



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 Tetrix 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.



Tetrix XQ 230
-Multivolt
230 V
110 - 120 V

CAN BE USED WORLDWIDE.

+

The Tetrix XQ 230 puls can be used worldwide thanks to the automatic adjustment of the mains voltage (110 - 120 V / 230 V).

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 CO_2 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.







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

50%*

LESS WORK REQUIRED
FOR REPETITIVE TACK WELDING –
WITH SPOTMATIC.

*up to

4

A VARIETY OF PULSE VERSIONS ARE AVAILABLE:

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

100
PERCENT

BETTER OVERVIEW!

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

100%

DIGITISATION
FOR 100%
REPRODUCIBLE
WELDING
RESULTS.

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



CASING VARIANTS.

DEMODULAR

Whether DC or AC/DC, gas or water-cooled – the Tetrix 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.



Safe crane transportation – levitation made easy

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

Always in sight

The large LED infobar with four unambiguous signal colours always shows you the current operating status of your Tetrix 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 infobar



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.



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 TETRIX XQ.



Workshop Trolly XQ 55-3



Construction site Trolly XQ 35-3



Carrying handle



Retrofittable water cooling





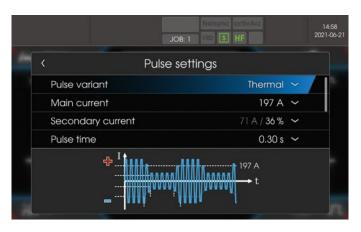
EXPERT 3.0 +

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



 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.



WELDING PROCEDURES



TIG XQ SERIES.

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

Tetrix XQ puls AC/DC

230 A | 300 A







MODULAR DEMODULAR

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



Comfort 3.0 AC



Expert 3.0



AC amplitude balance

Allows adjustment of negative and positive welding current level.



AC waveforms

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



HF start

Prevents tungste non-contact arc ig



AC balance

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



AC special

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



Lift arc

Simple ignition of up the welding to the workpiece.



AC-Balling

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



activArc®

Dynamic TIG arc with automatic arc stabilisation.



Average value pu

Allows the user to WPS requirement pulsed mode.



AC frequency

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



Automatic pulsing

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



spotArc®

Minimised time reing due to individu



Tetrix XQ puls DC

230 A | 300 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

n inclusions through gnition.

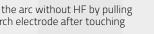


Reproducible welding of uniform tack points.



TIG Antistick

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



Standard AC

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



Pulsed TIG AC welding

Reduced distortion and discolouration through energy per unit length and heat input.



Standard DC

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



Pulsed TIG DC welding

Reduces heat input and therefore distortion and discolouration.

lse welding

implement, for example, s extremely easily, even in

rch electrode after touching



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.









equired for tacking and spot weldial triggering of the tack points



EQUIPMENT



ACCESSORIES.

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



TROLLY 53







- 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



- 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







- 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 wheelsSaves 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













ACCESSORIES.

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

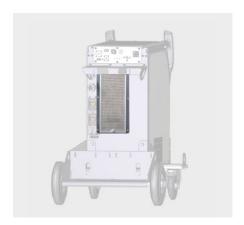
- TIG welding torches
- Gas and water-cooled versions available.



+ WELDING ROD HOLDER

Item no. 092-004388-00000

• Easy to mount on the flexFit rail.



DUST FILTER

TORCH HOLDER

Item no. 092-003337-00000

• Protects welding machine from extreme contamination.

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 + WORKSHOP TROLLY XQ 35-3

• Robust transport cart for a quick change of location.



TROLLY XQ 55-3

• Give your Tetrix 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





TECHNICAL DATA.

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,-	
ew	m Time
OF A	

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 460 V (- 2	5 % - + 20 %)* 5 % - + 15 %) 5 % - + 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	o +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	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	S CE EM				
Standards	IEC 60974-1, -3, -10 CLA				
Dimensions (L x W x H) mm Dimensions (L x W x H) inch	1,152 x 686 x 976 45.3 x 27 x 38.4				
Weight in kg Weight in lbs		6.5 8.9		8.5 3.3	

^{*}Also available with 460 V or 500 V ex works



500 PULS AC/DC

3 A – 500 A

5 A – 500 A

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TETRIX XQ	350 PULS AC/DC	400 PULS AC/DC
TIG setting range for welding current	3 A – 350 A	3 A – 400 A
MMA setting range for welding current	5 A – 350 A	5 A – 400 A
TIG duty cycle at 40 °C	350 A / 100%	400 A / 80% 370 A / 100%
MMA		

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	× 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			
Safety identification	S C E III		
Standards	IEC 60974-1, -3, -10 CLA		
Dimensions (L x W x H) mm Dimensions (L x W x H) inch	1,152 x 686 x 976 45.3 x 27 x 38.4		
Weight in kg Weight in lbs	128.5 129.5 283.3 285.5		

^{* 92} V at 460 V and 102 V at 500 V

^{**}Also available with 460 V or 500 V ex works



MODULAR



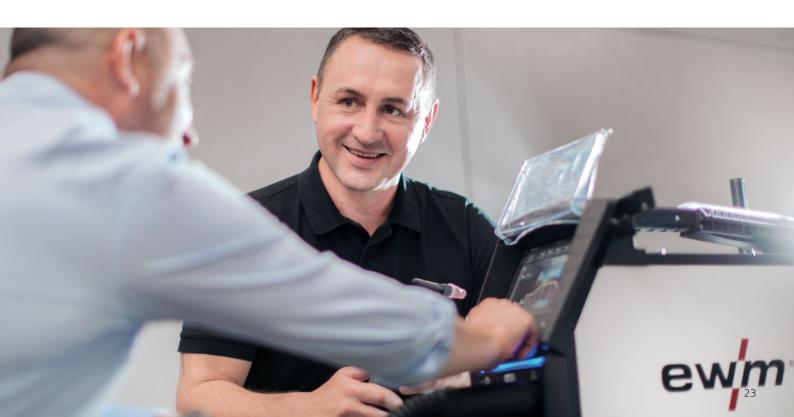
ew/m Tetrix XQ	230 PULS DC	230 PULS AC/DC	230 PULS DC	230 PULS AC/DC	300 PULS DC	300 PULS AC/DC
Technical data for input voltage	23	0 V	110 – 1	120 V**	380 –	400 V
TIG setting range for welding current	3 – 2	230 A	3 – 1	70 A	3 – 300 A	
MMA setting range for welding current	5 – 1	90 A	5 – 120 A		5 – 300 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 %	170 A / 40 % 150 A / 60 % 120 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 %	120 A / 40 % 100 A / 60 % 85 A / 100 %		300 A / 30 % 260 A / 60 % 210 A / 100 %	
Open circuit voltage	96	V*	96	V*	87 V*	
Mains voltage / tolerance	1 x 230 V (-40) % to +15 %)	110 – 120 V (-15 % to +15 %)		3 x 380 - 400 V (-25 % to +20 %)	
Mains fuse			1 x 16 A	4		
Rec. generator output	6,9 kVA	7,4 kVA	4,5 kVA	4,7 kVA	15,3 kVA	15,9 kVA
cos φ / efficiency	0,99 / 87 %	0,99 / 83 %	0,99 / 87 %	0,99 / 83 %	0,99 / 87 %	0,99 / 83 %
Insulation class / protection classification			H / IP23	3		
Ambient temperature			-25 °C to +4	40 °C		
Machine cooling		Fan, temperature-controlled				
Torch connection			5- or 8-pc	ole		
Mains connection lead	3,5 m 5,5 m				5 m	
Display size	Expert 3.0: 7" display (not a touchscreen) Comfort 3.0: 7-segment LED					
Favourites buttons	5					
Safety identification	S C C IHI L'É					
Standards	IEC 60974-1, -3, -10 CLA					
Dimensions (L x W x H) mm Dimensions (L x W x H) inch	550 x 257 x 415 21.7 x 10.1 x 16.3					
Weight kg Weight lbs	17,5 38.6	19,2 42.3	17,5 38.6	19,2 42.3	20,5 45.2	22,0 48.5

^{*}VRD version available as a separate machine **For water-cooled welding torches, the Cool XQ 40 MV cooling unit must be selected for multi-volt applications.



COOL XQ	40	40 MV Multivolt	41-1	
Compatible with	Tetrix XQ 230	Tetrix XQ 230	Tetrix XQ 300	
Input voltage	230 V	120 V / 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	C€ ENC ŁK			
Harmonised standards used	IEC 60974-1, -2, -10 CLA			
Standard configuration	Flow monitor Temperature controller			
Dimensions (L x W x H) mm Dimensions (L x W x H) inch	588 x 224 x 200 23.1 x 8.8 x 7.9			
Weight (without coolant) in kg Weight (without coolant) in lbs	10,4 12,5 10,4 22.9 27.6 22.9			

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



WE ARE WELDING

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



www.ewm-group.com

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