

QIROX

WL series:
The all-rounder

CLOOS

Weld your way.



WL series: The all-rounder

Automated welding and cutting with system

QIROX comprises all solutions for automated welding and cutting. Due to its modular design, the QIROX system allows scalable solutions which can perfectly match your production requirements. The QIROX system includes the robot technology, positioners,

safety technology, software, sensors and the interface to the process technology. It is supplemented by a comprehensive accessories program and matching services.

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International top class

The robot is the central element in the QIROX solution package. You benefit in particular from the modular design of the entire mechanics. All components of the robot, from the robot base to the wrist, are perfectly matched to each other. By using different component groups, you get a customised welding robot for every production requirement. With our four robot series for different applications, optimal solutions can be realised for the most diverse welding

processes and production environments. Depending on your requirements, you can choose between a robot with a classic or a hollow shaft wrist. The robot is supplemented by a variety of different positioners. These expand the working area of the robot and bring the workpieces into an optimal processing position.

- ▣ **Flexibility:** Modular design for tailor-made systems, perfectly adapted to individual production requirements
- ▣ **Quality:** Repeatability, long service life and maintenance intervals
- ▣ **Service:** Global dense service network and high availability of consumables and spare parts

WS Series

The entry model:
Easy entry into the world of robot welding



WM Series

The compact solution:
Agile and highly dynamic for short cycle times



WL Series

The all-rounder:
Flexible application possibilities for individual requirements



PL Series

The power pack:
Precise and powerful for high payloads and a wide range of applications



The all-rounder:

Flexible application possibilities for individual requirements

Wherever flexible applications are required and a large working area with medium payloads is necessary, the all-rounders of the **WL series** are ideal. Welding, cutting, handling and guiding sensors are part of the wide range of applications of the WL robot series. Equipped with a tool changing system, the robot takes over various tasks and thus increases the availability of the system.

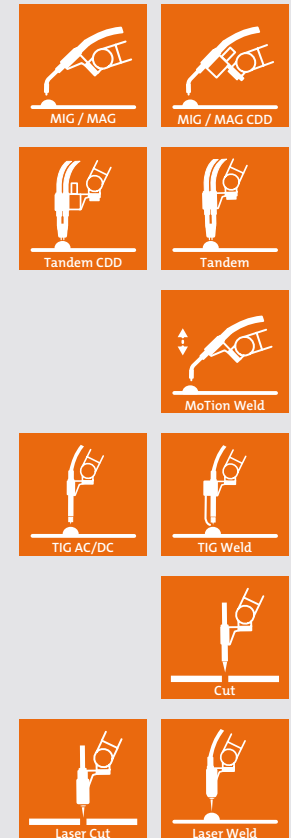
- For almost all processes
- Multiple tasks and processes with one robot thanks to tool changing system
- Extension of range by seventh robot axis (option)



Assembly



Processes



Many variants from one construction kit

The most dynamic feature of the QIROX robot is the modular design of all the mechanics. All components of the welding robot – from the robot base to the axis tube – are perfectly matched to each other. By using different components, a customised welding robot can be generated for every production requirement.

1 Arm tubes

- Design depending on the working range

2 Wrist

- Classic
- Hollow shaft

3 Shoulder joint

4 Pivot arm

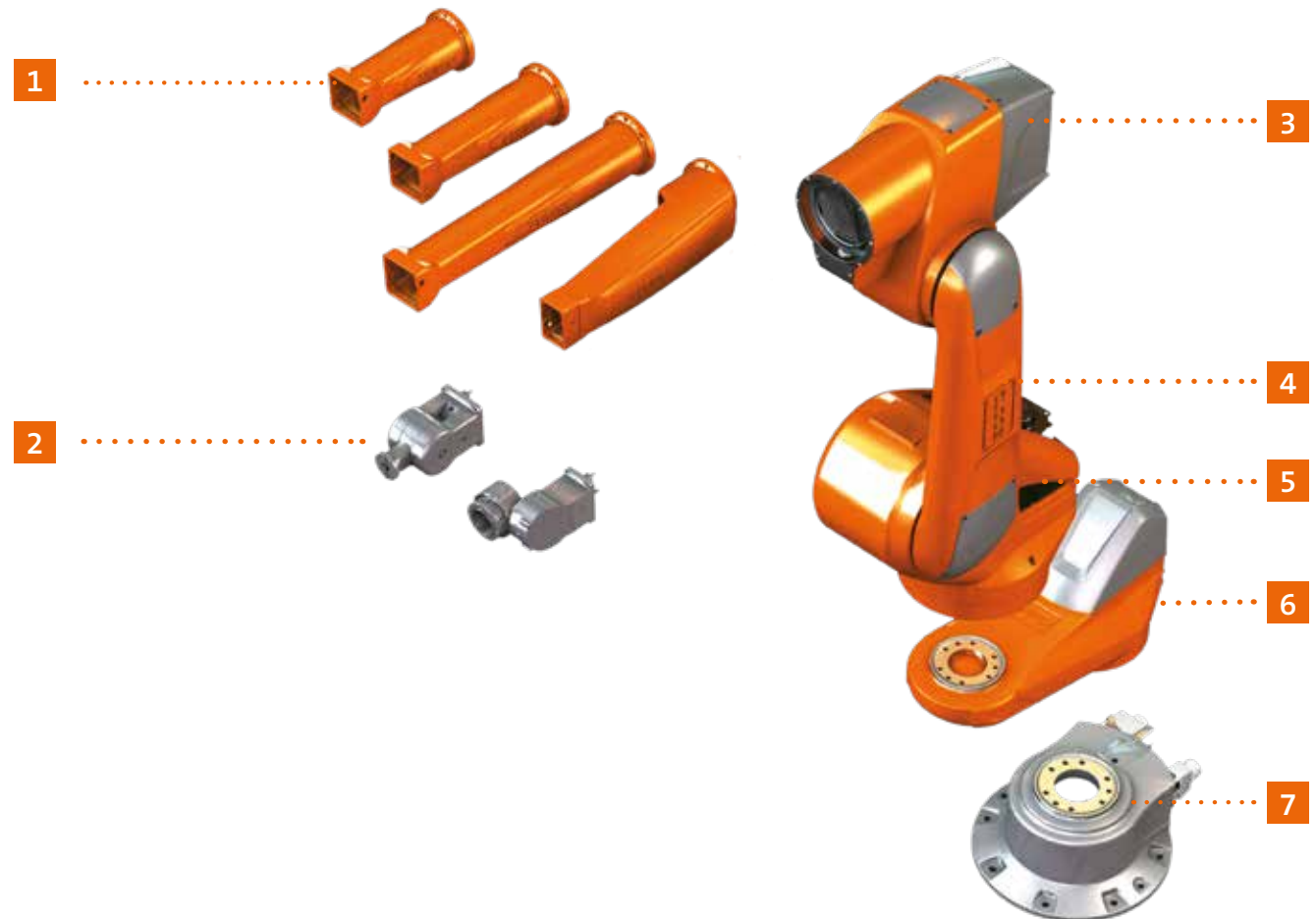
5 Angular base

6 7th axis

- Enlarged working envelope

7 Robot base

- Standard for upright and overhead mounting
- High for upright mounting



Application range Classic wrist

MIG/MAG DuoDrive Standard



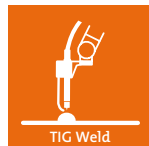
Single wire



Tandem



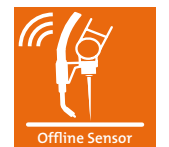
TIG



Enhancement of the application range due to a tool changing system



Sensors



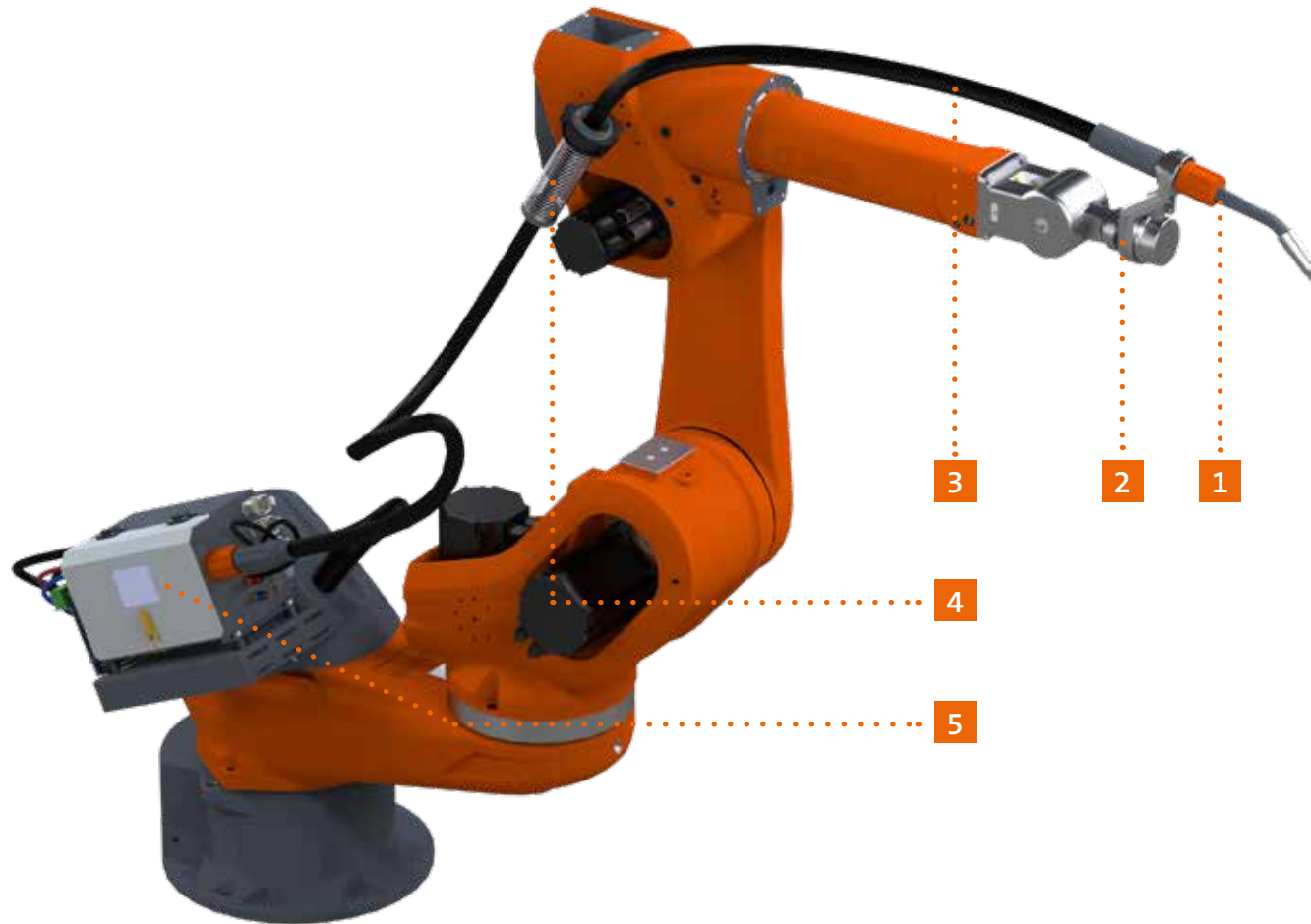
Application range Hollow wrist

MIG/MAG DuoDrive Standard

Sensors

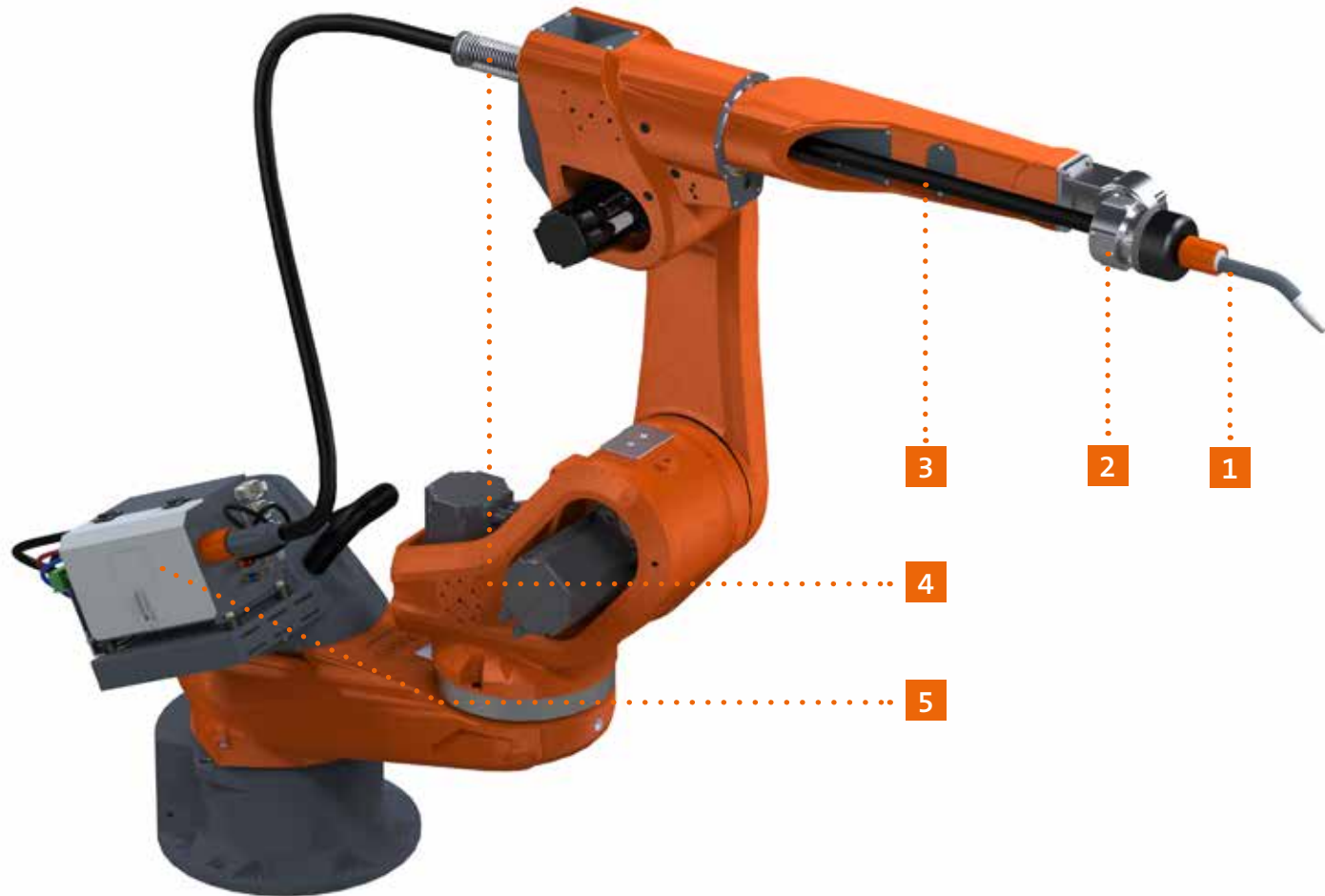


Welding equipment Classic wrist



- 1 Robot welding torches
- 2 Mounting flange with integrated anti-collision sensor
- 3 Torch cable assembly
- 4 Flexible hose guide
- 5 Wire drive QN-WD-AR

Welding equipment Hollow wrist



- 1 Robot welding torches
- 2 Mounting flange with integrated anti-collision sensor
- 3 Torch cable assembly
- 4 Flexible hose guide
- 5 Wire drive QN-WD-AR

Application examples

2x QRC-360

Linde MH



QRC-410

Bieber Industrie SAS



QRC-320

Atmos



QRH -390

Caldera HEATING GROUP



The all-rounder:

Flexible application possibilities for individual requirements

Assembly

Process

	Floor	Slope	Wall	Ceiling	MIG/MAG	MIG/MAG QN-RF-Duo*	MIG/MAG Tandem	MIG/MAG Tandem QN-RF-Duo**	TIG	TIG QN-WD-RF-Mono*	Plasma and oxyacetylene cutting	Laser cutting	Laser welding	Laser hybrid welding	Grinding and polishing	Handling
QIROX QRC-320 6-axis robot mechanics with classic wrist and 3,200 mm working envelope	X	O	O	X	X	X	X	X	X	X	X	X	X			
QIROX QRC-320-H 6-axis robot mechanics with hollow shaft wrist, 3,500 mm working envelope and a high base for floor mounting	X			X	X	X	X	X	X	X	X	X	X			
QIROX QRC-350 6-axis robot mechanics with classic wrist and 3,500 mm working envelope	X			X	X	X	X	X	X	X	X	X	X			
QIROX QRC-350-H 6-axis robot mechanics with classic wrist, 3,500 mm working envelope and a high base for floor mounting					X	X	X	X	X	X	X	X	X			

X Series

O Option

* Additional wire drive, mounted on the robot wrist





** Wire drive, mounted on the robot wrist

The all-rounder:

Flexible application possibilities for individual requirements

Assembly

Process

	Floor	Slope	Wall	Ceiling	MIG/MAG	MIG/MAG QN-RF-Duo*	MIG/MAG Tandem	MIG/MAG Tandem QN-RF-Duo**	TIG	TIG QN-WD-RF-Mono*	Plasma and oxyacetylene cutting	Laser cutting	Laser welding	Laser hybrid welding	Grinding and polishing	Handling
QIROX QRC-350-E  6-axis robot mechanics with classic wrist, 3,500 mm working envelope and extended range by seventh robot axis	X			X	X	X	X	X	X	X	X	X	X			
QIROX QRH-360  6-axis robot mechanics with hollow shaft wrist and 3,600 mm working envelope	X			X	X	X										
QIROX QRH-360-H  6-axis robot mechanics with hollow shaft wrist, 3,600 mm working envelope and a high base for floor mounting	X				X	X										
QIROX QRH-360-E  6-axis robot mechanics with hollow shaft wrist, 3,600 mm working envelope and extended range by seventh robot axis	X			X	X	X										

X Series

O Option

* Additional wire drive, mounted on the robot wrist

** Wire drive, mounted on the robot wrist

The all-rounder:

Flexible application possibilities for individual requirements

Assembly

Process

	Floor	Slope	Wall	Ceiling	MIG/MAG	MIG/MAG QN-RF-Duo*	MIG/MAG Tandem	MIG/MAG Tandem QN-RF-Duo**	TIG	TIG QN-WD-RF-Mono*	Plasma and oxyacetylene cutting	Laser cutting	Laser welding	Laser hybrid welding	Grinding and polishing	Handling
QIROX QRH-390 6-axis robot mechanics with hollow shaft wrist and 3,900 mm working envelope	X			X	X	X										
QIROX QRH-390-H 6-axis robot mechanics with hollow shaft wrist, 3,900 mm working envelope and a high base for floor mounting	X				X	X										
QIROX QRH-390-E 6-axis robot mechanics with hollow shaft wrist, 3,900 mm working envelope and extended range by seventh robot axis	X			X	X	X										

X Series

O Option

* Additional wire drive, mounted on the robot wrist




** Wire drive, mounted on the robot wrist

The all-rounder:

Flexible application possibilities for individual requirements

Assembly

Process

		Floor	Slope	Wall	Ceiling	MIG/MAG	MIG/MAG QN-RF-Duo*	MIG/MAG Tandem	MIG/MAG Tandem QN-RF-Duo**	TIG	TIG QN-WD-RF-Mono*	Plasma and oxyacetylene cutting	Laser cutting	Laser welding	Laser hybrid welding	Grinding and polishing	Handling
QIROX QRC-410		X			X	X	X	X	X	X	X	X	X				
QIROX QRC-410-H		X				X	X	X	X	X	X	X	X				
QIROX QRC-410-E		X			X	X	X	X	X	X	X	X	X				

X Series

O Option

* Additional wire drive, mounted on the robot wrist

** Wire drive, mounted on the robot wrist

Accessories



- Wire feed distance
- Safe wire feed for perfect welding results
- Powerful 4 roller drive
- Slip- and abrasion-free wire feed
- Maintenance-friendly



- Tool changing system
- Combination of different processes
- MIG/MAG
- TIG
- Tandem Weld
- Handling
- Cutting



- Welding torch
- with anti-collision sensor
- Powerful welding torch for robot application
- Liquid cooled
- Very high capacity class 550 A at 100% duty cycle
- Robust and compact design



- Handling tasks
- Loading and unloading of tools
- Provision of tack parts



- Sensors
- Quality assurance through precise welding processes
- Considerably improved weld quality
- Reduction of manual effort
- Minimum rework

All over the world

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QR4027-QIROX_Roboterserie-WL-EN
Subject to technical alterations.

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