

# MAKE YOUR TEAM STRONGER.

With the Lorch Cobot Welding Package –  
for MIG-MAG and TIG.



# Lack of skilled labour, cost pressure, technology gap.

Do you find that it is becoming increasingly difficult for you to find qualified welders? Are you and your company facing enormous cost pressure, even though you and your employees expected to meet the highest quality standards?

This is the reality for many medium-sized companies. Only when companies make efficient use of their qualified employees and optimize work processes without sacrificing quality will they remain competitive.



## The simplest solution to your challenge is: Cobot welding.

Cobot welding, that is **collaborative robot welding for medium-sized companies**: fast, flexible, economical - a system created for the automation of small and medium-sized batches. With this type of welding automation, the welder stays in complete control of the system, while the robot executes the instructions perfectly and precisely. Compared to other automation solutions, your **investment costs** are significantly lower.

## A working system!



*“Programming the welding cobot is fun and easy to understand. The robot welds reliably, and both the time savings and relief for the often repetitive, tiring, and monotonous welding tasks are simply enormous for us.”*

**Simon Ludwig**, welder at Hodapp GmbH



*“The high demands made by TIG welding are met by the system optimally. Now temporary workers and agency workers can take over the loading of the workpieces as soon as the cobot has been programmed. This means we can relieve our TIG welders to work on more demanding challenges.”*

**Helmut Krezdorn**,  
Project manager SCHAEFER GmbH



## The all-inclusive package for welding automation in medium-sized enterprises.

### SERVICES



### WELDING



### COBOT



Complete system including CE Certification



**LORCH COBOTRONIC SOFTWARE**

## The Cobot: easy to integrate into your daily production.

Thanks to lightweight construction and integrated safety technology, cobots can be used in direct interaction with humans. The Lorch Cobot Welding Package includes the UR10 cobot arm from market leader Universal Robots - with generous reach, sufficient payload, low-maintenance engineering, and sophisticated technology.

### Your advantages:



#### Easy operation:

Thanks to the touch display and intuitive user interface. The Cobot thus becomes a self-evident automation tool for your employees.



#### Immediately productive:

The basics are quickly understood - a two-day training course provides everything you need to know about commissioning, operation and welding functionalities.



#### Simple programming:

With the free-drive function, the cobot is shown by hand where to weld - including intermediate waypoints and sections.

## Cobot welding with two different processes:

### MIG-MAG welding process



Use the **Lorch Cobot Welding Package MIG-MAG Edition** to take the efficiency of your production to the next level: Our MIG-MAG Cobot is significantly more productive than conventional manual welding processes and works without a break!

### TIG welding process

The **Lorch Cobot Welding Package TIG-Edition** includes the high-quality Lorch welding system V30 AC-DC. Thanks to excellent ignition properties, this system is perfectly suited for automated operation. The integrated fast-pulse technology also ensures maximum efficiency in TIG welding automation.



#### Cobot meets MIG-MAG welding technology combined with Lorch quality.



##### The welding system

The Lorch Cobot Welding Package MIG-MAG Edition comes with the high-quality Lorch welding system S-RoboMIG-XT, including high-end inverter technology, digital interface and a precision feed system. The powerful power source of the Lorch Cobot Welding Package allows you to weld almost anything you want to weld with the highest efficiency due to the complete full process equipment and lightning fast control technology.



##### The torch

The system is complemented by the LMR 450 W torch, which has been specially developed for MIG-MAG cobot welding: cobot-optimized mounting and dual-circuit cooling for longer service life of the wear parts ensure ideal welding performance and greater user safety.



##### The Speed Processes

All of our innovative Speed processes are also included as standard. This means that the optimum welding process is always available, depending on the application. With TwinPulse-XT, for example, you can produce excellent TIG like seams with unbeatable speed and ease.



##### The multi-functional flange

Enables easy Freedrive programming from the 6th joint. In addition, the multifunction buttons on the flange support tacking and wire inch.

#### Cobot welding: now with Lorch quality TIG welding technology.



##### The welding system

The Lorch Cobot Welding Package TIG-Edition includes the high-quality Lorch welding system V30 AC-DC. Thanks to excellent ignition properties, this system is perfectly suited for automated operation. The integrated fast-pulse technology also ensures maximum efficiency in TIG welding automation.



##### The torch

The LTR 350 torch, specially developed for TIG Cobot welding, complements this high-quality system. Its slim and robust design and the cobot-optimized mounting make it the perfect partner. The hybrid cooling concept with innovative heat pipe technology also enables fast and precise torch changes without leaking cooling water.



##### The cold wire feeder

The digitally fully integrated Lorch Feed 1 cold wire feeder enables precise and reliable cold wire feeding during welding operations. In combination with the cobot, the cold wire feeder ensures foolproof feeding and high quality reliable results - ideal for all welding tasks where a filler wire is essential. The Lorch Feed 1 is included as standard in versions III and IV of the Lorch Cobot Welding Package TIG Edition.



##### The multi-functional flange

Enables easy Freedrive programming at the 6th joint. In addition, the multifunction buttons on the flange support tacking and wire inching.



*“The Lorch Cobot allows us to react highly flexible to customer queries. At the same time, we will not block the production process with large projects, which can now also be easily broken down into smaller ones.”*

**Torben Bruhn,**  
Metalworking master and customer coordinator,  
Resch Maschinenbau GmbH

*“Once optimally set, the Cobot weld seam ensures consistently high precision and quality. This is a clear bonus even when producing small series, since it saves valuable time and avoids rejects.”*

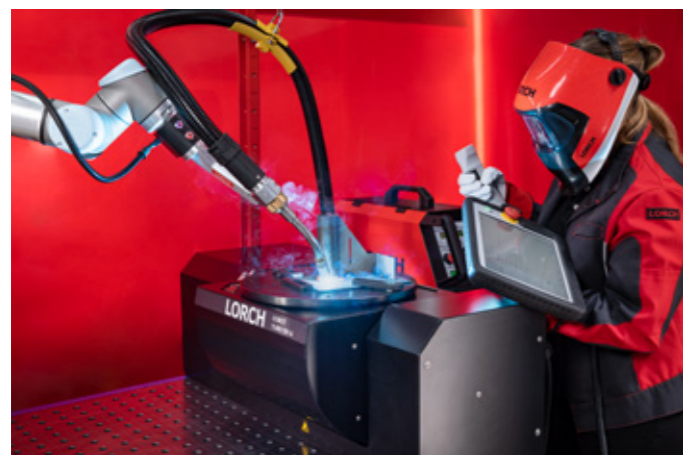
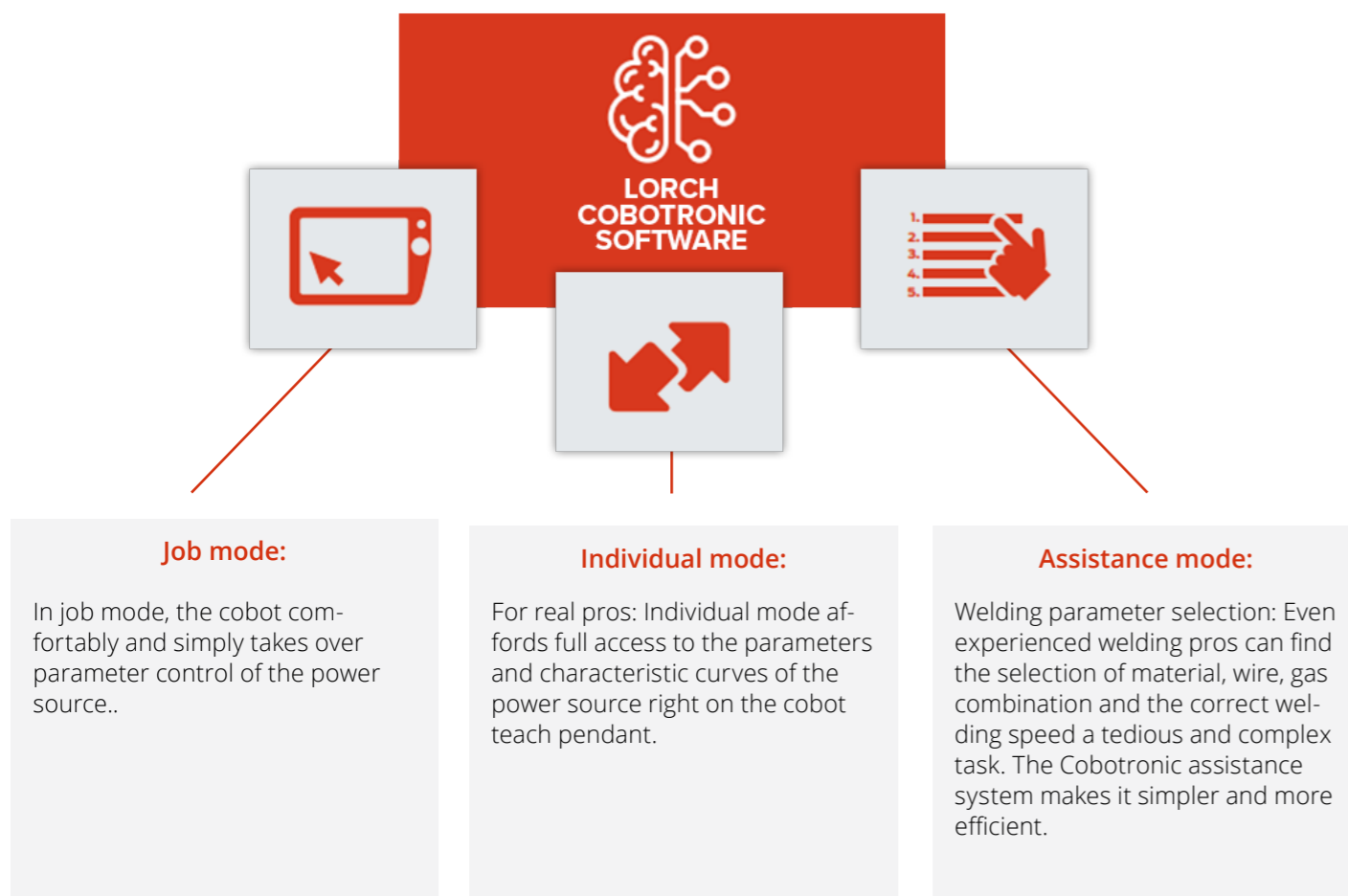
**Roland Rinnergschwentner,**  
Managing Director Reku Produktion & Entwicklung GmbH



# Lorch Cobotronic – at the Core of the Cobot Welding Package.

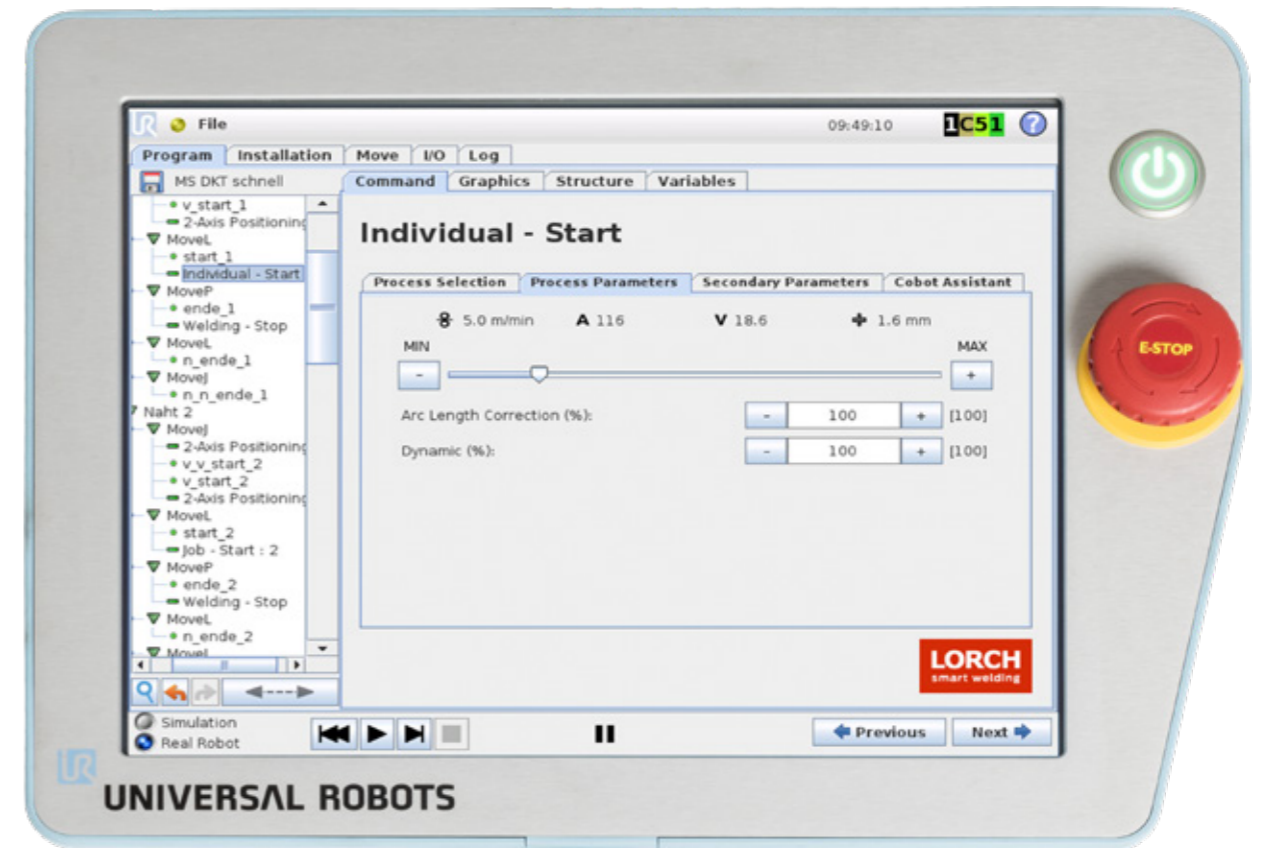
**The software makes the difference:  
Lorch Cobotronic for maximum comfort and efficiency.**

What sets the Lorch Cobot Welding Package apart from other cobot solutions is its optimized software. It has been perfectly adapted to the welding technology by our experienced welding experts - to increase the efficiency of your production through maximum user-friendliness and intuitive handling. Ongoing updates and further developments enable use of new function expansions in as many as 12 different languages!



## Intuitive operation for efficient setup and optimisation.

The simple and intuitive operation of the Cobotronic software enables users to quickly set and optimise welding parameters. Selection from three practical modes is a great help here. In its assistant mode, the software supplies parameter suggestions for optimal welding results depending on the chosen application.



## The most comprehensive function package for cobot welding:

The Cobot Welding package has many additional functions integrated that help to simplify work while increasing productivity at the same quality level.

Examples include:

- Spot function
- Linear weaving
- Circular weaving
- Software-supported help for determination of the optimal welding parameters based on the throat thickness
- An Integrated control of a torch cleaning station

### The Cobot Turn 100 A turn-tilt table:

## Just perfect from any angle.

### Cobot automation from the market leader is being supplemented for even greater performance:

The Cobot Turn 100 A turn-tilt table ensures optimal Cobot welding positions at all times. A precise position for each weld seam can be specified in the programme process, increasing quality, productivity, flexibility, and saving valuable time even in demanding welding tasks and for round seams.



*“Thanks to the welding cobot solution with tilt-turn table, we have been able to achieve massive time savings of up to 40% in series parts. We also relieve our welders in particular of long, exhausting welding work.”*

**Alexander Hörzenberger, Head of steel construction at Habau Group**



## Overview of the advantages:

- + Two-axis manipulator:** Longer welding without interruption or new set-up since the components require rare or no change of set-up at all.
- + Fully integrated Lorch Motion software:** The dedicated URcap Lorch Motion is fully integrated into the Cobotronic software and easy to retrofit.
- + Simple and intuitive operation:** The smart software also developed by Lorch is easy to operate. Programme processes can be configured intuitively.
- + Safety technology:** The laser scanner and virtual housing keep the system freely accessible at all times under consideration of employee protection.
- + Ergonomics at the workplace:** The avoidance of difficult positions and re-positioning saves time and increases ergonomics at the workplace.

## Fully integrated. Fully sophisticated. Lorch Motion.

The integrated Lorch Motion software permits simple and intuitive control of the additional axis. The different programming functions offer a vast range of options and automatic support that simplify programming. Functions from reference runs, to positioning, continuous operation, to roundseam welding can be programmed and calculated intuitively. Optimal positioning has never been easier.



## The perfect supplement

The Cobot Turn 100 A perfectly supplements the Lorch Cobot Welding Package. It can be integrated easily into existing work processes. Easy to operate and immediately productive, the Cobot is the perfect system for automation of small and medium series production, while keeping investment costs low. Combined with the Cobot Turn 100 A, the cobot will once again increase its performance, as the tilt-turn table can be easily attached to it. The simple user software upgrade permits immediate and intuitive programming via the operating unit. No matter if you are using the overall package or a retrofit: the two components will supplement each other perfectly in the end.

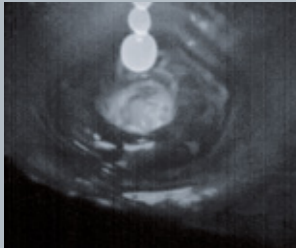






### Cobot Turn 100 A

Dimensions (W x H x D)	1000 x 400 x 550 mm
Weight	160 kg
Max. tilt speed	20°/s
Max. turning speed	90°/s
Tilt angle	0° to 90°
Turning angle	infinite
Max. payload	100 kg
Workpiece sizes – max. height	550 mm
Workpiece sizes – max. diameter	750 mm

**The Cobot Turn 100 A – improving your team in any situation.**

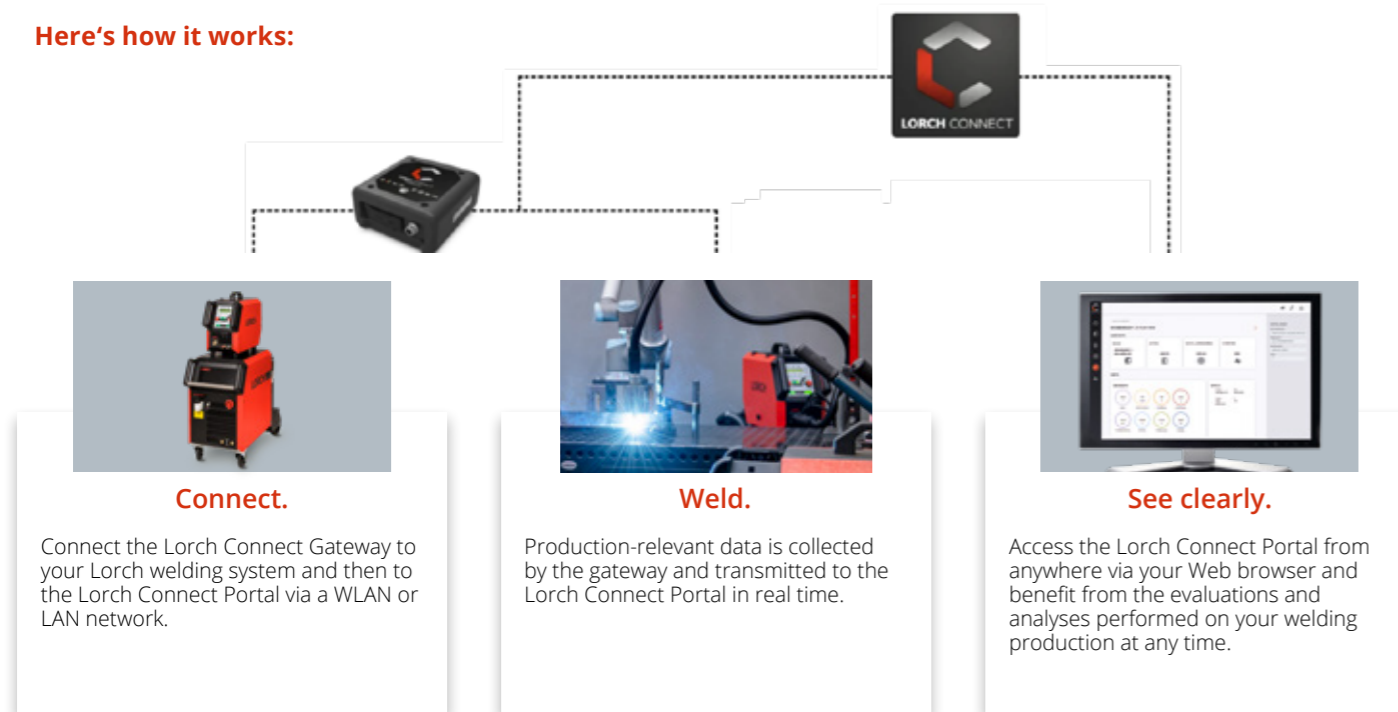
**All special processes included with MIG-MAG.  
For maximum productivity, quality and weld integrity.**

				
<b>SpeedPulse-XT</b> Extra fast. Extra high quality.	<b>SpeedArc-XT</b> Offers a particularly focused arc and a significantly higher deposition rate for fast welding of thicker material.	<b>TwinPuls-XT</b> Most beautiful MIG-MAG seams with maximum welding speeds.	<b>SpeedUp</b> Simple and reliable welding of vertical seams without oscillation.	<b>SpeedCold</b> Ice-cold efficiency in thin sheet welding.

**Lorch Connect:  
Your entry into digital welding production:**

The Lorch Cobot Welding Package is a step towards Industry 4.0. With the optional package add-on Lorch Connect, the simple and cost-effective cloud solution for reliable acquisition and analysis of your welding production data.

**Here's how it works:**



**Use Lorch Connect risk-free for 12 months!**

Get started at no risk: When the Lorch Connect Gateway is purchased, you will be able to use all of the current Lorch Connect services free of charge for one year. After that, you will be able to subscribe and use the services for €9,90 per gateway per month.

Have we peaked your interest?  
You can find even more interesting information at [www.lorch-connect.com](http://www.lorch-connect.com).

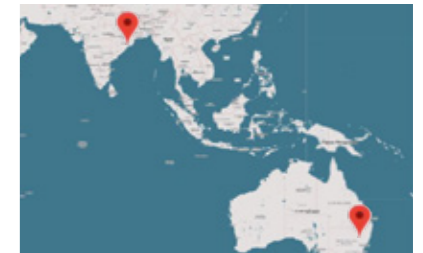
**Lorch Cobot partner near you.**

The Lorch Cobot Welding Package is available from your local qualified Cobot partner: personal, close and fast! Simply try out our Cobot there - during a live demonstration on a demo system - and convince yourself.



Well networked across Europe.

We are also there for you locally with branches worldwide.



**Cobot welding! The investment which pays off for you:**

<p><b>Compensating for a shortage of skilled workers</b></p> <ul style="list-style-type: none"> <li>✓ Time and physical relief for skilled workers: welders program the welding task, operators perform it with the Cobot</li> <li>✓ Increased productivity due to simple operation and high flexibility</li> <li>✓ Efficient and reliable completion of the required production quantities</li> </ul>	<p><b>Improve quality, reduce costs</b></p> <ul style="list-style-type: none"> <li>✓ Constant and reproducible welding quality - 365 days a year</li> <li>✓ Very high quality of results: less rework, fewer rejects</li> <li>✓ Significant cost savings thanks to reliably high quality</li> </ul>	<p><b>Keeping your finger on the pulse</b></p> <ul style="list-style-type: none"> <li>✓ Easy step toward Industry 4.0</li> <li>✓ Increase reputation as an attractive, future oriented and caring employer</li> <li>✓ Rapid payback of investment costs</li> </ul>
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**What sets the Lorch Cobot Welding Package apart from the rest:**

<b>1</b>	Intelligent software	<b>For your easy step into automation</b>
<b>2</b>	Perfect processes	
<b>3</b>	Support through international Cobot partner network	



MADE IN GERMANY

# Make the Cobot the new welder in your team!

Your Cobot contact near you:



More info also on  
[www.lorch-cobot-welding.com](http://www.lorch-cobot-welding.com)



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**LORCH**  
smart welding