

XQbot

COBOT WELDING CELLS:
GETTING STARTED WITH AUTOMATION



CE compliant

XQ
BOT

THE KEY TO OVERCOMING ANY CHALLENGE.

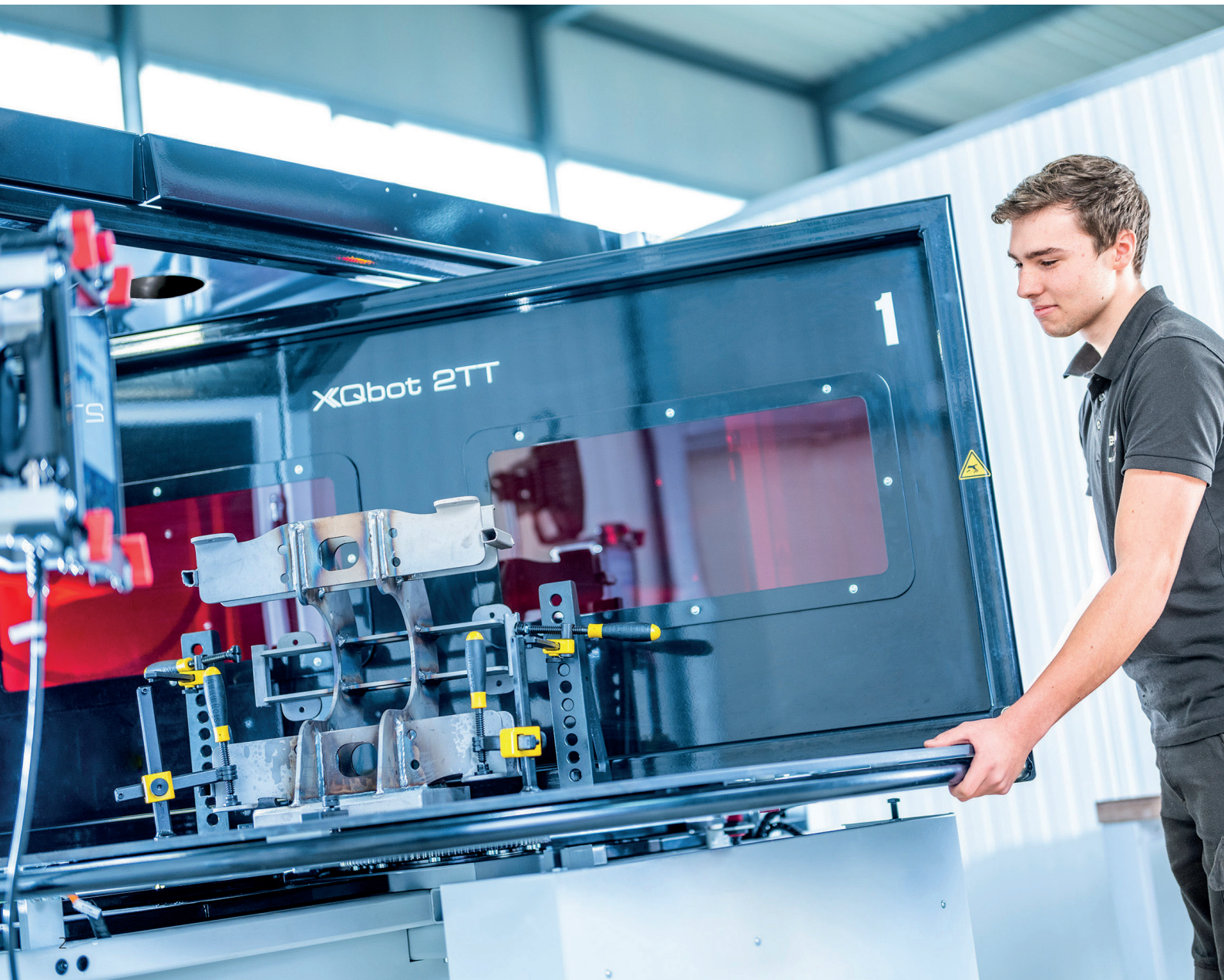
You need weld seams of the highest quality in a highly competitive, cost-sensitive market. You meet the standards and requirements of the industry amidst an ever-worsening shortage of qualified specialists. You recognise the growing demands with regard to digitisation while the resources required to implement them are lacking.

In this day and age, it is often hard to keep track of the various challenges your welding business faces.

The EWM **XQbot** welding cell helps you to overcome the challenges of today and tomorrow. The soundly designed concept involving collaborative robots enables reproducible weld seams on an industrial scale. The tech-lovers in your business will have no problem getting used to the simple haptic programming.

Cost-efficient, economical production will give you a competitive advantage as your welders benefit from healthier, more ergonomic work.

When you use the **XQbot** welding cells, you are choosing resource-saving, future-oriented production.



YOUR BENEFITS.

THIS INVESTMENT PAYS FOR ITSELF.

The **XQbot** standard welding cells are your ideal entry point into automation or the perfect addition to your manual workstation, allowing you to weld parts from small batches to larger production quantities all with minimal programming effort. The result: time savings, reduced costs and an easier day-to-day workload.



CE COMPLIANT: SAFETY FROM DAY ONE +

- Safety-monitored welding cell
- Complete shielding of the arc during operation
- Closed casing enables efficient welding fume extraction
- Optimal health and hazard protection for the operator



EASY TO USE – COBOT AS PART OF THE INDUSTRY STANDARD +

- CRX robots by FANUC, the world's leading manufacturer of industrial robots
- High precision and repeatability, just like an industrial robot
- Six push-buttons on the torch head for direct access to all important functions
- Minimal downtime thanks to long maintenance intervals and short maintenance times
- Reproducible results and consistent high quality



EASY TO WELD – PROGRAMMING MADE EASY +

- Easy to program, just like a cobot
- Intuitive programming supported by pictograms (drag 'n' drop)
- No need for programming language
- Plug 'n' play – we deliver the **XQbot** ready to weld straightaway
- Ready for production straightaway with our phased training concept
- Set up, plug in, done



THE TRADE OF WELDING – THE HUMAN FACTOR +

- **XQbot** creates an attractive workplace for young metalworkers
- It makes day-to-day work modern, healthy and varied
- Welders and machine operators work hand-in-hand
- Boosts motivation and eases the burden on the welder
- Robot becomes a valued member of the team



ECONOMICAL – PAYS FOR ITSELF IN NO TIME +

- Transparent costs
- Complete cell including welding machine
- EWM allin – all available welding processes included
- Increased production output
- Saves space and minimises investment costs
- Direct integration into the existing production environment
- ewm Xnet-compatible (digital component management)

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XQbot 1.

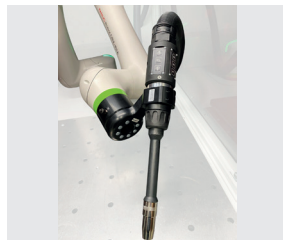
PERFECT FOR SINGLE AND SMALL BATCHES.

- Stationary hole system plate for mounting workpieces (system 16)
- Can be extended to double station cells with two stations next to each other or using an indexing table for larger quantities
- The front door and side folding doors allow unrestricted access to the workpiece from three sides. This makes teaching even easier
- Fits through (almost) any door



Intuitive app operation via tablet

- Create applications in just a few minutes
- Perfect for customers with no experience of robots
- Program via drag 'n' drop



Robot welding torches RMT301W cobot

- Hose package with push-buttons for wire inching, wire return and gas test
- Three additional push-buttons for easy programming
- Other welding torch necks possible



Wire feeder ROB 5

- eFeed: innovative 4-roll drive (quadruple meshing)
- Developed for tough production applications



RC XQ Expert 2.0 remote control

- Control of all welding parameters and functions with intuitive user guidance on LCD display and plain text display
- Can be placed ergonomically at the operating station

THE XQbot FAMILY.

WELDING HAND IN HAND WITH ROBOTS.

HIGHLIGHTS

The XQbot 1 welding cells come fully assembled and can be placed wherever you want them straightaway with a forklift or pallet truck using the transportation system. Simply connect the power and gas supply, and the cobot cell is good-to-go.

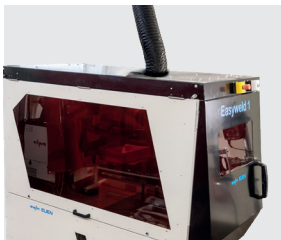
Our XQbot 1 welding cells are also available with an integrated power source or ready to be connected to an external power source. It is also possible to connect a power source with an additional wire feeder. This allows you to switch between welding with the XQbot 1 welding cell and with a manual welding torch.

PROGRAMMING

With the Teach Pendant tablet, you can create drag 'n' drop programmes and program an application easily in just a few minutes. The app is easy and intuitive to use, perfect for users without experience of robots.

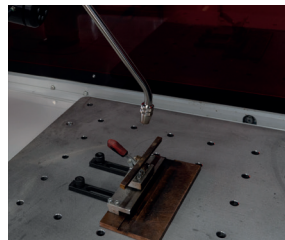
What's more, the special EWM-EUEN welding surface enables weaving and other necessary functions for welding.

Various teaching modes as part of the industry standard for precise setting of the path ensure reliable weld seams, even with complex contours and difficult seam preparations.



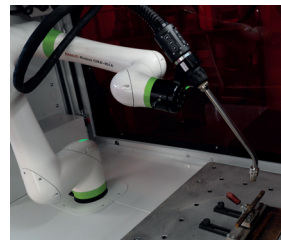
Welding fume extraction (optional)

- Closed working area enables safe extraction of welding fumes
- Suction opening compatible with all standard extraction systems



Hole system

- Hole system plate in the welding area with hole system 16



FANUC cobot CRX 10 iA

- Cobot as part of the industry standard
- The professional solution for collaborative robots in welding



Digital gas control (DGC)

- RC XQ Expert 2.0 remote control allows precise digital adjustment of the gas quantity
- Prevents welding errors caused by too much or too little gas
- Boosts efficiency by saving gas

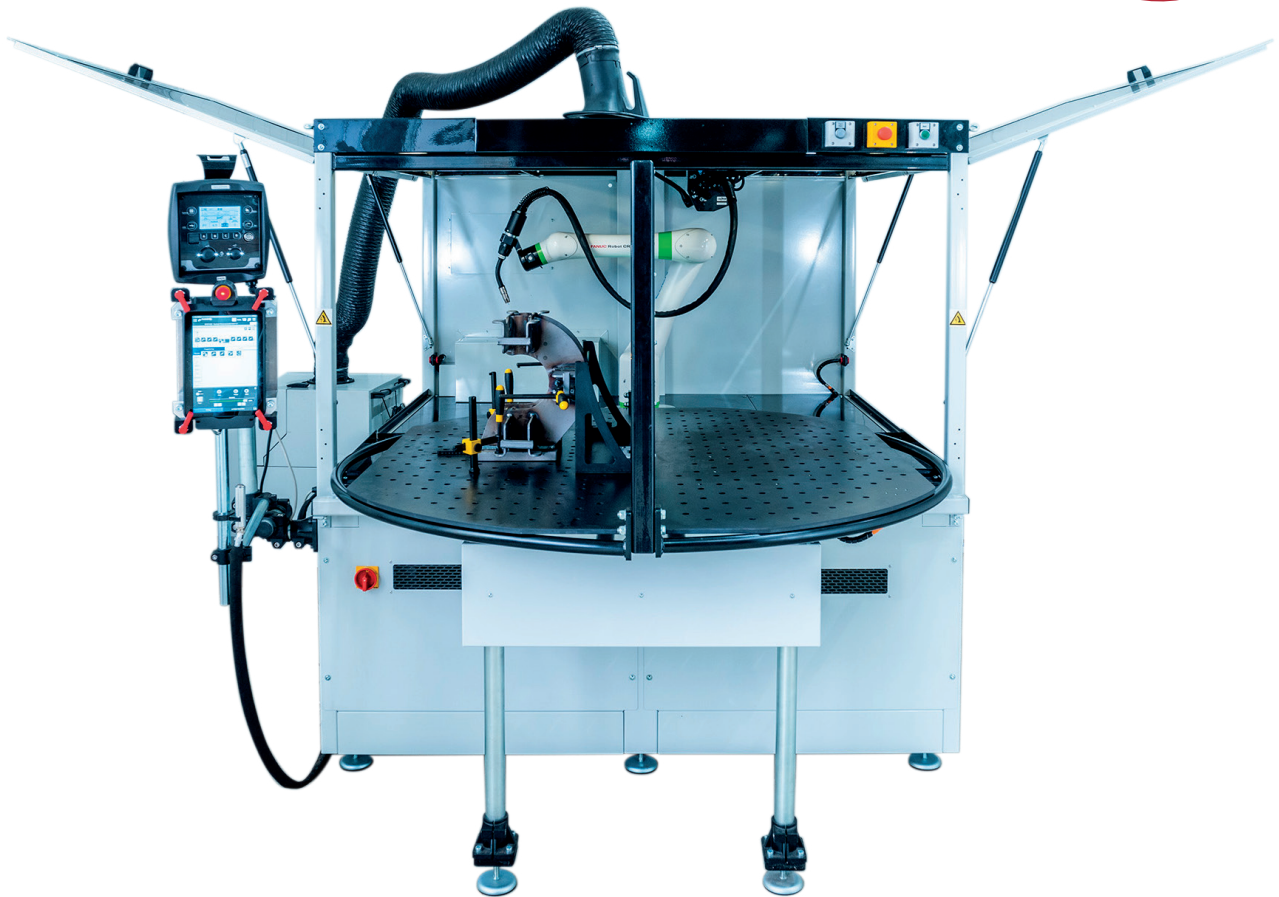
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XQbot 2TT.

PERFECT FOR LARGER QUANTITIES.

- The larger version with two-station indexing table
- Manually operated rotary table with hole system (system 16) allows you to insert parts while workpieces are being welded in the cell, reducing downtime and increasing production
- Steady support allowing you to insert and weld at the same time



Intuitive app operation via tablet

- Create applications in just a few minutes
- Perfect for customers with no experience of robots
- Program via drag 'n' drop



Robot welding torches RMT301W cobot

- Hose package with push-buttons for wire inching, wire return and gas test
- Three additional push-buttons for easy programming
- Other welding torch necks (power and geometry) possible



Wire feeder ROB 5

- eFeed: innovative 4-roll drive (quadruple meshing)
- Developed for tough production applications



RC XQ Expert 2.0 remote control

- Control of all welding parameters and functions with intuitive user guidance on LCD display and plain text display
- Can be placed ergonomically at the operating station

THE XQbot FAMILY.

EFFICIENT AUTOMATION MADE EASY.

HIGHLIGHTS

Just like the XQbot 1 welding cell, the XQbot 2TT welding cells also come pre-assembled so that they can be put right where they are needed right away with the forklift. And thanks to the transportation system, moving the cells is quick and easy.

For the XQbot 2TT welding cell, you can choose between two versions: one with integrated power source or one for connection to an external power source. It is also possible to connect a power source with an additional second wire feeder. This allows you to switch between welding with the manual XQbot 2TT welding cell and with a manual welding torch.

PROGRAMMING

With the Teach Pendant tablet, you can create drag 'n' drop programmes and program an application easily in just a few minutes. The app is easy and intuitive to use, perfect for users without experience of robots.

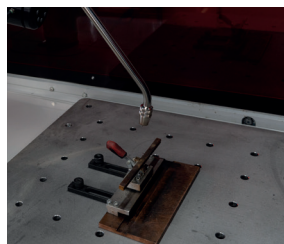
The special EWM-EUEN welding surface also enables weaving and other necessary functions for welding.

Various teaching modes as part of the industry standard for precise setting of the path ensure reliable weld seams.



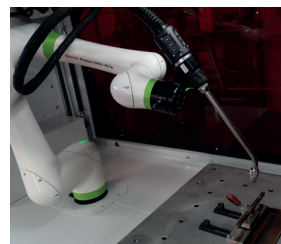
Welding fume extraction (optional)

- Closed working area enables safe extraction of welding fumes
- Suction opening compatible with all standard extraction systems



Hole system

- 2-station indexing table with hole system 16, to be turned by hand



FANUC cobot CRX 10 iA

- Cobot as part of the industry standard
- The professional solution for collaborative robots in welding



Digital gas control (DGC)

- RC XQ Expert 2.0 remote control allows precise digital adjustment of the gas quantity
- Prevents welding errors caused by too much or too little gas
- Boosts efficiency by saving gas

XQ

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THE XQ WELDING PROCESSES.

FOR THE BEST RESULTS.



Phoenix XQ puls

XQ - Process

all in

rootArc® XQ / rootArc® puls XQ

forceArc® XQ / forceArc® puls XQ

Standard (MIG/MAG)

Pulse

Positionweld for aluminium

superPuls

TIG

MMA

Gouging

Titan XQ puls

XQ - Process

all in

rootArc® XQ / rootArc® puls XQ

coldArc® XQ / coldArc® puls XQ

forceArc® XQ / forceArc® puls XQ

wiredArc XQ / wiredArc puls XQ

Standard (MIG/MAG)

Pulse

Positionweld

superPuls

TIG

MMA

Gouging

Titan XQ AC puls

XQ - Process

all in

acArc® puls XQ

rootArc® XQ / rootArc® puls XQ

coldArc® XQ / coldArc® puls XQ

forceArc® XQ / forceArc® puls XQ

wiredArc XQ / wiredArc puls XQ

Standard (MIG/MAG)

Pulse

Positionweld

superPuls

TIG

MMA

Gouging



acArc® puls XQ

Perfect for welding thin aluminium sheets



rootArc® XQ / rootArc® puls XQ

Perfect root welding/easy-to-execute filler and final passes



coldArc® XQ / coldArc® puls XQ

Heat-minimised arc for thin metal sheet welding



Pulse

Low-spatter pulsed arc



wiredArc XQ/wiredArc puls XQ

High-performance arc with penetration independent of stick-out thanks to dynamic wire control (penetration stabilisation)



forceArc® XQ / forceArc® puls XQ

Powerful, high-performance arc with deep penetration



Positionweld

Simple positional welding without "Christmas tree" technique



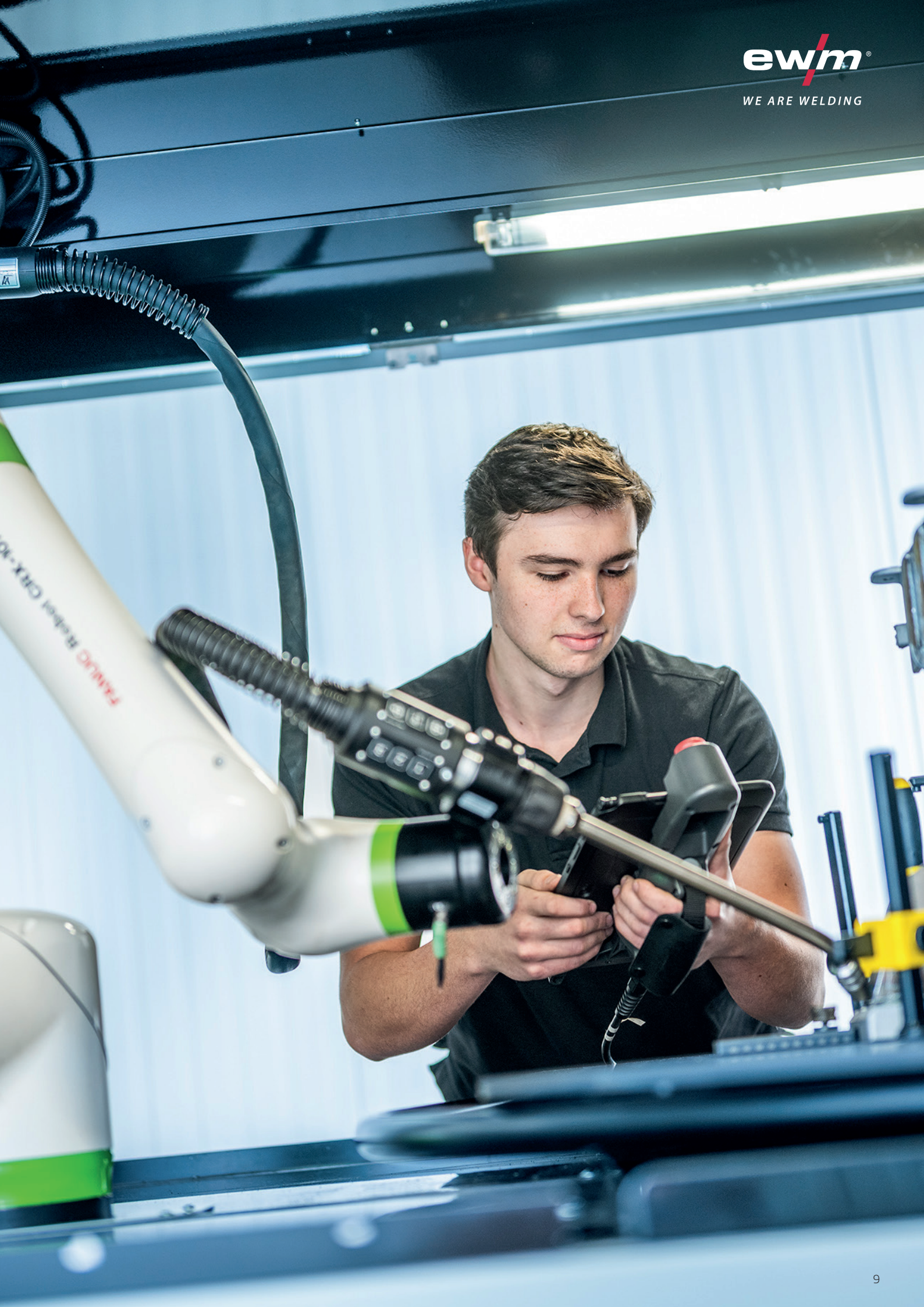
Standard

Perfect short and spray arcs



superPuls

Heat-reduced interval welding between two operating points: High-current and low-current phases freely adjustable – control dependent



XQ

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ROBOT WELDING TORCHES BY EWM.

THE RMT COBOT WELDING TORCH: PERFECT FOR ALL WELDING CURRENTS.



Teach cobot hose package

Three function push-buttons for:

- Wire forwards
- Wire backwards
- Gas test



Function push-buttons for direct connection to the cobot

- Push-button 1: Robot release (main movement button)
- Push-button 2: Memory button
- Push-button 3: Changeover switch

LEASING.

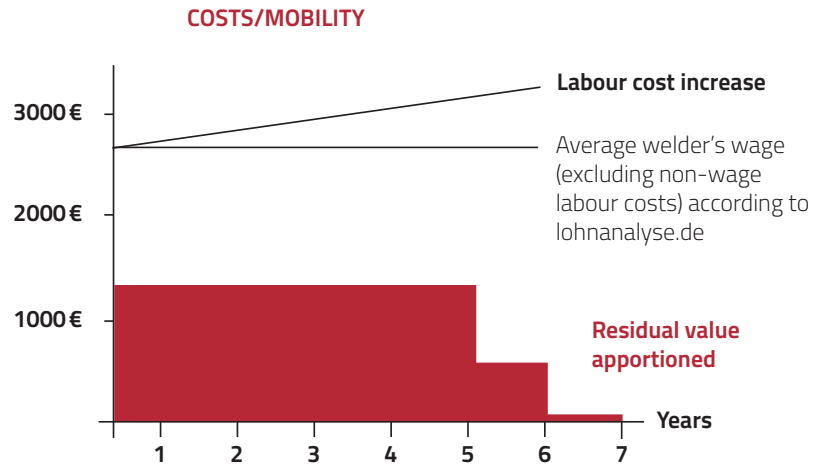
FINANCING THAT FITS YOU.

Leasing for investment financing protects your company's liquidity, is neutral on the balance sheet and fully tax-deductible, allowing you to achieve reproducible quality and higher profitability under favourable conditions.

Leasing example

For example:	85 000 €
Contract type:	Leasing
Contract term:	75 months
Residual value:	5% (4250 €)
Monthly leasing rate:	1160 €
Leasing factor:	1.433

No additional costs. The leasing rates given are due monthly and each one increases by the statutory value added tax.



WORK FLEXIBLY.

Make your day-to-day work easier. The power source is equipped for operation with an additional second wire feeder. This allows you to switch between welding with the XQbot welding cell and with a manual welding torch.



SERVICES/TRAINING COURSES.

GET ACCESS TO KNOW-HOW ON SITE.

BASIC

Training course contents:

- Installation and commissioning of the XQbot welding cell
- Introduction to the software of the FANUC cobot
- Introduction to operation of the welding machine
- Programming your first component
- Safety briefing
- Preventive maintenance tips

Duration: 1.5 days**Participants:** up to 5 people

+

PRO

Training course contents – building on BASIC:

- Additional assistance with the use of the XQbot welding cell in your welding business
- Path and movement optimisation for the cobot
- Programming of further components
- Optimisation of welding parameters

Duration: flexible to your needs**Participants:** up to 3 people

+

EXPERT

Training course contents – building on BASIC and PRO:

- Programming techniques for creating cobot programmes: processes, grinding, gotos
- Use of innovative welding processes e.g. forceArc®, rootArc®, superPuls
- Special weld appearances

Duration: 1 to 2 days, flexible to your needs**Participants:** up to 3 people

ACCESSORIES.

THE PERFECT SUPPLEMENT TO XQbot F.

Whether it's XQbot 1 or XQbot 2TT - with our extensive range of accessories, you can find everything you need to complete your XQbot system. These not only let you access additional functions, they also allow you to tailor your practical automation solutions to fit your needs.



INDUSTRY PC WITH TOUCHSCREEN

- Webinars and remote support
- Allows welders to learn programming directly on the system with the help of our webinars or instructional videos



HD-WEBCAM

- For online support from EWM
- At the push of a button, the camera films the working area you selected so that our experts can provide targeted assistance



TORCH NECK RMT301W

- Available in four versions with different angles:
- 22.5° (long version), 22.5° (ex works), 35° and 45°
 - Maximum TCP safety
 - One-piece liner



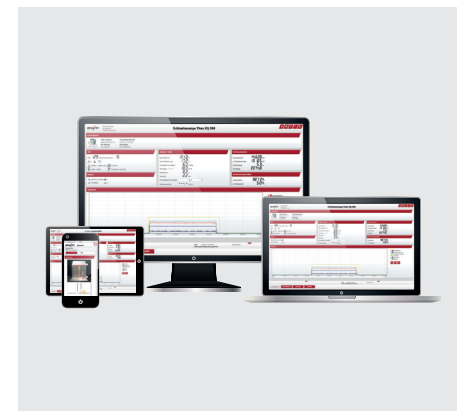
EXTRACTION

- Mobile filter unit for medium quantities of fumes/dust and chrome-nickel steels
- Contamination-free filter replacement and filter monitoring
- Large capacity and long service life of the filters



CLAMPING SET

- Set for aligning and clamping components:
- 29 piece
 - For 16 mm system



EWM XNET WELDING 4.0

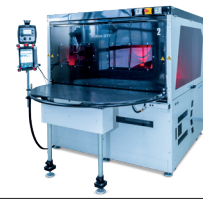
- Digitalises production and increases efficiency
- For welding businesses of all sizes and orientations

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BOT



XQBOT 1



XQBOT 2TT

Working area	Hole system plate in the welding area	2-station indexing table with hole system plate
Hole system	System 16	
Insertion height	1234 mm/48.6 inches	
Cobot model	FANUC CRX-10iA	
Number of axes	6	
Cobot load capacity	10 kg/22 lbs	
Cobot range	1249 mm/49.1 inches	
Controller	R-30iB Plus	
Handheld machine	Tablet TP	
Interface	Ethernet/IP	
Welding torches	Robot welding torches RMT301W cobot	
Mains voltage	3 x 400 V (-25% to +20%)	
Mains frequency	50/60 Hz	
Mains fuse (slow blow)	3 x 20 A	
Dimensions (L x W x H) in mm	1940x940x1900	2660x1900x1900
Dimensions (L x W x H) in inch	76.4x37x74.5	104.7x74.5x74.5
Product certification	CE	
Weight in kg	510	1020
Weight in lbs	1125	2249

PRODUCT CONTENTS.

DELIVERED COMPLETE WITH EXTENSIVE EQUIPMENT.

Every XQbot welding cell comes ready to connect ex works and equipped with:

- One MIG/MAG cobot welding torch with 22.5° angled torch neck
- One 1.8m long cobot hose package for water-cooled MIG/MAG welding torches equipped for 1.0/1.2 mm steel
- One integrated ROB 5 wire feeder
- Digital gas control (DGC)
- RC XQ Expert 2.0 remote control

To ensure optimal integration into your production, the XQbot welding cells are also available with an integrated welding machine or ready to be connected to an external welding machine.

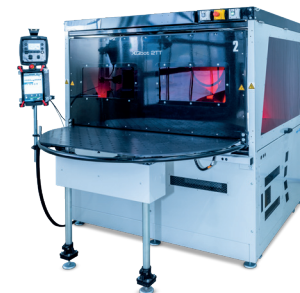
XQbot

with integrated welding machine

Phoenix XQ 355 DW and cooling unit
cool50-2 U40



XQbot 1 P355 DW DGC



(with indexing table)

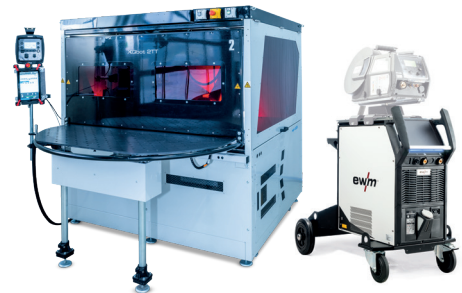
XQbot 2TT P355 DW DGC

XQbot

ready for an external power source



XQbot 1 EPS DGC



(with indexing table)

XQbot 2TT EPS DGC

Examples for external power sources

Type	Description
Phoenix XQ 350 puls DW	
Titan XQ 350 puls DW	Without control, wheel kit with single cylinder bracket, water cooling and 5 m mains connection lead, including mains plug
Titan XQ 400 AC/DC puls DW	
Phoenix XQ 350 puls DWF	Without control, ready for second wire feeder, wheel kit with double cylinder bracket, enhanced water cooling and 5 m mains connection lead including mains plug (wire feeder must be ordered separately)
Titan XQ 350 puls DWF	
Titan XQ 400 AC puls DWF	
Z MIG XQ 70 mm ² /1.8m 400 A / 80 % W	
Z MIG XQ 70 mm ² /5 m 400 A / 80 % W	Intermediate hose package, water-cooled, 14-pole
95 mm ² / H01-N2-D / 5 m	Earth cable extension



WE ARE WELDING

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#WEAREWELDING

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EWM is your partner for the best welding technology. With EWM, you'll weld more efficiently, more reliably and produce higher-quality results. EWM's innovative systems, high-performance welding procedures, digital technologies and services, as well as expert consultation, all support you in achieving perfect results in your welding tasks.

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The contents of this document were researched, checked and edited with care. However, it is still subject to alterations, writing errors and mistakes.