-Funktion produces a stabilised and focused arc for deep penetration or high welding speeds (Deep Pulse up to 20 kHz)
- Excellent control behaviour enables a stable arc over the entire setting range
- **Fast transitions** even with large capacity differences (TIG pulses)
- Modular design and extensive accessories for individual adjustment of the QINEO QuesT to your needs
- **Comfortable operating concept** for easy, quick and intuitive handling
- High-quality components and a robust design in proven CLOOS quality

Application

Capacity

400 A	550 A
35% duty cycle	35% duty cycle

Processes

Flexible application possibilities

The right QINEO for your application

		Application		Process							Processes										
		Manual welding	Automated welding	MIG/MAG Single wire	MIG/MAG Single wire pulse	MIG/MAG Single wire AC	MIG/MAG Tandem	MIG Brazing	TIG DC	TIG AC/DC	Tandem Weld	Vari Weld	Speed Weld	Root Weld	Rapid Weld	MoTion Vari Weld	MoTion Control Weld	Control Weld	Cold Weld	Fine Weld	Laser Hybrid Weld
QINEO QuesT 402/552 DC Premium			X						X												
QINEO QuesT 402/552 DC Master		X							X												

Technical data

The most important performance features at a glance

QINEO QuesT	QINEO QuesT 402 DC Master / Premium	QINEO QuesT 552 DC Master / Premium
Welding current	3 A / 10.1 V - 400 A / 26.0 V	3 A / 10.1 V - 550 A / 32.0 V
Welding current at 60% duty cycle*	400 A / 26.0 V	550 A / 32.0 V
Welding current at 100% duty cycle*	350 A / 24.0 V	450 A / 28.0 V
Open circuit voltage	80V	80V
Mains voltage	380V - 480 V / 3 phases	380V - 480 V / 3 phases
Connection cable	4 x 6 mm2	4 x 6 mm2
Mains fuse slow-acting	32 A	32 A
Protection class	IP 23	IP 23
Insulation class	F	F
Cooling type	F	F
Dimensions L/W/H	819 x 348 x 667 mm	819 x 348 x 667 mm
Weight	74 kg	74 kg

qineo

Powerful and light

The new QINEO GL/GLW Inverters for TIG-DC (GL) or TIG-AC/DC (GLW) welding supports the users in efficient and flexible welding.
With their excellent price/performance ratio and their outstanding process functions the QINEO GL/GLW power sources are particularly suitable for a wide range of applications. These welding machines are suitable for use on the largest construction sites and the most punishing assembly lines and are connected either via power supply cables up to 100 metres in length or directly to the generator. Their high degree of tolerance against power fluctuations ensures perfect welding results.
Gas-cooled TIG welding torches are the standard equipment for the QINEO TIG welding machines GL/GLW222 to GL/GLW502. As an option they can be equipped with water cooling. A trolley and a gas bottle holder are also available for a good mobility.

QINEO GL 322 DC / GL 502 DC

- Excellent price and performance ratio
- Safe arc ignition: Matched start parameters for best ignition conditions
- Suitable for MMA welding: Optimum flow behaviour and more protection due to VoltageReduceControl
- Optimum power and weight ratio The powerful but light partner - everywhere
- Everything at a glance: A clear operating panel for easy handling
- Robust construction: High level of stability of the devices
- Automation interface: Easy integration of the TIG welding power source in robot welding systems

Application

Capacity

320 A	500 A
60% duty cycle	50% duty cycle

Processes

QINEO GL 302 DC

- Excellent price and performance ratio
- Safe arc ignition: Matched start parameters for best ignition conditions
- Suitable for MMA welding: Optimum flow behaviour and more protection due to VoltageReduceControl
- Optimum power and weight ratio The powerful but light partner - everywhere
- Everything at a glance: A clear operating panel for easy handling
- Robust construction: High level of stability of the devices

Application

Capacity

300 A
50%
duty cycle

Processes

TIG DC

QINEO GL 202 DC

- Excellent price and performance ratio
- High welding capacity on 1- or 3-phase mains
- Safe arc ignition: Matched start parameters for best ignition conditions
- Suitable for MMA welding: Optimum flow behaviour and more protection due to VoltageReduceControl
- Optimum power and weight ratio The powerful but light partner - everywhere
- Everything at a glance: A clear operating panel for easy handling
- Robust construction: High level of stability of the devices

Application

Capacity

200 A
30%
duty cycle

Processes

TIG DC

QINEO GLW 322 / GLW 502

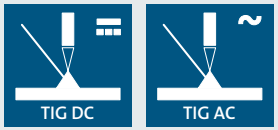
- Safe arc ignition: Matched start parameters for best ignition conditions
- Alternating current waveform for every need: Individual AC waveforms for demanding tasks
- Penetration function for thin/thick plate joints: Joining of aluminium plates of very different thicknesses
- Suitable for MMA welding: Optimum flow behaviour and more protection due to VoltageReduceControl
- Optimum power and weight ratio The powerful but light partner - everywhere
- Everything at a glance: A clear operating panel for easy handling
- Robust construction: High level of stability of the devices
- Automation interface: Easy integration of the TIG welding power source in robot welding systems

Application

Capacity

320 A	500 A
45% duty cycle	50% duty cycle

Processes



QINEO GLW 222 / GLW 302

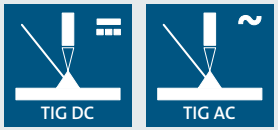
- Excellent price and performance ratio
- Safe arc ignition: Matched start parameters for best ignition conditions
- Alternating current waveform for every need: Individual AC waveforms for demanding tasks
- Penetration function for thin and thick plate joints Joining of aluminium plates of very different thicknesses
- Suitable for MMA welding: Optimum flow behaviour and more protection due to VoltageReduceControl
- Optimum power and weight ratio The powerful but light partner - everywhere
- Everything at a glance: A clear operating panel for easy handling
- Robust construction: High level of stability of the devices

Application

Capacity

220 A	300 A
35% duty cycle	30% duty cycle

Processes



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Technical data

The most important performance features at a glance

QINEO GL	QINEO GL 202 DC	QINEO GL 302 DC	QINEO GL 322 DC	QINEO GL 502 DC
Welding current	5 A - 200 A DC	5 A - 300 A DC	5 A - 320 A DC	5 A - 500 A DC
Welding current	200 A (30 % duty cycle*)	300 A (50 % duty cycle*)	320 A (60 % duty cycle*)	500 A (50 % duty cycle*)
Welding current at 60% duty cycle*	140 A	250 A	320 A	460 A
Welding current at 100% duty cycle	130 A	210 A	260 A	400 A
Open circuit voltage	83V	76V	73V	85V
Mains voltage	230 V + 115 V	3 x 400 V	3 x 400 V	3 x 400 V
Connection cable	3 x 2,5 mm^2	4 x 2,5 mm^2	4 x 2,5 mm^2	4 x 6 mm^2
Mains fuse slow-acting	16 A + 32 A (115 V)	20 A	25 A	32 A
Protection class	IP 23 S	IP 23 S	IP 23 S	IP 23 S
Insulation class	H	H	H	H
Cooling type	AF	AF	AF	AF
Dimensions L/W/H	400 x 160 x 260	460 x 230 x 325	690 x 290 x 450	690 x 290 x 450
Weight	9.8 kg	19.9 kg	45 kg	54 kg

* at an ambient temperature of 40°C

Technical data

The most important performance features at a glance

QINEO GLW	QINEO GLW 222	QINEO GLW 302	QINEO GLW 322	QINEO GLW 502
Welding current	5 A - 220 A AC/DC	5 A - 300 A AC/DC	5 A - 320 A AC/DC	5 A - 500 A AC/DC
Welding current	220 A (35 % duty cycle*)	300 A (30 % duty cycle*)	320 A (45 % duty cycle*)	500 A (50 % duty cycle*)
Welding current at 60% duty cycle*	180 A	220 A	280 A	450 A
Welding current at 100% duty cycle	160 A	180 A	240 A	400 A
Open circuit voltage	72V	59V	66V	85V
Mains voltage	230V	3 x 400 V	3 x 400 V	3 x 400 V
Connection cable	3 x 2,5 mm^2	4 x 2,5 mm^2	4 x 2,5 mm^2	4 x 6 mm^2
Mains fuse slow-acting	25 A	20 A	25 A	32 A
Protection class	IP 23 S	IP 23 S	IP 23 S	IP 23 S
Insulation class	H	H	H	H
Cooling type	AF	AF	AF	AF
Dimensions L/W/H	460 x 230 x 325	460 x 230 x 325	690 x 290 x 450	690 x 290 x 450
Weight	19 kg	24.2 kg	42.6 kg	54 kg

* at an ambient temperature of 40°C

qineo

TIG manual welding torches gas-cooled

QINEO-TT-HG-150

QN-TT-HG-200

Benefit from the CLOOS accessories:

- **Ergonomic handle:** Optimum handling and minimised strain on the wrists
- **Stable components:** Maximum service life
- **Optimum quality**: Optimum welding results in all welding positions

TIG manual welding torches	QINEO-TT-HG-150	QN-TT-HG-200
Type of cooling	gas-cooled	gas-cooled
Capacity DC	150 A	200 A
Power AC	120 A	160 A
Duty cycle	60%	60%
Electrode gage	0.5-3.2mm	0.5-4.0mm
Equipped for electrode	1.6 mm	2.4 mm

TIG manual welding torches water-cooled

QN-TT-HW-250

QINEO-TT-HW-350

QINEO-TT-HW-400

Benefit from the CLOOS accessories:

- **Ergonomic handle:** Optimum handling and minimised strain on the wrists
- **Stable components:** Maximum service life
- **Optimum quality**: Optimum welding results in all welding positions

TIG manual welding torches	QN-TT-HW-250	QINEO-TT-HW-350	QINEO-TT-HW-400
Type of cooling	water-cooled	water-cooled	water-cooled
Capacity DC	100%	350 A	400 A
Power AC	250 A	280 A	320 A
Duty cycle	200 A	100%	100%
Electrode gage	0.5-3.2mm	0.5-4.0mm	0.5-4.8mm
Equipped for electrode	2.4 mm	2.4 mm	3.2 mm

Accessories

Cooling module for TIG welding power sources

For GL/GLW222-302

QINEO QN-EC-P GL/GLW222-302

For GL/GLW222-502

QINEO QN-EC-P GL/GLW322-502

Overview of your advantages:

- **High cooling capacity** for manual welding up to 300 ampere or over 320 ampere
- **Separate, encapsulated housing** of the cooling module protects the components installed in the welding power source from possible water leakage
- **A water flow control** protects the welding torch from thermal overload

Carriage for TIG welding power sources

For GL/GLW222-302

QN-PFW-BC GL/GLW222-302

For GL/GLW222-502

QN-PFW-BC GL/GLW322-502

Overview of your advantages:

- **Stable mounting platform** for moving the QINEO on uneven floors
- **Tilt-proof mounting of a shielding gas cylinder** with deep bottom for an easy change

Efficiency due to modern processes

Control Weld
Reliable MIG/MAG welding process for thin and thick materials

Speed Weld
Stable MIG/MAG pulsed arc for numerous applications

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

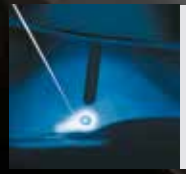
Fine Weld
Extremely low spatter MIG/MAG short arc for mixed gas and CO_2 welding

Rapid Weld
High-capacity MIG/MAG spray arc for efficient welding

Cold Weld
Heat-reduced MIG/MAG AC pulsed arc for optimum results when welding sensitive materials

MoTion Weld
MIG/MAG arc with reversing welding wire

Tandem Weld
Combination of two synchronised MIG/MAG arcs for double capacity



Laser Hybrid Weld
Combination of laser welding and MIG/MAG arc for maximum efficiency and quality

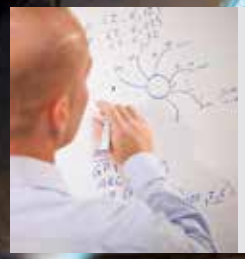
The way ...

Consulting

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

Planning

We elaborate a solution which perfectly meets your individual requirements.



Design

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

Production

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

Commissioning

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

Training

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

Service

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

... to your success.

All over the world

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Subject to technical alterations.

CLOOS

Weld your way.