



WE ARE WELDING

Automated MIG/MAG multi-process welding machines

Titan XQR puls



Titan XQR puls – a quantum leap in welding technology

Discover the result of the consistent development of the Phoenix puls and alpha Q puls: The Titan XQR puls is our current flagship power source for automated welding. It features the new RCC inverter technology as well as significantly improved XQ welding processes and is available as gas or water

cooled. The Titan XQR puls is also suitable for welding torch changing systems. It covers long distances with up to three drives in series depending on the version. Perfect weld seams are thereby pre-programmed for all materials and material thicknesses

Robot power source

Titan XQR puls



XR robot interface



RC XQ panel

With Expert XQR 2.0 control

Networking gateways for connection with ewm Xnet 2.0

- LAN gateway XQ LG (optional)
- LAN/Wi-Fi gateway XQ WLG (optional)

Available versions

- Gas or water cooled

all in

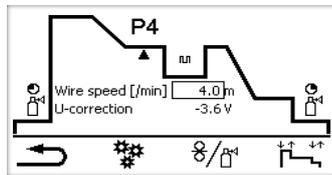
All MIG/MAG processes included in the machine at no extra charge!

Thanks to the new RCC inverter technology, the welding features of the Titan XQR puls have been significantly improved for all welding processes. With the Standard XQ and Pulse XQ characteristics, you can weld low-alloy and high-alloy steels and aluminium alloys perfectly. You can even braze steel, aluminium and galvanised sheet metal.



Control Expert XQR 2.0

- Welding program sequence**
 Simple adjustment of all welding parameters in the program sequence
- JOB window**
 Simple JOB selection for characteristics via click wheel
- Welding parameter**
 Display of the effective arc power for the simple calculation of energy per unit length
- Quick switching between MIG/MAG processes**
 The optimum for each welding task
- WPQR welding data assistant**
 Exact calculation of heat input and energy per unit length
- Language selection**
 Pre-configured languages for the user menu:



all in

- No extra charge
- All processes included in the machine



rootArc XQ
rootArc puls XQ

Perfect root welding, perfect gap bridging



coldArc XQ
coldArc puls XQ

Heat-reduced for thin sheet welding



forceArc XQ
forceArc puls XQ

Heat-reduced, directionally stable high-performance arc with deep penetration



wiredArc XQ
wiredArc puls XQ

Heat-reduced, directionally stable high-performance arc with penetration stabiliser for changing stick-out



Positionweld

For simple and perfect positional welding



superPuls

Enables process combinations for positional welding



Standard XQ
Pulse XQ

Standard and pulsed arc

Options

Titan XQR puls

- Fieldbus interfaces
- Robot interfaces RINT X12/BUSINT X11
- Network connection with ewm Xnet 2.0 and built-in or external LAN or WiFi gateways
- Split box for changing systems with two welding torches
- 60 V sensor voltage for position search
- Water cooling set for Rob 5 – for retrofitting

Rear connections



Connection panel

BUSINT X11

Fieldbus interface for: Profibus, DeviceNet, CANopen, EtherNet IP, Profinet, EtherCAT, Modbus, Interbus, Rugged Line

RINT X12

Digital/analogue interface

Gas connections

Digital gas regulation

Strain relief

Relieves hose package

Protective dust filter

Protects welding machine and cooling unit from external contamination

Split box

Connection for double wire feeder systems

Robotic wire feeder

M Drive 4 Rob 5 XR

M Drive 4 Rob 5 XR, the wire feeder for automated welding, is available for conventional robot systems or hollow wrist robots. The eFeed allows easy wire inching and return. Rollers and flap can be optionally aligned to the left or the right. That way, you can

install two wire feeders next to each other. The M Drive 4 Rob 5 XR is available for gas or water cooled welding torches and can be fitted with a variety of options depending on your needs.



Robot welding torches selection

With the Titan XQR puls, you can also enjoy an entire range of welding torch possibilities: Choose between the standard or hollow shaft variants, gas or water cooling as well as push/pull or push/push welding

torches. Even a drum feed is possible. Welding torches with various neck bend angles or a swan neck, collision sensor, wire feeders and other welding accessories round off the system.

EWM RMT robot welding torches

Gas or water cooled

Hose package

- Gas test
- Push-buttons for wire inching and return

EWM RMT torch neck with quick connect coupling

- Gas or water cooled
- Various bend angles or swan neck

Adapter

EWM collision sensor RSA

- Protects against damage
- High reset precision



M Drive 4 Rob 5 XR robotic wire feeder



Titan XQR puls



EWM RMT hollow shaft Robot welding torches

Gas or water cooled

EWM hollow shaft collision sensor RSA HW

- Gas or water cooled

EWM RMT torch neck with quick connect coupling

- Gas or water cooled
- Various bend angles or swan neck



M Drive 4 Rob 5 HW XR robotic wire feeder





DGC – electronic gas flow control

- No gas blast with turbulence when igniting the arc as electrical valve opens and closes gently
- Efficiency through gas savings thanks to accurate settings
- Prevention of welding errors caused by too much or too little gas
- Precise, digitally adjustable gas quantity
- Suitable gas quantity for the respective welding task (JOB) optimally set at the factory
- Exact gas quantity depending on the shielding gas automatically without conversion for argon, argon mixed gas, CO₂, helium
- Welding stop when dropping below the critical quantity of gas (shielding gas cylinder empty or gas supply interrupted)
- Simplified calculation by recording the exact gas consumption via the ewm Xnet 2.0 software (optional)

EWM frontDrive robot welding torch

Gas cooled

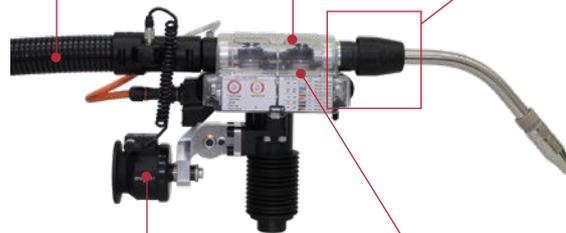
M Drive 4 Rob 5 XR
robotic wire feeder



frontDrive media box



Hose package with
ewm powerConnector
connection



Transparent
polycarbonate
hood



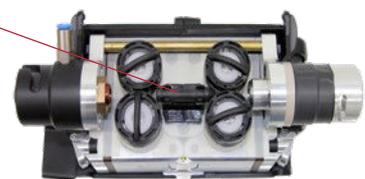
Torch neck with quick
connect coupling

Simple torch neck
replacement thanks
to new quick connect
coupling

Collision
sensor

4-roll drive

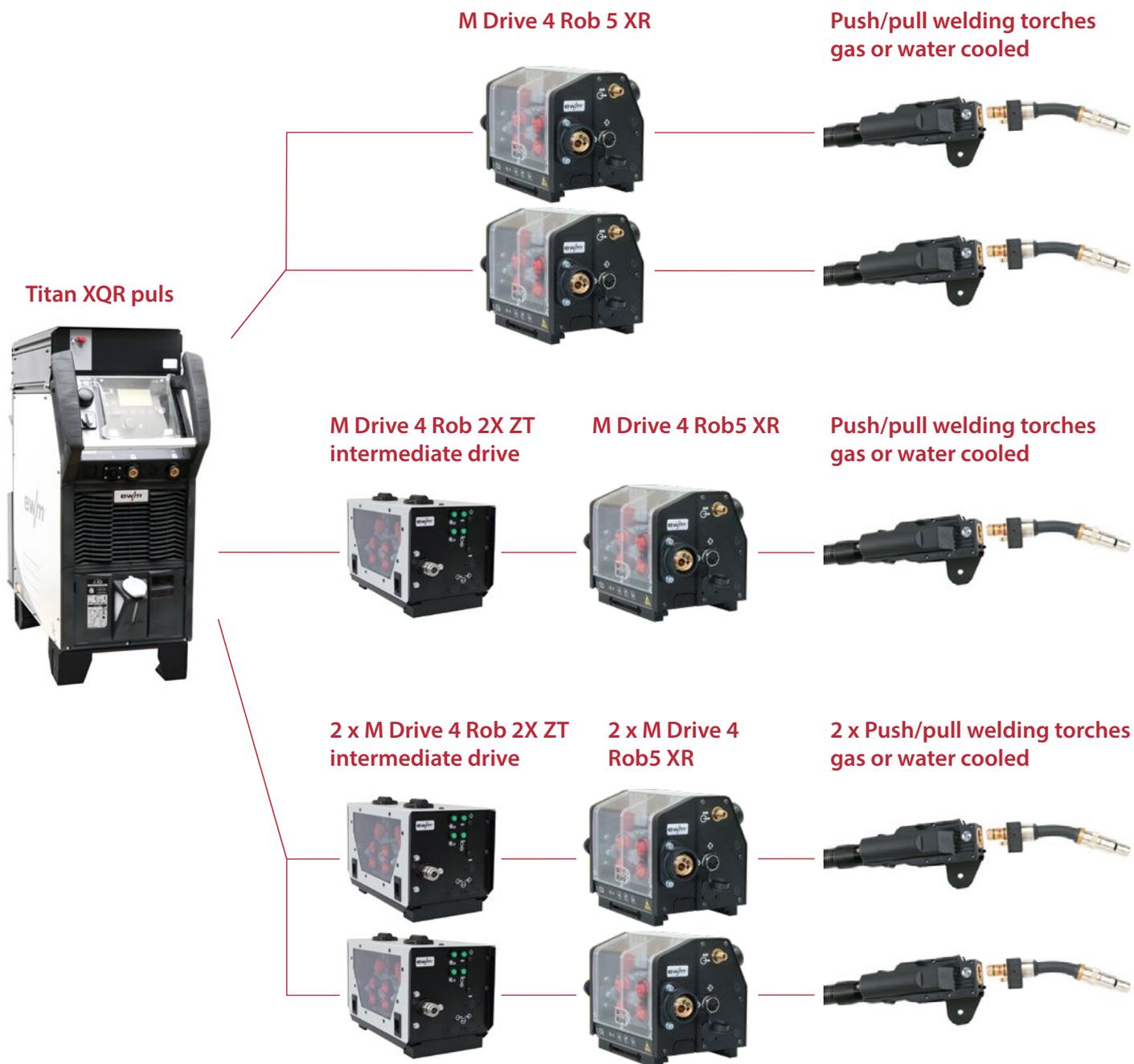
- Reliable wire feeding with four driven rolls
- Colour-coded wire feed rolls can be changed without tools



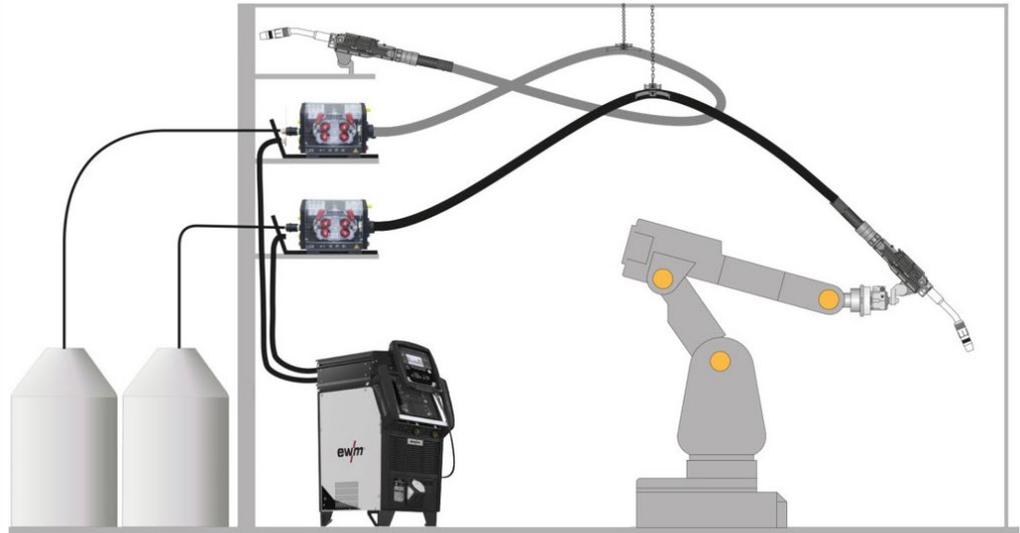
The right solution for your application

In addition to the standard variants with just one drive, you can also use a drum feed or an intermediate drive. Up to three drives in series can be used in combination with a push/pull welding torch. Plus, you can also use two welding torches in turn with

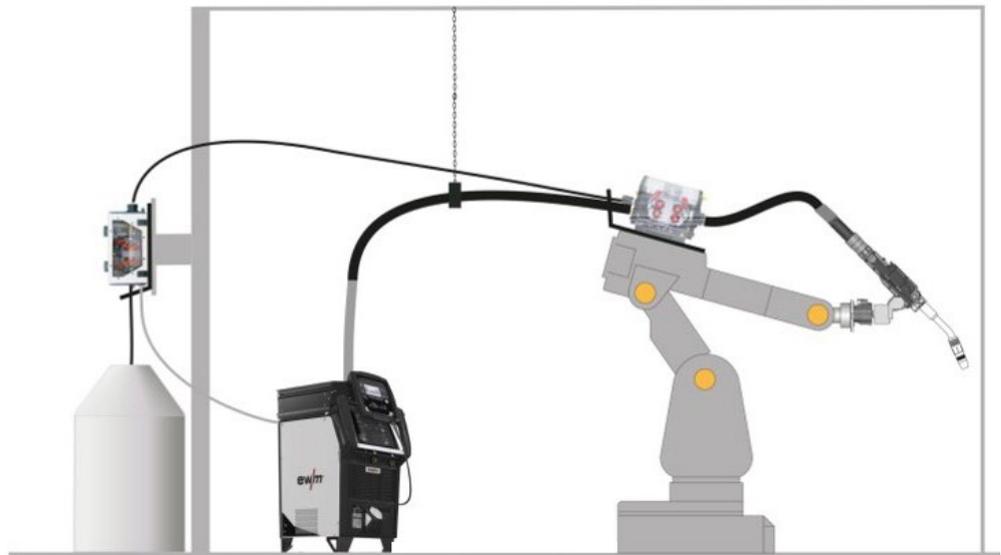
the welding machine when you use a welding torch changing system. Here at EWM we have the right components for your application. So, you can complete your automated welding task perfectly.



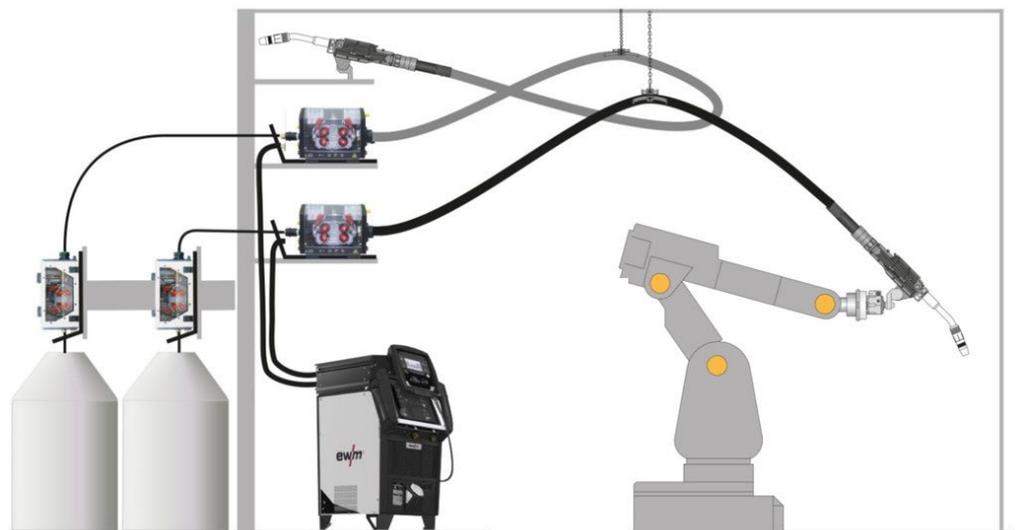
Wire feeder changing system



Wire feeder system with intermediate drive – e.g. drum feed



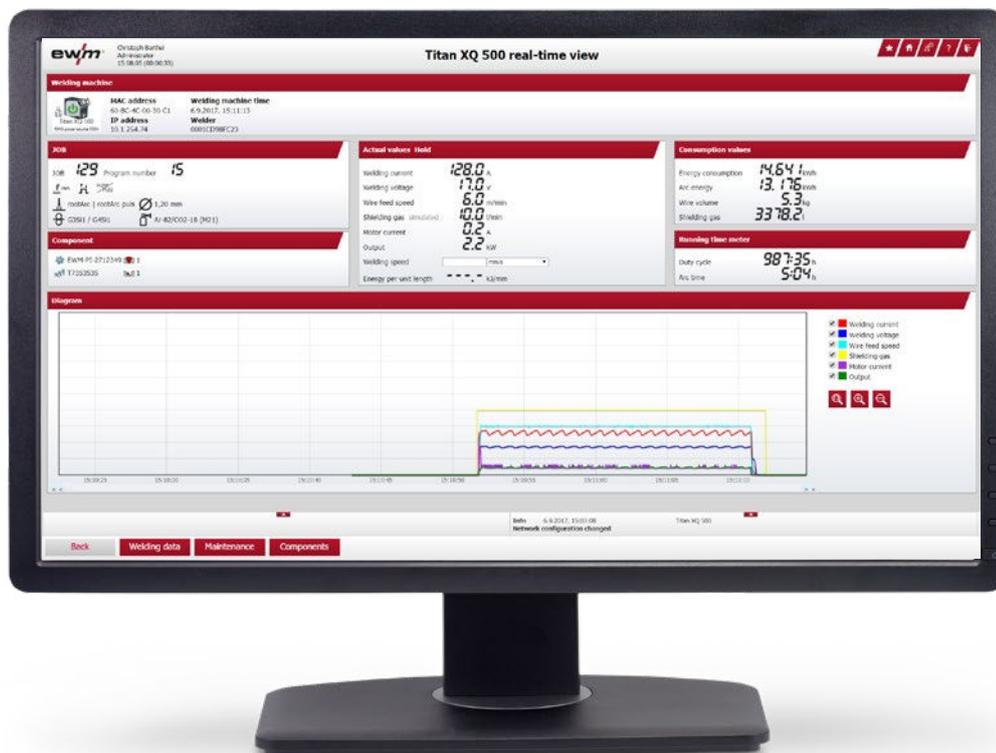
Wire feeder changing system with intermediate drive – e.g. drum feed



Welding 4.0 – ewm Xnet 2.0 welding management system

Intelligent and productivity-boosting networking of man and machine for an automatic flow of data within the production chain: Industry 4.0 is now becoming established in welding production thanks to ewm Xnet 2.0, the new and innovative Welding 4.0 welding management system. In this way, future concepts such as the smart factory and digital transformation effortlessly become reality. The advantages are obvious: Improved networking of products and people improves efficiency and quality

and reduces costs whilst saving resources. Intelligent monitoring and transparent processes from planning to production and final costing of weld seams keep you informed at all times. ewm Xnet 2.0 provides the advantages of Industry 4.0 for welding operations of any size and orientation. Bring the future into your company now – get in touch with us!



Your advantages

- Record welding data
- Save, view and analyse at a central point
- Online monitoring – control and monitor the welding process for any number of welding machines from any number of computer workstations
- Analyse, evaluate, report and document logged welding parameters online for each networked welding machine using different documentation and analysis tools
- Option of transferring to all welding machines in the network
- Convenient, easy-to-create graphic display layout showing the network participants based on work facility floor plan, can be enlarged by zooming, navigation window and much more

Modules and components

- Starter set – record and manage welding data and transmit consumption values in real time
- Upgrade 1 – WPQ-X Manager – create, manage and assign welding procedure specifications to welders
- Upgrade 2 – component management – manage components, create welding sequence plans, assign WPS
- Upgrade 3 – project planning for complex welding tasks
- Xbutton – access rights and WPS allocation for the welder via the robust hardware key



OPC UA interface

By using standardised interfaces such as OPC UA, data from the EWM system can be exported in a standard format so that it can be integrated into superordinate production management systems.



Quick data transfer for Industry 4.0

- Networking of any number of power sources – by LAN/WiFi
- Simple offline data transfer via USB connection



**Titan XQR
350 puls**

**Titan XQR
400 puls**

**Titan XQR
500 puls**

**Titan XQR
600 puls**



**M Drive 4 Rob 5 X
(HW)**

Setting range for welding current	5 A–350 A	5 A–400 A	5 A–500 A	5 A–600 A
Welding current duty cycle at ambient temperature of 40 °C				
100% DC	350 A	370 A	470 A	470 A
80% DC	–	400 A	500 A	500 A
60% DC	–	–	–	550 A
40% DC	–	–	–	600 A
Mains voltage 50 Hz/60 Hz	3 x 400 V (-25% to +20%) to 3 x 500 V (-25% to +10%)			
Mains fuse (slow-blow)	3 x 20 A	3 x 25 A	3 x 32 A	3 x 32 A
Efficiency	88%			
cos φ	0.99			
Open circuit voltage at 3 x 400 V mains voltage	82 V			
Max. connected load	15.4 kVA	18.6 kVA	25.8 kVA	34.1 kVA
Rec. generator rating	20 kVA	25 kVA	35 kVA	45 kVA
Protection classification	IP 23			
EMC class	A			
Ambient temperature	-25 °C to +40 °C			
Machine cooling	Fan			
Torch cooling	Gas or water			
Coolant water tank	8 L			
Safety identification				
Standards	IEC 60974-1, -2, -10			
Dimensions L x H x W	1,152 x 976 x 686 mm 45.3 x 38.4 x 27 inch			
Machine weight, gas cooled	114 kg/251.32 lb			
Machine weight, water cooled	128 kg/282.19 lb			

Welding current duty cycle at ambient temperature of 40 °C	
100% DC	470 A
40% DC	600 A
Wire feed speed	0.5 m/min. to 25 m/min.
Factory-installed roll equipment	Uni drive rolls 1.0 to 1.2 mm (for steel wire)
Drive	4 rolls (37 mm)
Protection classification	IP 23
EMC class	A
Ambient temperature	-25 °C to +40 °C
Safety signs	
Standards	IEC 60974-1, -5, -10
Dimensions L x H x W	271 x 179 x 212 mm
Weight	5.3 kg

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