

XQ TIG

ewm[®]
WE ARE WELDING

TETRIX XQ

THE TIG SUCCESS STORY
CONTINUES: 230 A TO 600 A



DEMODULAR/MODULAR

THE TIG FAMILY.

More digital, universal and personal – the welding revolution is here. DC or AC/DC? Modular or demodular? We provide you with exactly the right Tetric XQ for your welding tasks! Smart networking. Robust operation. Sophisticated casing. Revolutionary control. The TETRIX XQ machines offer a whole new TIG welding experience! For the best welding results you've ever achieved.



YOUR BENEFITS +

- Digital welding processes for the best welding results
- Innovative casing system for ultimate user comfort
- The Expert 3.0 boasts a 7" high-resolution graphic display with plain text display
- Can be individually configured
- Can be connected to the network with ewm Xnet welding management software via the gateway
- Many more features including:
 - Easy, intuitive operation
 - LED status bar
 - Available with various rated outputs
- Extensive range of accessories



THE EWM ENVIRONMENT INITIATIVE

We support your efforts to reduce CO₂ emissions with our BlueEvolution® sustainability initiative. After all, a weld seam can only be perfect if the welding process conserves energy and resources. With our resource-saving inverter technology and energy-reducing joining processes, we unite economic efficiency and ecology. Join us – become a:



EMISSIONS HERO.

Innovative EWM welding processes produce fewer harmful welding fume particles and therefore cut down on emissions – thus improving working conditions for everyone utilising these welding processes. A reduction of the passes to be welded also cuts down on welding times. This not only reduces emissions but avoids their production from the outset.



ENERGY WINNER.

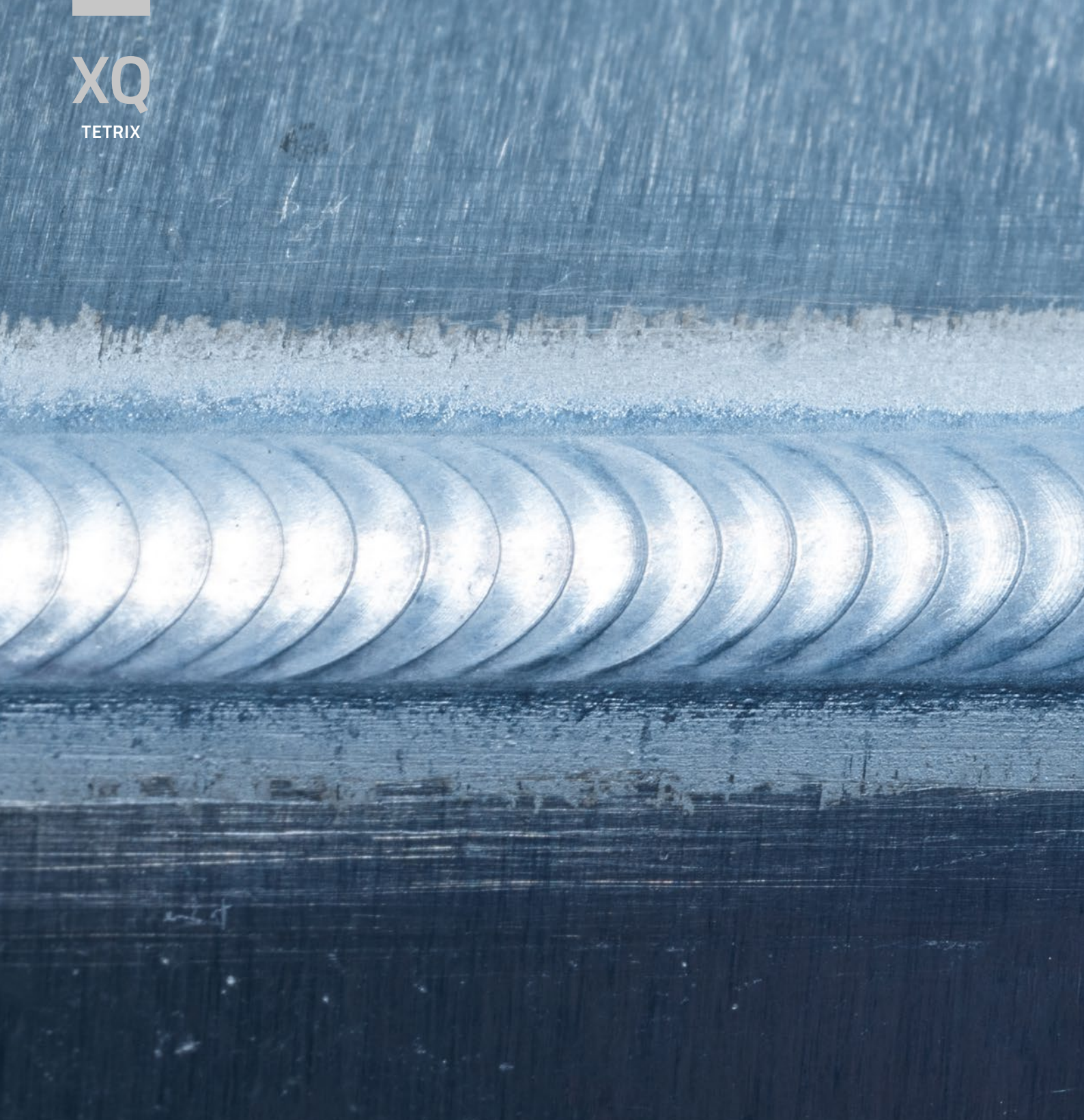
When used in conjunction with power-saving EWM joining processes, the high efficiency of our inverter technology saves primary energy and therefore cuts electricity costs. These savings are also enhanced by weld seam geometries which use less wire and gas. Take advantage of shorter welding times and reduced need for post weld work to save CO₂ and become an energy winner.



RESOURCE RESCUER.

EWM inverter technology allows lighter and more compact machines to be built. This results in less material consumption, and resources like copper, aluminium and steel are conserved. This also corresponds to the action plan of the Ecodesign guidelines for resource-conserving recycling management with high requirements on the reparability and recyclability of products.





PULSED TIG WELDING

- Safe weld pool backing for positional, thin sheet and root welding
- Minimum distortion thanks to reduced heat input
- Reduction of the energy per unit length, perfect for heat-sensitive materials
- Perfect for visible seams thanks to uniform bead ripples

5[☆]

DIRECT SELECTION OF YOUR WELDING TASK WITH FIVE INDIVIDUALLY PROGRAMMABLE FAVOURITES BUTTONS!

100

PERCENT

BETTER OVERVIEW!

Thanks to the well-laid-out, intuitively operated controls.

50%*

LESS WORK REQUIRED FOR REPETITIVE TACK WELDING – WITH SPOTMATIC.

*up to

100%

DIGITISATION FOR 100% REPRODUCIBLE WELDING RESULTS.

4

A VARIETY OF PULSE VERSIONS ARE AVAILABLE:

- Average value pulse welding
- Thermal pulsing
- Automatic pulsing
- AC special pulsing

3 -YEAR WARRANTY**

- No restriction on the number of operating hours – even when used in 3-shift operation, 24 hours a day, 7 days a week
- 3-year warranty on welding machines and 5-year warranty on transformers and rectifiers

**In accordance with the warranty conditions at www.ewm-group.com

XQ

TETRIX

CASING VARIANTS.

DEMODULAR

Whether DC or AC/DC, gas or water-cooled – the Tetrrix XQ series has an individual solution for every need. The machines boast an above-average duty cycle to make your work more effective and, thanks to the wide range of accessories, there's always a machine to meet any special, unusual requirements.

flexFit casing system with a whole range of attachment options

Whether you want to add a torch holder, a container for welding consumables, or anything else, many individual accessories and options can be attached to the casing's continuously cast aluminium profile using the handy slot nuts on the upper cross member.



Safe crane transportation – levitation made easy

4 sturdy holders (Ø = 40 mm) for easy hook-in or through connection of the crane harness.

Always in sight

The large LED info bar with four unambiguous signal colours always shows you the current operating status of your Tetrrix XQ.

Torch cooling

Can be gas- or water-cooled. High cooling capacity of 1500 W thanks to high-performance centrifugal pump and large 8-litre water tank. The integrated flow and temperature monitoring protect your welding torch against damage caused by overloading.



Ergonomic handles



LED info bar



flexFit rail on casing



Integrated water cooling

MODULAR

Modular casing system for workstations in all kinds of environments. Gas- or water-cooled. DC or AC/DC. Flexible design: suitable for use both in production or as a mobile machine on the construction site or job. Portable or mobile on a trolley. Space-saving and lightweight design guarantees flexibility and mobility.



Everything within reach

You can stow consumables in the storage compartment on the newly designed handle and always have them ready to go.



Different trolley models

Workshop or construction-site trolley? There are four models to choose from.

Modular casing system

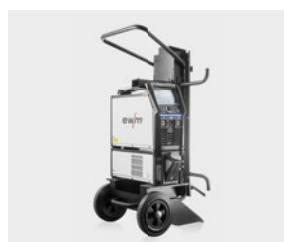
The modular power source offers countless combination options. Optional accessories allow it to be adapted perfectly to your needs.

Cool XQ

With excellent cooling capacity and integrated flow and temperature monitoring, it's the perfect addition to your TETRIS XQ.



Workshop Trolley
XQ 55-3



Construction site Trolley
XQ 35-3



Carrying handle



Retrofittable water cooling

EXPERT 3.0 +

NOW ANYTHING'S POSSIBLE.

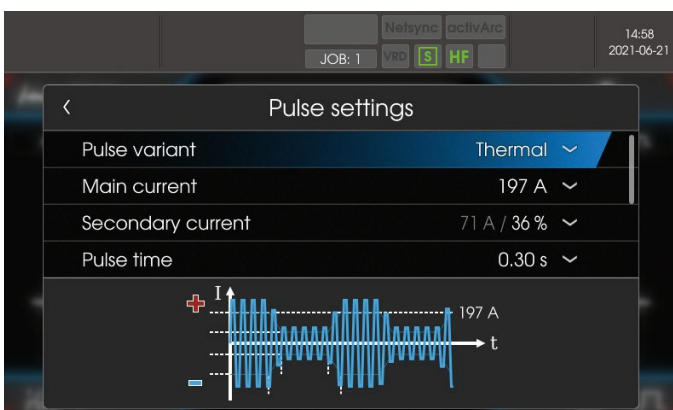


- 7" high-resolution graphic display with plain text display
- Five favourites buttons
- Xbutton for individual access authorisation
- USB interface for software updates
- Click wheel for convenient operation with welder's gloves
- Reliable push-button operation (no touchscreen)
- Customisable to your individual requirements
- Direct access to all main functions
- All parameters at a glance
- Colour screen and graphical support for setting parameters

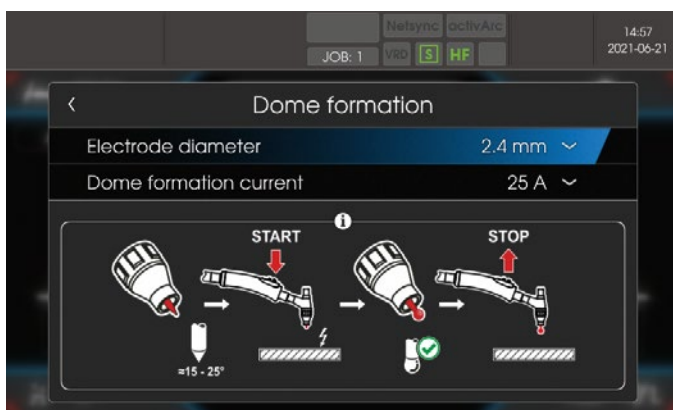
Graphic adjustment of all parameters in the flow diagram



Visual support for parameter setting



All key functions can be accessed without submenus directly from the home screen



Easy-to-understand illustrated instructions and quick-access menus

FUTURE SOFTWARE UPDATES FOR THE EXPERT 3.0 WILL BE AVAILABLE FOR DOWNLOAD.

COMFORT 3.0 +

POPULAR, PRAISED AND SIMPLY INDISPENSABLE.

- Two large, easy-to-read 7-segment displays
- Five favourites buttons
- Click wheel for convenient use with welder's gloves
- Reliable push-button operation
- Direct access to all main functions
- All parameters at a glance
- AC/DC and DC versions available



WELDING TORCHES.

TORCH VARIETY

Weight-optimised and ergonomic in design, gas- or water-cooled EWM welding torches are comfortable to hold and thus ensure fatigue-free work. Extreme robustness and durability also reduce wear and spare parts costs. Whatever your need, you can find the perfect solution in the extensive range of EWM welding torches.



TIG RETOX XQ WELDING +

- Your TIG Retox XQ welding torch is fitted with two torch triggers. This allows you to reduce the current to a secondary current during welding simply by tapping.
- It is also possible to continuously increase (up function) or reduce (down function) the current during welding.
- Displays the welding current or your selected welding task (JOB number).
- Grip handle ensures secure handling.
- Standard or high-flex leather hose package (HFL – with the first metre after the handle coated with highly durable, yet soft, napa leather).

SPOTARC WELDING TORCH +

- Pinpoint precision – the solution for spot welding fillet welds, edge welds and flat welds



FLEXIBLE CONNECTION +

- The standard 5-pole torch connection is now compatible with EWM X technology.
- This allows you to connect digital EWM multi-function torches with display and remote-control functions, in addition to conventional welding torches.



TIG XQ SERIES.

IT'S BEGINNING: YOUR ALL-NEW TIG WELDING EXPERIENCE.

Tetrix XQ puls AC/DC
230 A | 300 A

Tetrix XQ puls AC/DC
350 A | 400 A | 500 A

CASING



MODULAR



DEMODULAR

WELDING PROCEDURES
TIG AND MMA

AC/DC WELDING FUNCTIONS

- AC amplitude balance
- AC balance
- AC-Balling
- AC frequency
- AC special
- AC waveforms
- Standard AC
- Pulsed TIG AC welding

- activArc®
- Automatic pulsing
- HF start
- Lift arc
- Average value pulse welding
- spotArc®
- spotmatic
- Standard DC
- Thermal pulsing
- TIG Antistick
- Pulsed TIG DC welding

- Antistick
- Arcforce
- Cellulose electrode compatible
- MMA pulse welding
- Hot start
- Standard MMA

CONTROL



Comfort 3.0 AC



Expert 3.0

WELDING PROCEDURES
OVERVIEW



AC amplitude balance

Allows adjustment of negative and positive welding current level.



AC balance

The perfect balance between the penetration profile and the achievable cleaning effect.



AC-Balling

Ensures optimum tungsten balling and therefore a stable, easy-to-handle arc.



AC frequency

Adjustment of arc – ideal for thin sheets and fillet welds.



AC waveforms

Optimum stability and reduced noise level thanks to adjustable AC waveforms (sine, trapezoidal, square and customised).



AC special

Switch between AC in the pulsing phase and DC in the fundamental current phase.



activArc®

Dynamic TIG arc with automatic arc stabilisation.



Automatic pulsing

In order to increase arc stability and penetration characteristics at low currents, the current is automatically pulsed.



HF start

Prevents tungsten non-contact arc ignition.



Lift arc

Simple ignition of the welding torch on the workpiece.



Average value pulse welding

Allows the user to meet the WPS requirement in pulsed mode.



spotArc®

Minimised time required for welding due to individual triggering with the torch trigger.

Tetrix XQ puls DC

230 A | 300 A



MODULAR

Tetrix XQ puls DC

350 A | 400 A | 500 A | 600 A



DEMODULAR

DC WELDING FUNCTIONS

- activArc[®]
- Automatic pulsing
- HF start
- Lift arc
- Average value pulse welding
- spotArc[®]
- spotmatic
- Standard DC
- Thermal pulsing
- TIG Antistick
- Pulsed TIG DC welding

- Antistick
- Arcforce
- Cellulose electrode compatible
- MMA pulse welding
- Hot start
- Standard MMA



Comfort 3.0 DC



Expert 3.0



spotmatic
Reproducible welding of uniform tack points.



Standard AC
Aluminium welding in just one click thanks to perfect presets. Easy adjustment of AC parameters for special applications.



Standard DC
Perfect TIG welding with ignition parameters adapted depending on power output.



Thermal pulsing
The freely adjustable pulsed current and relevant time can be adapted in accordance with the welding power. These precision settings allow for unique weld appearances.



TIG Antistick
Prevents damage to tungsten electrode in case of inadvertent contact with the workpiece.



Pulsed TIG AC welding
Reduced distortion and discolouration through energy per unit length and heat input.



Pulsed TIG DC welding
Reduces heat input and therefore distortion and discolouration.

Xnet ready

Blue Evolution[®]

3 Years // 5 Years
ewm-warranty[®]
3 shifts / 24 hours / 7 days

Industry 4.0
ewm



ACCESSORIES.

TROLLY 53/54
EASY MOBILITY WITH THE
XQ TROLLEY SERIES.



TROLLY 53

TROLLEYS



EQUIPMENT



- For a power source with or without a cooling unit
- Not suitable for transporting shielding gas cylinders
- Sturdy design with four stable wheels
- Saves space, ideal for use on a ring line

TROLLY 55-3

OTHER TROLLEYS



- For a power source with or without a cooling unit
- Suitable for transporting a shielding gas cylinder up to 50 L (300 bar)
- Sturdy design with four stable wheels

TROLLY 54



OPTIONAL



- For a power source with or without a cooling unit
- Suitable for transporting shielding gas cylinder up to 33 L (200 bar)
- Sturdy design with four stable wheels Saves space, ideal for use on a ring line
- Fitted with suspension for cables on the cylinder holder as standard
- **Option** to retrofit with welding machine frame (gas-cooled)
- **Optional** welding rod holder

TROLLY 35-3



- For a power source with or without a cooling unit
- Suitable for transporting a shielding gas cylinder up to 50 L (300 bar)
- Sturdy design with two stable wheels
- Optional crane suspension allows lifting by crane



Xnet ready

Blue Evolution®

3 Years // 5 Years
ewm-warranty
3 shifts / 24 hours / 7 days
For details see ewm-warranty.com

Industry 4.0
ewm



Thanks to the wide variety of user-oriented accessories, the XQ series provides flexibility and can be adjusted to all challenges and applications.

DEMODULAR



HOSE PACKAGE HOLDER

Item no. 092-003333-00000

- Mount for long hose packages.



+ TIG 450 GRIP RETOX XQ

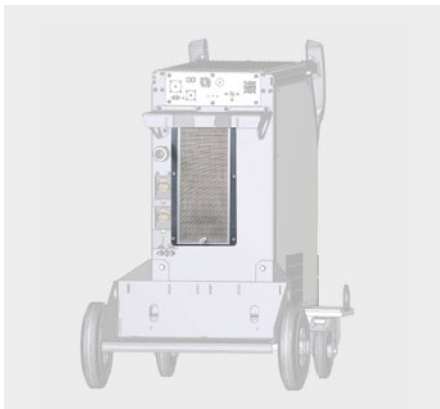
- TIG welding torches
- Gas and water-cooled versions available.



+ WELDING ROD HOLDER

Item no. 092-004388-00000

- Easy to mount on the flexFit rail.



DUST FILTER

Item no. 092-003337-00000

- Protects welding machine from extreme contamination.



+ TORCH HOLDER

Item no. 092-003335-00000

- Secure place protects against damage.
- Can be simply screwed to the handle of the system.
- Individual versions for right-handed and left-handed users.



MODULAR



CONSTRUCTION SITE + TROLLY XQ 35-3

- Robust transport cart for a quick change of location.



WORKSHOP + TROLLY XQ 55-3

- Give your Tetrax XQ even more mobility.



+ PROTECTIVE + SCREEN EXPERT 3.0

Item no. 092-004278-00000

- Fixed cap for Expert control.



DIRT FILTER

Item no. 092-004056-00000

- Reliably protects the machine from impurities in difficult working conditions.



+ WELDING ROD + HOLDER

Item no. 092-004389-00000

- Easily attach to trolley with magnets.



DIGITISE ANY WELDING OPERATION.

THE ewm Xnet WELDING MANAGEMENT SYSTEM AND XBUTTON.

Making Industry 4.0 a reality is easy with the innovative ewm Xnet welding management system – no matter your company's size or focus. The advantages are obvious: strengthened interconnectedness of products and people increases efficiency and quality, while reducing costs and preserving resources. By choosing ewm Xnet, you are adding measurable value throughout your welding company's entire value chain. Thanks to intelligent monitoring and transparent planning, production, quality management, welding coordination personnel, final costing and administration processes, you can always keep track of everything.



GUARANTEED AND INCREASED QUALITY

- Documentation of the welding parameters and the welders of every run provides long-term, traceable welding quality
- WPS connection to the component, real-time parameter monitoring directly on the welding machine and clear assignment of required welder qualifications all minimise the number of errors
- Precise specifications from component management and the WPS manager ensure that the correct parameters are always set



COST REDUCTIONS

- Consumption values for power, shielding gas, welding consumables and welding time are recorded to recognise potential savings
- Prompt maintenance instructions instead of early warnings lead to a minimised consumption of wear parts
- Transparent processes ensure constructive controlling with the option of precise final costing



INCREASED PRODUCTIVITY

- Longer arc times per layer improve efficiency
- Paperless transfer of all relevant data and WPS directly to the workplace reduce non-productive times
- Pre-set welding parameters reduce the number of error corrections
- Timely, consumption-oriented maintenance notices, e.g. for consumables, result in fewer unnecessary downtimes

ewm Xnet EXAMPLE OF USE COMPONENT MANAGEMENT

The modular design of the Welding 4.0 ewm Xnet welding management system can be adapted to meet the special requirements of individual production processes. The three interrelated ewm Xnet modules meet any individual requirements depending on the type and size of the company. The update capability typical of EWM products is also integrated: Additional modules can be retrofitted easily at any time.



STEP 1 +

Work preparation in ewm Xnet

- Create the component to be produced in ewm Xnet during work preparation on PC in the office
- Create drawing file or import from CAD
- Determine seam sequence plan
- Assign WPS
- Print barcode, add to the work order or attach directly to the component as a sticker
- Send the component data via LAN/WiFi to the gateway connected to the welding machine
- The data is now available offline in the gateway, e.g. for use on the construction site

STEP 2 +

Scan the barcode on the component

- Welder scans the barcode on the component using a barcode scanner
- The component data is loaded on the control:
 - Job no.
 - Component no.
 - Component group
 - Serial number
 - Lot no.
 - Welding sequence plan (e.g. seam 1, run 1, seam 1, run 2, etc.)
 - WPS (welding data for each run/seam)
 - Required welder qualification (Xbutton)

STEP 3 +

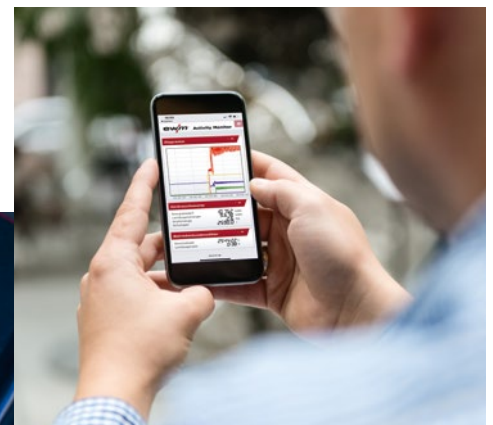
Xbutton

- Welder identifies themselves for welding approval using the Xbutton on the welding machine or the gateway

STEP 4 +

Use the barcode scanner to scan the parameters of the runs and seams in line with the welding sequence plan

- Welder starts working in line with the welding sequence plan
- All welding parameters are set automatically according to the WPS for every individual run/seam by the machine
- Scanning the next run/seam confirms the completion of the current run/seam
- Activity Monitor can be viewed on the go via your smartphone or tablet



TECHNICAL DATA.

DEMODULAR




TETRIX XQ	350 PULS DC	400 PULS DC	500 PULS DC	600 PULS DC
TIG setting range for welding current	3 A – 350 A	3 A – 400 A	3 A – 500 A	3 A – 600 A
MMA setting range for welding current	5 A – 350 A	5 A – 400 A	5 A – 500 A	5 A – 600 A
TIG duty cycle at 40 °C	350 A / 100%	400 A / 80% 370 A / 100%	500 A / 80% 470 A / 100%	600 A / 40% 550 A / 60% 470 A / 100%
MMA duty cycle at 40 °C	350 A / 100%	400 A / 80% 370 A / 100%	500 A / 80% 470 A / 100%	600 A / 40% 550 A / 60% 470 A / 100%
Open circuit voltage	82 V – 102 V			
Mains voltage / tolerance	3 x 400 V (- 25 % – + 20 %)* 3 x 460 V (- 25 % – + 15 %) 3 x 500 V (- 25 % – + 10 %)			
Mains fuse	25 A	25 A	35 A	35 A
Rec. generator output	20.4 kVA	24.6 kVA	34.2 kVA	45 kVA
cos φ / efficiency	0.99 / 90%			
Insulation class / protection classification	H / IP23			
Ambient temperature	-25 °C to +40 °C			
Cooling capacity at 1 l/min	1,500 W			
Max. delivery height	35 m			
Max. pump pressure	3.5 bar			
Pump	Centrifugal pump			
Machine cooling	Fan, temperature-controlled			
Standard configuration	Flow monitor, temperature controller			
Torch connection	5- or 8-pole			
Mains connection lead	Configurable to 5 m, 10 m or 15 m			
Display size	Expert 3.0: 7" display (not a touchscreen) Comfort 3.0: 7-segment LED			
Favourites buttons	5			
Safety identification				
Standards	IEC 60974-1, -3, -10 CLA			
Dimensions (L x W x H) mm	1,152 x 686 x 976			
Dimensions (L x W x H) inch	45.3 x 27 x 38.4			
Weight in kg	126.5		128.5	
Weight in lbs	278.9		283.3	

*Also available with 460 V or 500 V ex works

DEMODULAR



TETRIX XQ	350 PULS AC/DC	400 PULS AC/DC	500 PULS AC/DC
TIG setting range for welding current	3 A – 350 A	3 A – 400 A	3 A – 500 A
MMA setting range for welding current	5 A – 350 A	5 A – 400 A	5 A – 500 A
TIG duty cycle at 40 °C	350 A / 100%	400 A / 80% 370 A / 100%	500 A / 40% 400 A / 80% 370 A / 100%
MMA duty cycle at 40 °C	350 A / 100%	400 A / 80% 370 A / 100%	500 A / 40% 400 A / 80% 370 A / 100%
Open circuit voltage	82 V*		
Mains voltage / tolerance	3 x 400 V (- 25% – + 20%)**		
Mains fuse	25 A		
Rec. generator output	20.8 kVA	25.1 kVA	34.8 kVA
cos φ / efficiency	0.99 / 88%		
Insulation class / protection classification	H / IP23		
Ambient temperature	-25 °C to +40 °C		
Cooling capacity at 1 l/min	1,500 W		
Max. delivery height	35 m		
Max. pump pressure	3.5 bar		
Pump	Centrifugal pump		
Machine cooling	Fan, temperature-controlled		
Standard configuration	Flow monitor, temperature controller		
Torch connection	5- or 8-pole		
Mains connection lead	Configurable to 5 m, 10 m or 15 m		
Display size	Expert 3.0: 7" display (not a touchscreen) Comfort 3.0: 7-segment LED		
Favourites buttons	5		
Safety identification			
Standards	IEC 60974-1, -3, -10 CLA		
Dimensions (L x W x H) mm	1,152 x 686 x 976		
Dimensions (L x W x H) inch	45.3 x 27 x 38.4		
Weight in kg	128.5		129.5
Weight in lbs	283.3		285.5

* 92 V at 460 V and 102 V at 500 V

**Also available with 460 V or 500 V ex works

MODULAR



TETRIX XQ	230 PULS DC	230 PULS AC/DC	300 PULS DC	300 PULS AC/DC
TIG setting range for welding current	3 A – 230 A	2 A – 230 A	3 A – 300 A	
MMA setting range for welding current	5 A – 190 A	5 A – 190 A	5 A – 300 A	
TIG duty cycle at 40 °C	230 A / 45 % 205 A / 60 % 170 A / 100 %	230 A / 40 % 200 A / 60 % 170 A / 100 %	300 A / 40 % 270 A / 60 % 220 A / 100 %	
MMA duty cycle at 40 °C	190 A / 35 % 155 A / 60 % 125 A / 100 %	190 A / 35 % 150 A / 60 % 120 A / 100 %	300 A / 30 % 260 A / 60 % 210 A / 100 %	
Open circuit voltage	96 V*		87 V*	
Mains voltage / tolerance	1 x 230 V (- 40 % – + 15 %)		3 x 380 - 400 V (-25 % bis +20 %)	
Mains fuse	1 x 16 A			
Rec. generator output	8,2 kVA	8,8 kVA	22,3 kVA	23,4 kVA
cos φ / efficiency	0,99 / 87 %	0,99 / 83 %	0,99 / 87 %	0,99 / 83 %
Insulation class / protection classification	H / IP23			
Ambient temperature	-25 °C bis +40 °C			
Machine cooling	Fan, temperature-controlled			
rch connection	5- or 8-pole			
Mains connection lead	3,5 m		5,5 m	
Display size	Expert 3.0: 7" display (not a touchscreen) Comfort 3.0: 7-segment LED			
Favourites buttons	5			
Safety identification				
Standards	IEC 60974-1, -3, -10 CLA			
Dimensions (L x W x H) mm	550 x 224 x 415			
Dimensions (L x W x H) inch	21.7 x 8.8 x 16.3			
Weight kg	17,5		20,5	22,0
Weight lbs	38.6		45.2	48.5

*VRD version available as a separate machine



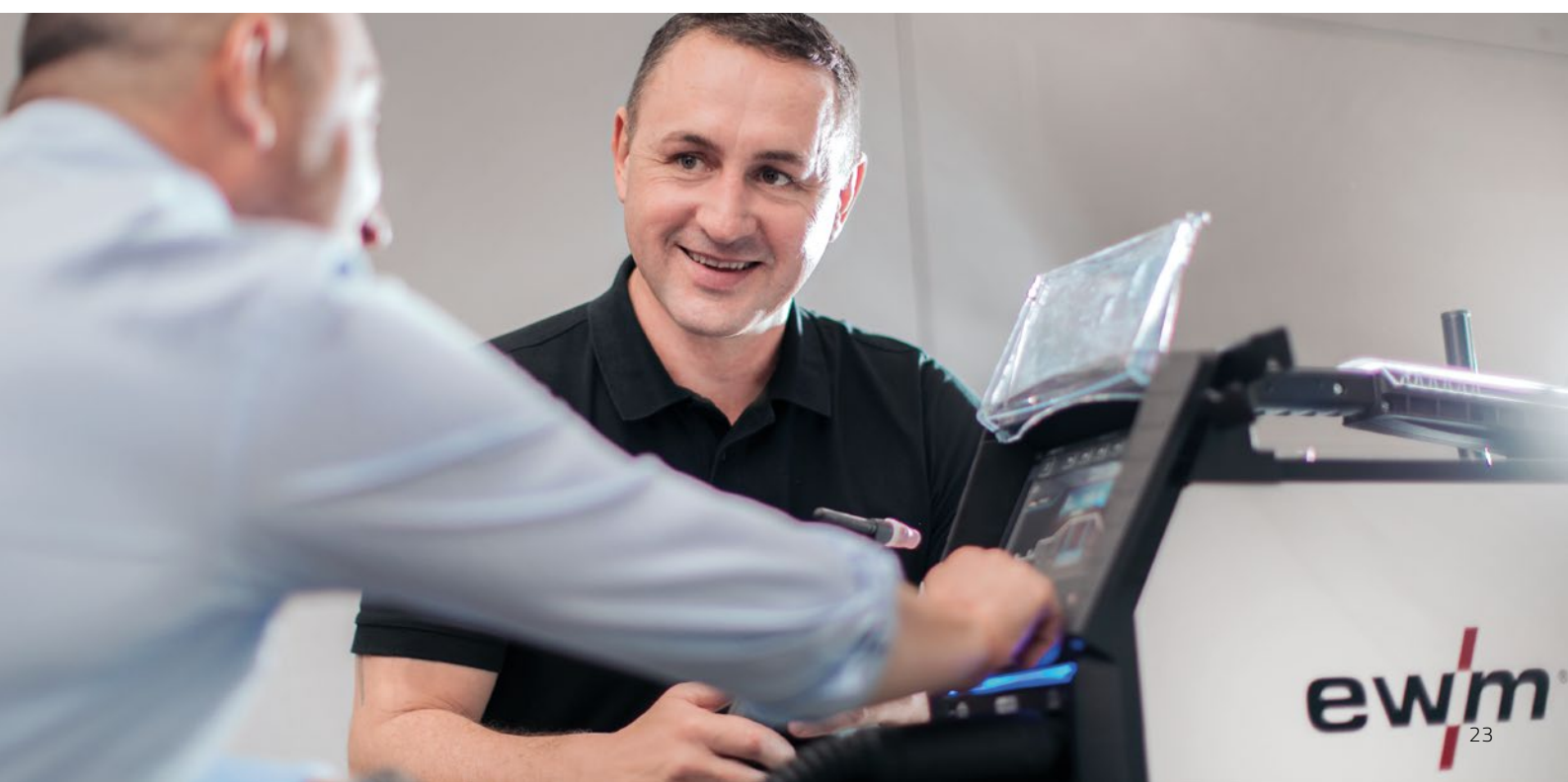
COOL XQ 40



COOL XQ 41-1

Compatible with	Tetrix XQ 230	Tetrix XQ 300
Input voltage	230 V	400 V
Max. cooling capacity	1.100 W	
Cooling capacity at 1 l/min	790 W	
Max. head	35 m	
Max. pump pressure	3,5 bar	
Pump	Centrifugal pump	
Machine cooling	Fan, temperature-controlled	
Protection classification	IP 23	
Safety identification	CE ENEC UKA	
Harmonised standards used	IEC 60974-1, -2, -10 CLA	
Standard configuration	Flow monitor Temperature controller	
Dimensions (L x W x H) mm	588 x 224 x 200	
Dimensions (L x W x H) inch	23.1 x 8.8 x 7.9	
Weight (without coolant) in kg	10,4	
Weight (without coolant) in lbs	22,9	

WELDING WITH EWM MEANS:
WE'RE HERE FOR YOU!





WE ARE WELDING

EWM GmbH
Dr. Günter-Henle-Straße 8
56271 Mündersbach
Germany
Phone: +49 2680 181 0
Fax: +49 2680 181 244
Email: info@ewm-group.com



#WEAREWELDING

Follow us



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, and expert consultation all support you in achieving perfect results from your welding tasks.

053-100181-00001 / 2023-06 / © EWM GmbH



www.ewm-group.com

The content of this document has been researched, prepared and reviewed with all reasonable care. The information provided is subject to change; errors excepted.