



TIG

DC
AC/DC



MMA

DC
AC/DC

Professional TIG welding – everywhere

Tetrix 230/300 Comfort 2.0 puls



3 Years

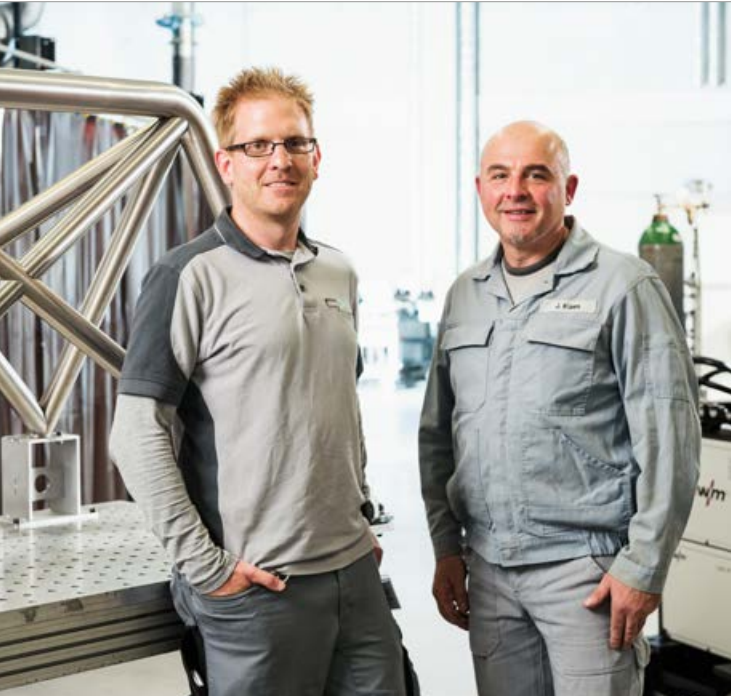
5 Years
transformer
and rectifier

ewm-warranty*
24 hours / 7 days

*For details visit
www.ewm-group.com

Professional TIG welding – everywhere

Flexible application



Welding titanium safety cages for racing

"We have the highest demands when it comes to quality and technology – after all, the health of our customers depends on it. That's why we only use ewm TIG welding machines and accessories for all our applications, from titanium and CrNi to aluminium."

CP autosport GmbH, 33142 Büren/Germany
Welding coordinator Mr. Oke Leuber,
Welding expert Mr. Jürgen Klaes



Comfort 2.0 – the simplest operation thanks to innovative control technology

- / Intuitive single-handed operation using click wheel and intelligent up/down menu. Welding sequence parameters set with LED user guidance
- / Optimum control and simplified documentation thanks to two displays
- / Function display with simple symbol indicators
- / Perfect ignition and excellent welding performance
- / Welding data recording with ewm Xnet software (for Tetrix 300)



With unrivalled ewm quality guarantee

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

For the highest quality demands

Perfect DC welding – for CrNi, titanium and much more

- / ewm activArc® for full control over the weld pool – automatic arc stabilisation for reliable sidewall fusion and focused and concentrated heat input
- / The new user-friendly average value pulse function allows the user to implement WPS requirements, for instance, in the simplest manner, even in pulsed mode
- / kHz pulses – high welding speeds with minimised heat input thanks to the precisely constricted arc with high energy density
- / spotmatic – up to 50% less time required for tacking



Flexible AC welding – for aluminium

- / Balling – individual and multiple tungsten balling without having to activate the function on the welding machine again
- / AC special – ideal for joining metal sheets of different thicknesses
- / AC frequency – adjustment of the arc width – perfect for thin metal sheets and fillet welds
- / AC waveforms – sine, trapezoidal or square – always the right waveform for optimum arc stability



Energy cost-saving inverter technology

- / Lower consumption thanks to high efficiency and automatic energy saving mode (switchable standby function)
- / Electricity costs fall, so production costs do too

The major sustainability initiative from ewm

Blue Evolution®

Innovative ewm welding procedures and functions

Economical, efficient and simple to use.

Whether in the food or chemicals industry, in pipe construction, mechanical engineering or metal-working – the new, mobile Tetrix generation is equally at home in industry as it is in trade. Not least the ideally harmonised welding procedures and functions are the reason why. They are the result of our continuous further development and research, which has also gained ewm AG the “Innovativ durch Forschung” seal by the Stifterverband für die Deutsche Wissenschaft e.V.



Your benefit:

Simple handling and sparing use of materials – saving resources and ensuring competitiveness. Sustainable!

Pulsing

Difficult welding applications can be realised easily

Pulsed TIG welding

- / Safe weld pool control for positional welding, welding thin metal sheets and root welding
- / Minimised distortion due to reduced heat input
- / Reduction of the energy per unit length, perfect for CrNi welding and heat-sensitive materials
- / Perfect for visible seams thanks to the uniform bead ripples

MMA pulse welding

- / Simplified positional welding
- / Improved gap bridging

Pulsed average value TIG welding

- / The user-friendly average value pulsing function allows the user to realise WPS requirements, for instance, in the simplest manner, even in pulsed mode

Pulsed TIG kHz welding

- / High welding speed thanks to stable arc



Pulsed TIG welding – fillet weld, PB position

AC functions

Unique functions which perfect alternating current welding

AC special

- / Ideal for joining metal sheets of different thicknesses
- / Allows for constant welding speeds when welding aluminium
- / Also suitable for automated applications

AC frequency

- / Adjustment of the arc width – perfect for thin metal sheets and fillet welds



AC special – outer edge weld, 3 mm

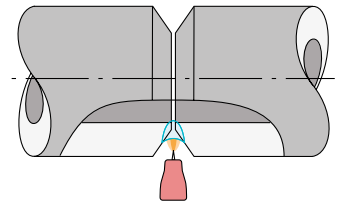


You will find further information
in the ewm Welding dictionary
or at www.ewm-group.com

activArc®

Dynamic TIG arc with automatic arc stabilisation

- / Constant sufficient power and high arc force for reliable sidewall fusion and focused and concentrated heat input – for full weld pool control over the entire weaving area
- / Particularly beneficial when welding fillet welds and root passes



TIG antistick

Less tungsten electrode wear

- / Prevents the tungsten electrode from sticking to the weld pool
- / Particularly beneficial for positional welding



activArc® – ideal for positional welding

Spot welding

Perfection in tack welding and spot welding

spotArc® with TIG standard welding torch

- / Automatic pulsing for oscillating weld pool – perfect for tack welding and joint welding without welding consumables

spotArc® with spotArc® welding torch

- / Simple, time-saving tack welding for butt joints, fillet welds, edge welds as well as pipes
- / Single-side use for welding metal sheets to hollow profiles, for example
- / Spot welding through up to 2-mm thickness with CrNi

spotmatic with TIG standard welding torch

- / Simple operation and setting
- / Up to 50% less time required for tacking, thanks to automation
- / 100% reproducibility of results
- / DC TIG spot welding with constant low energy input



spotmatic – very small tack points



spotmatic – no annealing colours on back

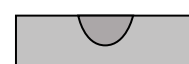
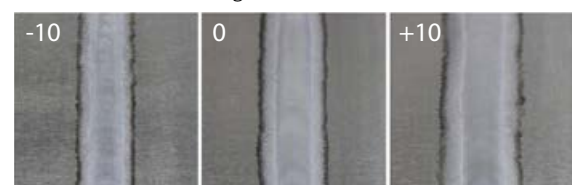
AC balance

- / The perfect balance between the penetration profile and the achievable cleaning effect

AC waveforms

- / Sine, trapezoidal or square – always the right waveform for the various areas of application

AC balance – cleaning effect



AC balance – penetration profile

The ewm system housing

For maximum flexibility for the applications

Modular concept

Modules for flexible use with multiple combination options. The new high-performance Tetrix generation shows its strengths in every area of application – in daily continuous use and in mobile usages on customer premises equally. With the optional cooling unit and transport trolley you are **perfectly equipped for any application – everywhere!**

Compact, light, robust

The quality has to be right, both when working on site and when prefabricating parts in the factory. The high-performance Tetrix welding machines are also designed for mobile use. With their compact dimensions, low weight and robust housing they are optimised for mobile use.



- / Robust aluminium housing with impact-resistant plastic cover
- / With temperature overload protection and dust-proof electronics
- / Splash-proof to IP23
- / Practical carrying strap for easy transportation



Tetrix 300 AC/DC
Comfort 2.0 puls

The simplest connection technology

The ewm system housing impresses with innovative connection technology. Modules in the same housing class can be combined as required and put to quick and flexible use wherever they are needed.

Quick assembly/disassembly

- / No need for tools
- / No need to intervene on the machine
- / No need for specialist staff



Simple connection of the power source and the cooling unit

Cooling unit for continuous use

- / Light, modular design for tool-free assembly
- / Powerful centrifugal pump for unlimited cooling power, even with long hose packages
- / External coolant water filling nozzle with filling level indicator
- / Quiet running noises thanks to high-grade components



Cool 41 U31, Cool 40 U31
high-performance cooling unit

Transport trolley for maximum mobility

- / Particularly stable design with robust steel pipe construction
- / Large wheels for easy transportation on stairs and on difficult terrain
- / Low loading edge for easy replacement of the shielding gas cylinder
- / Secure mount with holding plate and two pull straps
- / For shielding gas cylinders from 10 l to 50 l (200 and 300 bar)
- / Mounting bracket to protect the machine and the connections whilst accommodating the hose package and grounding cable
- / Easy connection technology without tools
- / Total width of only 75 cm, suitable for standard doors
- / Compartment for small parts and tools
- / Optional crane suspension equipment available for retrofitting



The modular concept
provides maximum flexibility

ewm welding torches, accessories and data recording

For constant, excellent quality

The ewm TIG welding torches

Weight-optimised and ergonomic in design, the 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 the costs for spare parts.

From the simple control of the push-button welding torches to the comprehensive operating options of the functional welding torches – the ewm welding torch range provides the perfect solution for every requirement.



Perfect control in every location

From setting the welding current by hand or foot to full access to all the functions: the ewm remote controls enable the user to control the welding machine directly at the welding site.



Compatible with the ewm tigSpeed 45 TIG wire feeder

With the optional tigspeed 45 TIG wire feeder the new Tetrix generation can also be used for TIG welding with mechanised wire feeding. In accordance with the material and requirements, with TIG cold wire or TIG hot wire, the dynamic wire feed makes for a reliable and manageable weld pool, even in positional welding.



PC300 welding parameter software

The PC300 system software makes it possible to read out the machine software and can also be used to transfer saved welding tasks (JOBS) to other welding machines. PC300 is the simple solution for online data exchange and complete control of the welding data (for Tetrix 300).

Safety with every welded seam

With ewm Xnet you can document the quality of every welded seam, identify potential savings and produce economically. The modular structure of the ewm Xnet quality management software combines these tasks – equally suitable for smaller welding shops as it is for global companies.

Optional quality data recording via LAN, WiFi and USB, even during mobile use (for Tetrix 300).

Xnet ready



Welding consumables and accessories for the perfect welding results

One contact for the entire welding process. From welding machines to welding torches, welding consumables and welding accessories, ewm supplies all the necessary components for manual and automated welding applications.



Tetrix 230/300 Comfort 2.0 puls

Easy handling, a clear layout and intuitive operation form the basis for efficient, high-quality welding machines. The new Comfort 2.0 puls control combines all requirements of the welder on a good welding machine.

Adjustable welding parameters and options

Function display with simple symbol indicators and good legibility of displays even when wearing a helmet

Two displays for optimum control and simplified documentation

Standby function: Power saving at the push of a button or automatically (time-controlled)

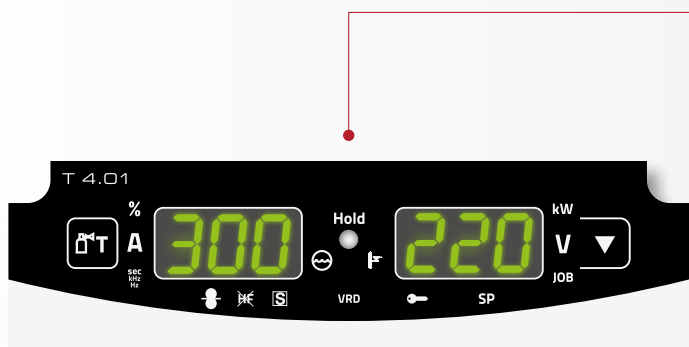


Easy operation thanks to sequence buttons and LED user guidance

Click wheel for intuitive single-handed operation

Xnet ready

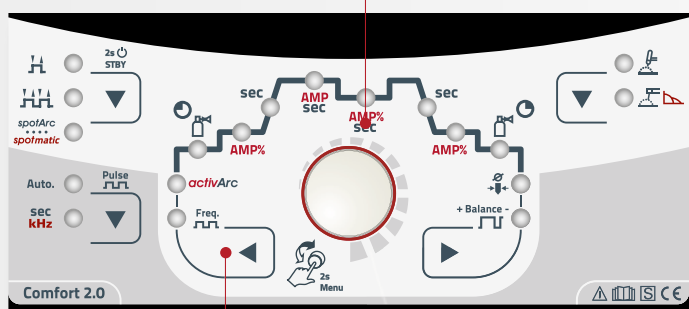
ewm Xnet: Optional quality data recording via LAN, WiFi or USB, even during mobile use (for Tetrix 300)



Two digital welding data displays with hold function

All the data at a glance! Expanded display for optimum control and simplified documentation

- / Welding current
- / Welding voltage
- / Welding parameters
- / Welding power
- / JOB number
- / Clear symbol display for easy understanding of the selected settings



Single-handed operation

- / Welding sequence selection and parameter setting using click wheel or conventional operation with sequence buttons (back/forward)
- / Equipped with activArc® and spotArc® with no surcharge
- / Menu for advanced setting and display of welding parameters
- / TIG welding, pulsed TIG welding, MMA welding, MMA pulse welding

Welding sequence parameters set with LED user guidance

- / Start, welding, secondary and end current
- / Pulse time and pulse pause time with corresponding slope times
- / Up-slope/down-slope time
- / kHz pulses: balance, frequency
- / Gas pre- and post-flow time
- / Tungsten electrode diameter

Tetrix 230/300 AC/DC Comfort 2.0 puls

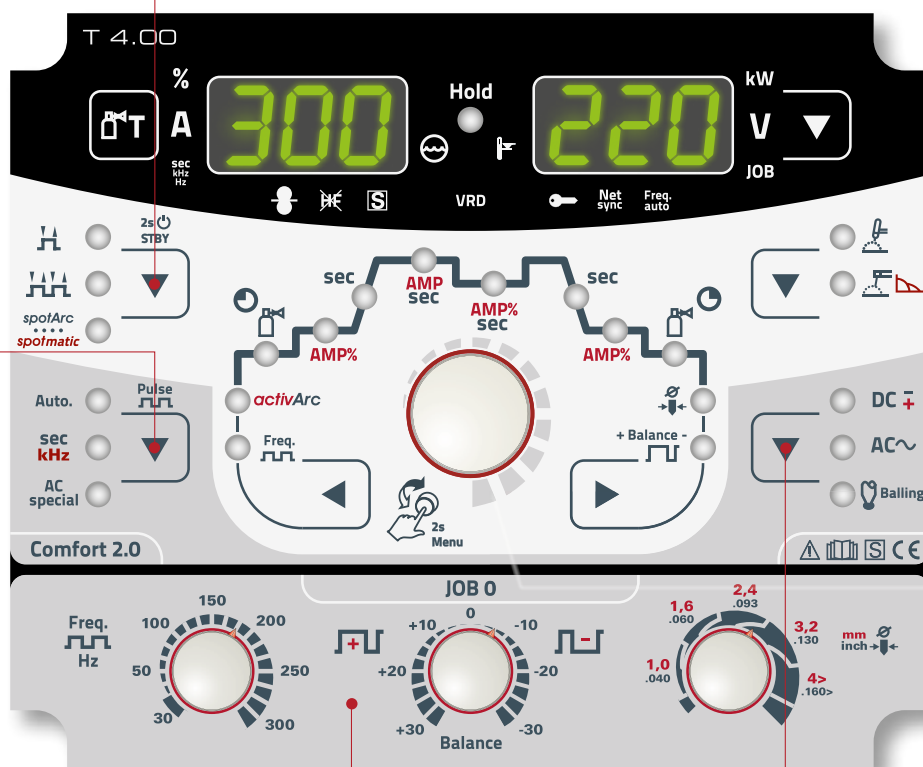
AC TIG welding requires full concentration, even from the welding professional. Especially when it comes to mobile use, everything must be right – simple operation, global setting options and, if necessary, also full quality control.

Adjustable welding parameters and options

Standby function: Power saving at the push of a button or automatically (time-controlled)

Two displays for optimum control and simplified documentation

AC special – simple joining of metal sheets of different thicknesses



Direct adjustment of AC parameters even during welding

Balling – perfect tungsten balling at the push of a button

Xnet ready

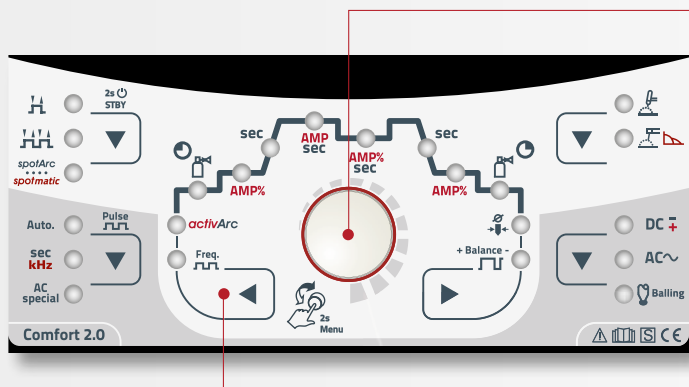
ewm Xnet: Optional quality data recording via LAN, WiFi or USB, even during mobile use (for Tetrix 300)



Two digital welding data displays with hold function

All the data at a glance! Expanded display for optimum control and simplified documentation

- / Welding current
- / Welding voltage
- / Welding parameters
- / Welding power
- / JOB number
- / Clear symbol display for easy understanding of the selected settings

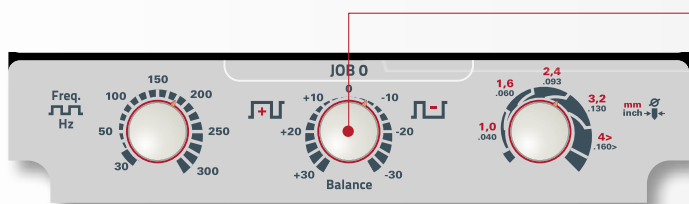


Single-handed operation

- / Welding sequence selection and parameter setting using click wheel or conventional operation with sequence buttons (back/forward)
- / Equipped with activArc® and spotArc® with no surcharge
- / Menu for advanced setting and display of welding parameters
- / DC and AC/DC TIG welding, pulsed TIG welding, DC and AC/DC MMA welding, MMA pulse welding

Welding sequence parameters set with LED user guidance

- / Start, welding, secondary and end current
- / Pulse time and pulse pause time with corresponding slope times
- / Up-slope/down-slope time
- / kHz pulses: balance, frequency
- / Gas pre- and post-flow time
- / Tungsten electrode diameter



Direct access to all parameters when performing AC TIG welding

Full adjustability even during the welding process. This function is particularly suitable for varying welding tasks and for determining the ideal parameters for new programs

- / Frequency
- / Balance
- / Electrode diameter

Tetrix 230/300 Comfort 2.0 puls



Tetrix 230 Comfort 2.0 puls
Tetrix 230 AC/DC Comfort 2.0 puls

Tetrix 300 Comfort 2.0 puls
Tetrix 300 AC/DC Comfort 2.0 puls

	DC	AC	DC	AC
Welding procedure				
TIG	•	•	•	•
MMA	•	–	•	•
activArc®	•	•	•	•
Functions				
TIG				
HF start and lift arc	•	•	•	•
Selection of TIG ignition type	Control menu	Control menu	Control menu	Control menu
Operating modes: Non-latched, latched	•	•	•	•
TIG pulse variants				
Pulses (times)	0.01 - 10 sec	0.01 - 10 sec	0.1 - 20 sec	0.1 - 20 sec
kHz pulses (frequency)	50 Hz - 15 kHz	–	5 Hz - 15 kHz	–
kHz average value pulses (frequency)	0.2 Hz - 2 kHz	–	5 Hz - 15 kHz	–
Automated pulsing (frequency)	•	–	•	–
TIG spot variants				
spotArc®	•	•	•	•
spotArc® with spotArc® welding torch	•	•	•	•
spotmatic®	•	–	•	–
TIG antistick	•	•	•	•
Settable start and end current	•	•	•	•
AC frequency	–	50 - 200 Hz	–	30 - 300 Hz
AC amplitude balance	–	–	–	•
AC net sync	–	–	–	•
AC tungsten balling	–	•	–	•
Foot-operated remote control function with logarithmic characteristics	–	–	•	•
MMA				
Average value pulses (frequency)	0.2 - 500 Hz	–	0.2 - 500 Hz	–
Arcforce adjustable	–	–	•	•
Hot start, antistick	•	•	•	•
Actual value display (RCD)	–	–	•	•
Accessories/options				
ewm Xnet	–	–	•	•
PC 300	–	–	•	•
RT50 remote control	–	–	•	•
RT1, RTG1 remote control	•	•	•	•
RTP1, 2, 3 pulse remote control	•	•	•	•
RTAC1 AC remote control	•	•	•	•
RTF1 foot-operated remote control	•	•	•	•
cool 40 U31 cooling unit	•	•	–	–
cool 41 U31 cooling unit	–	–	•	•
Trolley 35.2-2	•	•	•	•



For full information
on the machines and
matching accessories see
www.ewm-sales.com

Tetrix 230 Comfort 2.0 puls
Tetrix 230 AC/DC Comfort 2.0 puls

Tetrix 300 Comfort 2.0 puls
Tetrix 300 AC/DC Comfort 2.0 puls

Technical data

	TIG	MMA
Current setting range		
DC	3 A - 230 A	5 A - 180 A
AC	5 A - 230 A	–
Voltage setting range	10.1 V - 19.2 V	20.2 V - 27.2 V
Duty cycle at ambient temperature	40 °C	40 °C
30%	–	–
35%	–	–
40%	230 A	180 A
60%	200 A	150 A
100%	170 A	120 A
Open circuit voltage		
DC		90 V
AC		45 V
Mains voltage (tolerances)	1 x 230 V (+15 % bis -40 %)	
Frequency	50 / 60 Hz	
Mains fuse (safety fuse, slow-blow)	1 x 16 A	
Max. connected load	5.5 kVA	6 kVA
Recommended generator rating	8.1 kVA	
Noise level	< 70 dB (A)	
cosφ/efficiency	1.0 / 85.0 %	
Insulation class/protection classifica- tion	H / IP 23	
EMC class	A	
Ambient temperature	-25 °C bis +40 °C	
Machine cooling/torch cooling	Fan (AF)/gas or water	
Safety identification		
Harmonised standards used	IEC 60974-1. -3. -10	
Dimensions L/W/H	539 x 210 x 415 mm 21.2 x 8.3 x 16.3 inch	
Weight DC / AC/DC	17.5 kg / 22.0 kg 38.6 lb / 48.5 lb	

	TIG	MMA
Current setting range		
DC	5 A - 300 A	5 A - 300 A
AC	5 A - 300 A	5 A - 300 A
Voltage setting range	10.2 V - 22.0 V	20.2 V - 32.0 V
Duty cycle at ambient temperature	40 °C	40 °C
30%	–	300 A
35%	300 A	–
40%	–	–
60%	260 A	260 A
100%	210 A	210 A
Open circuit voltage		
DC		63 V
AC		63 V
Mains voltage (tolerances)	3 x 400 V (+20 % bis -25 %)	
Frequency	50 / 60 Hz	
Mains fuse (safety fuse, slow-blow)	3 x 16 A	
Max. connected load	11.7 kVA	16.6 kVA
Recommended generator rating	23 kVA	
Noise level	< 70 dB (A)	
cosφ/efficiency	0.99 / 84.0 %	
Insulation class/protection classifica- tion	H / IP 23	
EMC class	A	
Ambient temperature	-25 °C bis +40 °C	
Machine cooling/torch cooling	Fan (AF)/gas or water	
Safety identification		
Harmonised standards used	IEC 60974-1. -3. -10	
Dimensions L/W/H	539 x 210 x 415 mm 21.2 x 8.3 x 16.3 inch	
Weight DC / AC/DC	20.0 kg / 22.0 kg 44.0 lb / 48.5 lb	

Technical data

cool 40 U31
cool 41 U31

Trolley 35.2-2

Cooling capacity	800 W (1/min)	–
Flow rate	5 l/m	–
Tank capacity	4 l	–
Coolant outlet pressure	3.5 bar	–
Dimensions L/W/H	600 x 210 x 340 mm	600 x 580 x 1200 mm
Weight. cool 40/cool 41	14.0 kg / 18.4 kg 30.8 lb / 40.5 lb	33.0 kg 72.7 lb



Order information material now or simply get in touch with us.
We will be happy to advise you!

Download PDF file
www.ewm-group.com/sl/brochures

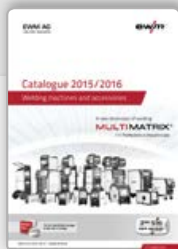
Tel. +49 02680 181-0
info@ewm-group.com
www.ewm-group.com/contact



Brochure
maXsolution – Innovation
and technology consulting



Brochure
Product range, services



Catalogue 2015/2016
Welding machines and accessories



Catalogue 2015/2016
Welding torches and accessories



Catalogue 2016/2017
Welding accessories



Handbook
Welding consumables

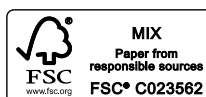


Mechanisation Brochures
Products and Services
Components and Accessories



Handbook
EWM welding dictionary

EWM AG
Dr. Günter-Henle-Straße 8
D-56271 Mündersbach
Tel: +49 2680 181-0 · Fax: -244
www.ewm-group.com
www.ewm-sales.com
info@ewm-group.com



Sales / Consultancy / Service