



MMA
DC
DC pulse



TIG
DC
DC pulse

MMA welding made easy
Pico 160 cel puls



3 Years

5 Years
transformer
and rectifier

ewm-warranty*
24 hours / 7 days

*For details visit
www.ewm-group.com

MMA welding made easy

Can be used anywhere



Extremely light – one of the lightest machines on the market at only 4.7 kg

- / Practical carrying strap for effortless transport on construction sites, along stairs and ladders, on steel structures and on scaffolds
- / Also handy for use in extremely difficult conditions in building construction, civil engineering, mining and similar projects



Robust and highly suitable for construction sites

- / Large mains voltage tolerance range between –40 and +15% for problem-free operation with generators and mains leads up to 100 m in length
- / Splash-water protected as per IP23
- / Robust aluminium casing
- / Front, rear and machine base made of impact-resistant composite



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

Highly effective welding wherever needed

Perfectly equipped for all MMA requirements

- / Automatic ignite for safe, gentle ignition prevents the electrode from sticking to the workpiece
- / Steady arc for all electrode types; no arc interruption
- / Completely safe vertical down welding of cellulose electrodes
- / MMA pulse welding:
 - Less finishing work thanks to minimised spatter formation
 - Easy positional welding with excellent gap bridging



TIG welding just like the big players

- / TIG lift arc ignition without tungsten inclusions
- / Pulsed TIG welding up to 2 kHz:
 - Produce fillet welds with extremely fine flaking
 - Easy to complete vertical-up welds and positional welding



Energy cost-saving inverter technology

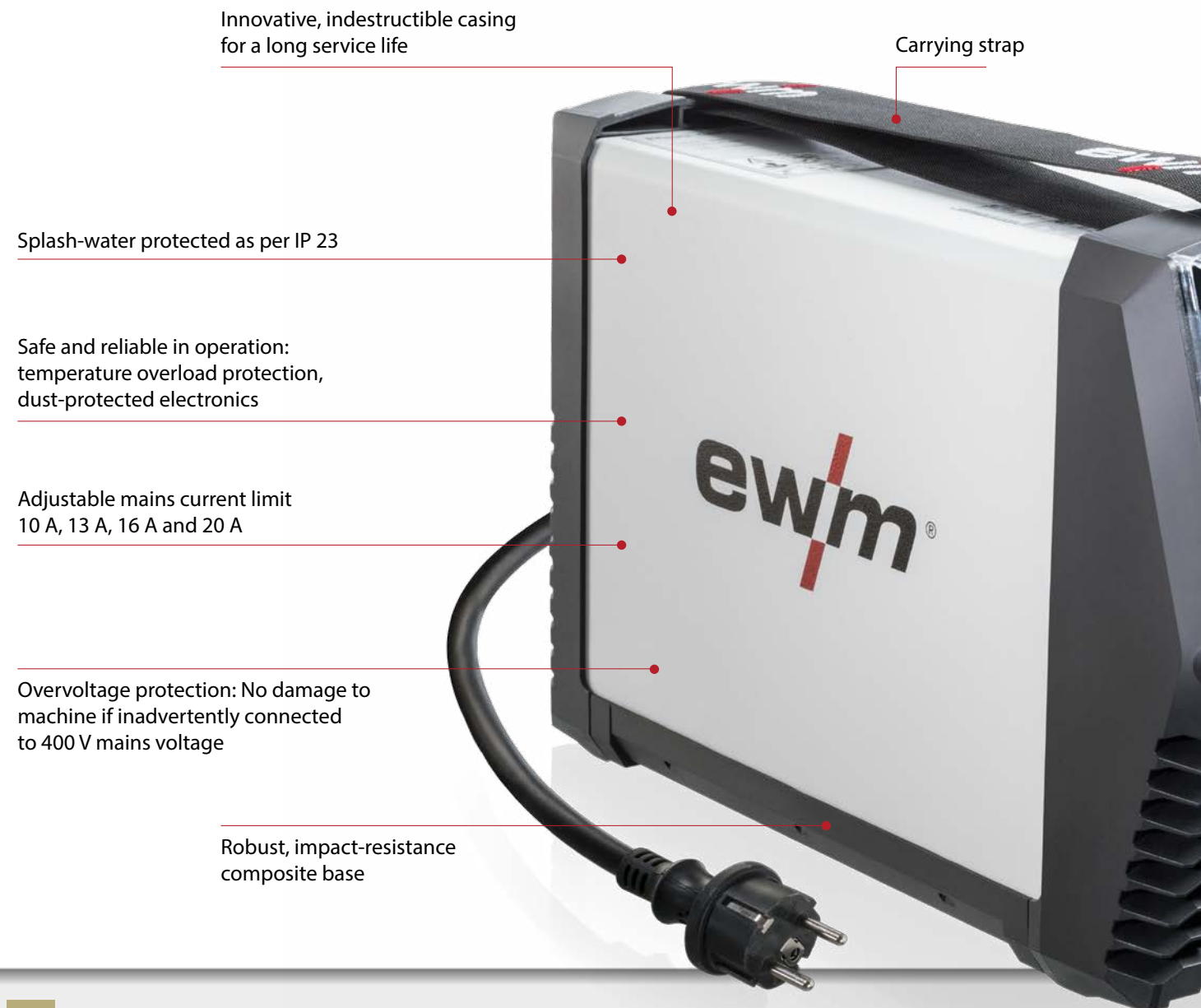
- / Lower consumption thanks to high efficiency and automatic energy saving mode (switchable standby function)
- / Electricity costs fall, so production costs do too

The major sustainability initiative from ewm

Blue Evolution®

Extremely robust in modern, ergonomic casing

Intuitive in its operation



Innovative, indestructible casing
for a long service life

Carrying strap

Splash-water protected as per IP 23

Safe and reliable in operation:
temperature overload protection,
dust-protected electronics

Adjustable mains current limit
10 A, 13 A, 16 A and 20 A

Overvoltage protection: No damage to
machine if inadvertently connected
to 400 V mains voltage

Robust, impact-resistance
composite base



MMA

- / Stick electrode welding up to 4 mm in Ø
- / Completely safe for vertical-down cellulose electrode welding
- / Optimum welding characteristics (Arcforce) for the different electrode types: rutile (R), rutile-basic (RB), basic (B), rutile-cellulose (RC), cellulose (C)
- / Adjustable hot start current and time for reliable ignition and re-ignition
- / Antistick – no electrode sticking or annealing
- / MMA pulse welding (0.2 Hz up to 500 Hz)
 - Positional welding for extremely flat and wide weld seams with reduced heat input
 - Less spatter formation, less finishing work, fine-flaked weld, effective gap bridging
 - Complete vertical-up welds without using the "Christmas tree" technique with safe weld root base fusion
 - Welding of components with changing air gaps for reliable sidewall fusion

Operating elements protected by transparent protective cap



Large load sockets (Ø 13 mm) for maximum compatibility

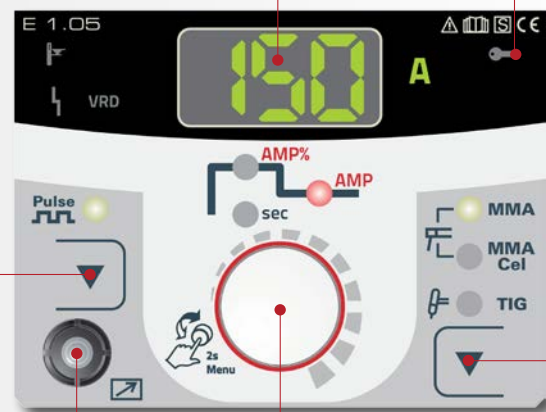
Easy, intuitive operation

Digital display for reproducible setting of welding parameters

Welding procedure selection: MMA, MMA Cel and TIG

Selection: Pulsing for MMA and TIG

Electronic key switch



Remote control connection

Single-hand operation: Large rotary knob with click wheel function – for simple adjustment, even with gloves on



TIG

- / TIG lift arc ignition without tungsten inclusions
- / Pulsed TIG welding (0.2 Hz–2 kHz)
 - Produce fillet welds with extremely fine flaking
 - Easy to complete vertical-up welds and positional welding



Manual remote control RG 13 RS-453 – Extremely simple to set welding current, even with gloves on

Pico 160 cel puls



Pico 160 cel puls

Welding procedure

MMA	•
MMA pulse welding	•
TIG	•
Lift arc	•
Pulsed TIG welding	•

Functions

Hot start	•
Antistick	•
Pulsing	•
Mains current limit 10 A, 13 A, 16 A, 20 A (M)	•

Adjustable welding parameters

MMA

Welding current	•
Hot start current and time	•
Arcforce	Rutile, rutile-basic, basic, rutile-cellulose, cellulose
Arcforce correction (M)	•
Pulse frequency, current and balance	•

TIG

Welding current	•
Pulse frequency, current and balance	•
Ignition current (M)	•
Up-slope time (M)	•

Displays, indicators


Display: Displays for welding parameters before, during and after welding	•
LEDs: interferences, welding parameters	•

Accessories/options

Electrode holder	•
Workpiece lead	•
TIG welding torch with rotary valve	•
RG 13 RS-453 manual remote control	•
Grip	•
Dirt filter	•

(M) Adjustable on menu

Technical data

	MMA	TIG
Current setting range	5 A–150 A	5 A–160 A
Voltage setting range	20.2 V–26.0 V	10.2 V–16.4 V
Duty cycle at ambient temperature	40 °C	40 °C
30%	150 A	160 A
60%		120 A
100%		110 A
Open circuit voltage		94 V
Mains voltage (tolerance)	1 x 230 V (+15% to –40%)	
Frequency	50/60 Hz	
Mains fuse (safety fuse, slow-blow)	16 A	
Max. connected load	7.3 kVA	4.9 kVA
Recommended generator rating	9.9 kVA	
Noise level	< 70 dB(A)	
cosφ/efficiency	0.99/83.0%	
Insulation class / protection classification	H/IP 23	
EMC class	A	
Ambient temperature	–25 °C to +40 °C	
Machine cooling/torch cooling	Fan (AF) / gas	
Safety identification		
Harmonised standards used	IEC 60974-1, -10	
Dimensions L/W/H	370 x 129 x 236 mm 14.6 x 5.1 x 9.3 inch	
Weight	4.7 kg 10.4 lb	



You will find full machine information and matching accessories at
www.ewm-sales.com

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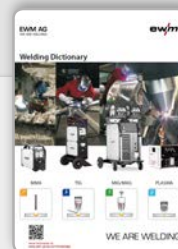
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Handbook
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