

# PICOTIG 220 PULS DC

THE POWERHOUSE FOR ALL THINGS TIG WELDING



## THE PICOTIG 220 PULS DC.

Sophisticated solutions combined in a single powerful machine. The Picotig 220 puls scores across the board with features such as an integrated storage compartment for wear parts in the handle and a practical cable holder to make your work much more convenient. What's more, this powerhouse saves both electricity and money thanks to its increased efficiency and standby function. The protective cap provided as standard effectively protects the control against splash water, dirt and impacts. All this makes the Picotig 220 puls the perfect machine for use in the workshop and on the construction site.



#### THE BENEFITS FOR YOU +

- Lightweight, portable and compact
- Thanks to in-built Power Factor Correction (PFC), your Picotig 220 puls enables more efficient current consumption from the mains network and therefore greater power output
- can be used worldwide thanks to automatic adjustment of mains voltage
- High mains voltage tolerances enable uninterrupted welding, even on weak mains networks, with long mains leads and when using a generator
- Easy operation thanks to the Comfort 3.0 mini-control
- 5-pole, digital welding torch connection allows users to connect Retox XQ welding torches with X technology

# 3.5 m

LONG MAINS CONNECTION CABLE WITH SHOCK-PROOF PLUG FOR SINGLE-PHASE 230 V MAINS.

-40% +15%

APPROX. 97 V

VERY HIGH VOLTAGE RESERVE FOR WELDING CELLULOSE ELECTRODES Mains voltage tolerance at 230 V

2

A VARIETY OF PULSE VERSIONS ARE AVAILABLE:

- Average value pulsing TIG and MMA
- Automatic pulsing TIG

10 kg

LIGHTWEIGHT POWERHOUSE

# 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

<sup>\*</sup>In accordance with the warranty conditions at www.ewm-group.com

#### **PICOTIG**

### THE CASING.

#### REIMAGINED, DOWN TO THE SMALLEST DETAIL.

Wherever your welding tasks may lead you, the Picotig 220 puls is the perfect companion. It is a true powerhouse that you can easily use anywhere in the world thanks to its multi-voltage capability which automatically adjusts the mains voltage depending on the location. The high-performance welding machine's rugged casing also stands up to even the biggest challenges and offers you a wide variety of different expansion options thanks to a host of accessories. This enables you to individually adapt your Picotig to your requirements so it does just what you need it to.



#### **CABLE HOLDER**

You can conveniently wind up the mains cable on the cable holder of the handle.



#### **CONNECTIONS**

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A foot-operated remote control can be connected as standard. All connections are protected by the casing.



# MAINS CONNECTION + CABLE

The 3.5 m-long mains connection cable gives you a larger working radius.





#### CARRYING HANDLE

With a storage compartment integrated into the handle, you can always have wear parts directly on hand. The sturdy, ergonomic carrying handle is installed directly ex works.



#### **PROTECTIVE CAP**

It effectively protects the control against splash water, dirt and impacts.



#### 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.





## THE WELDING PROCESSES.

#### THIS IS WHAT YOUR PICOTIG 220 PULS CAN DO.

How can you achieve optimal welding results? At EWM, we are always pondering this question. But what's our answer? The Picotig 220 puls. It offers maximum operating convenience, impresses with its long service life and makes all the pulse, standard and innovative welding processes available in an optimised way. Whether you're working on low- or high-alloy steel, perfect weld seams are pre-programmed.







# TIG MMA TIG standard DC MMA standard Average value pulsing Average value pulsing Automatic pulsing Cellulose electrodes HF start Antistick Lift arc Arcforce spotArc® Hot start spotmatic



#### Standard DC

Perfect TIG welding with ignition parameters adapted to the power output.



#### spotmatic

Reproducible welding of uniform tack points.



#### HF star

Prevents tungsten inclusions through non-contact arc ignition.



#### **Pulsed TIG DC welding**

Decreases heat input, which in turn reduces distortion and discolouration.



#### Lift arc

Easy ignition of the arc without HF by pulling up the welding torch electrode after touching the workpiece.



#### Average value pulsing

Allows the user to implement, for example, WPS requirements extremely easily, even in pulsed mode.



#### spotArc®

Minimises the time required for tacking and spot welding thanks to individual triggering of the tack points with the torch trigger.



#### **Automatic pulsing**

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

## THE CONTROL.



#### EASY HANDLING: THE COMFORT 3.0 MINI.

The Comfort 3.0 mini offers you a host of innovations, making your work easy as can be – even while wearing a welding helmet and carrying out complex welding tasks.

#### **PICOTIG 220 PULS**



- Two large, easy-to-read 7-segment displays
- Click wheel for convenient use with welder's gloves
- Reliable push-button operation
- Direct access to all main functions
- All parameters at a glance
- Complete TIG sequence
- Access block to protect against unauthorised or accidental adjustment



# QR CODE PROVIDES INFORMATION QUICKLY

All important information, operating instructions, accessories and other options for retrofitting can be accessed quickly in digital form using the QR code on top of the control.

## WELDING TORCHES.

#### VERSATILITY FOR EVERY APPLICATION

With their optimised weight and ergonomic design, gas-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 needs, you can find the perfect solution in the extensive range of EWM welding torches.



# TIG RETOX XQ WELDING TORCH +

- 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's also possible to continuously increase (up function) or reduce (down function) the current during welding.
- Welding current display.
- 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, nappa 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.

## ACCESSORIES.



#### NEEDS-ORIENTED AND VERSATILE.

You can enhance the Picotig 220 puls with a comprehensive range of accessories precisely oriented to your needs. From the practical carrying strap, to the foot-operated remote control, to the dirt filter – you decide what your EWM welding machine can do.







CARRYING STRAP

WELDING TORCH

+ RTF-X TIG 19POL 5M -

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- For easier transport
- Ideal for use on the go and in case of frequently changing working sites
- With integrated double push-button
- Available in different lengths
- The RTF-X TIG is a foot-operated remote control with a 19-pole connection and 5 m cable
- Infinitely adjustable welding current (0 to 100%) depending on the main current preselected on the welding machine





**TROLLY 35-1** 

DIRT FILTER

Additional accessories available

- Transport cart (two wheels) for moving a power source and a shielding gas cylinder up to 33 I (300 bar)
- Solid, sturdy design

 Reliably protects the machine from impurities in difficult working conditions

# TECHNICAL DATA.



#### **PICOTIG**

Multivolt	230 V	110 – 120 V	
TIG setting range for welding current	5 – 220 A	5 – 170 A	
MMA setting range for welding current	5 – 190 A	5 – 120 A	
TIG duty cycle (DC) at 40 °C	220 A / 40 % 190 A / 60 % 160 A / 100 %	170 A / 40 % 150 A / 60 % 120 A / 100 %	
MMA duty cycle (DC) at 40 °C	190 A / 35 % 155 A / 60 % 125 A / 100 %	120 A / 40 % 100 A / 60 % 85 A / 100 %	
Open circuit voltage	97 V		
Mains voltage/Tolerance	1 x 230 V (- 40% to + 15%)	1 x 110 - 120 V (- 15% to + 15%)	
Rec. generator output	8,4 kVA	4,7 kVA	
cos φ / efficiency	0,99 / 85 %		
EMC class	А		
Insulation class/ Protection classification	H/IP23		
Torch connection	5-pole, with X technology		
Mains connection lead	3,5 m		
Product certification	S C € ERIC L'É		
Standards	IEC 60974-1, -3, -10 CL.A		
Dimensions (L x W x H) mm Dimensions (L x W x H) inch	454 x 165 x 321 17.9 x 6.5 x 12.6		
Weight in kg Weight in lbs	10 22		

# ADDITIONAL PICOTIG MODELS.



In addition to the new Picotig 220 puls, the Picotig series also includes other machines from our selection:

PICOTIG	ew/m	00 puls DC MV*	200 puls AC/DC
Multivolt	230 V	115 V	-
TIG setting range for welding current	5 A-180 A	5 A-150 A	3 A-200 A
MMA setting range for welding current	5 A-150 A	5 A-110 A	5 A-140 A
TIG duty cycle (DC) at 40 °C	200 A/25% 150 A/60% 140 A/100%	150 A/35% 120 A/60% 100 A/100%	200 A/35% 150 A/60% 140 A/100%
MMA duty cycle (DC) at 40 °C	150 A/35% 120 A/60% 100 A/100%	110 A/35% 90 A/60% 80 A/100%	140 A/50% 130 A/60% 110 A/100%
Open circuit voltage	90 V		43 V
Mains voltage/Tolerance	1 x 230 V -40% to +15%	1 x 115 V -25% to +15%	1 x 230 V -40% to +15%
Rec. generator output	8.6 kVA		8.1 kVA
cos φ / efficiency	0.99 / 86%		0.99–85%
EMC class	A		
Insulation class/ Protection classification	H / IP23		
Torch connection	5-pole		5- or 8-pole
Mains connection lead	3.5 m		
Product certification	S C € EEL EK		
Standards	IEC 60974-1, -3 and -10 CL.A		
Dimensions (L x W x H) mm Dimensions (L x W x H) inch	428 x 181 x 294 16.9 x 7.1 x 11.6		539 x 210 x 415 21.2 x 8.3 x 16.3
Weight in kg Weight in lbs	9.8 21.6		16.5 36.4
Notes	*Multivolt		Can be combined with a cooling unit.



#### WE ARE WELDING

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#### **#WEAREWELDING**

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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. Innovative systems, efficient welding procedures, digital technologies & services and EWM's expert consultation help you carry out your welding tasks with perfection.



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