



MMA DC welding machines

Pico / Stick



■ MMA DC welding machines

Low investment costs and universal applications make MMA welding machines from EWM extremely economical. The innovative EWM inverter technology offers premium quality and high output with low energy consumption. This development sets new environmental standards! Easy handling for a wide range of tasks: from very small yet high-output power sources for quick and easy repair and assembly, right through to the robust professional MMA which performs reliably and powerfully even in pipeline construction and offshore.



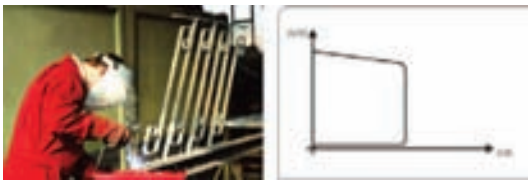


■ Light, robust and small

Pico 162
Pico 180

The PICO 162 and 180, EWM's miniature powerhouses, are barely the size of a shoe box, yet they really pack a punch. In doing so, with up to 160 and 180 amperes output, outstanding welding properties, large mains voltage ranges and the easiest of handling, these MMA specialists set new standards in assembly. The universal all-rounder: The Pico 162 MV (multi-volt variant) automatically detects the mains voltages of different countries between 115 and 230 volts.

Highlights



■ Antistick and Arcforce – weld like a professional

Extremely easy welding: The arc burns steadily without the electrode sticking or annealing.



■ Perfect weld seams even with thick electrodes

Even 4-millimetre electrodes are no problem for the Pico. State-of-the-art inverter technology with superb control dynamics provides a stable arc. This makes even joining with rutile or rutile-cellulose electrodes that are hard to weld effortless.



■ Light, transportable and mobile

Easily transportable to any work location. Very small and lightweight in a robust plastic casing, this machine can easily be carried up ladders or over cramped scaffolding.



■ 100% suitable for construction sites

Perfect for large construction sites and very tough assembly work with mains supply leads up to 50 metres or connected directly to a generator. High tolerance to mains fluctuations ensures a perfect welding result.



■ Reliable, safe, cost-effective

All electronic components are particularly well protected against dust. The temperature-controlled fan prevents unnecessary intake of dirt. An all-round low-maintenance, reliable and therefore cost-effective solution!



■ Arcforce: tuning for all electrodes

Arcforce offers exceptional welding properties with all types of electrodes. No short circuits, even with rutile-cellulose electrodes.



Pico 162: Insulating protective cover
for optimum protection of the machine in tough conditions. Light, robust and easy to re-fit by hand. Combined with an optional dirt filter, you can protect your machine as best as possible from dirt.



Overvoltage protection.
Accidental connection to 400 V mains voltage does not result in damage to the machine



Made-to-measure open circuit voltage – for worldwide use
The VRD (voltage reduction device) function reduces the open circuit voltage to safe levels. This option meets regional requirements and standards all over the world.



Hotstart for exceptional quality
The variable Hotstart function (adjustable current and time) reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam. This solution makes lack of fusion and cold welds a thing of the past and significantly reduces excess weld metal.



Very comfortable to carry
Stable and comfortable carrying strap, slender and convenient design



Modern, ergonomic casing
The front and rear sections of the machine are made of shock-resistant plastic, with rounded corners and edges



Extremely resilient
Side panels made from powder-coated sheet aluminium



Intelligent casing design
Optimised air conduction for long duty cycle



Operating elements
Particularly robust, clear and protected layout



Safe and reliable
Integrated temperature monitors protect against overload



■ **Compact, indestructible and versatile**

Pico 300 Stick 350

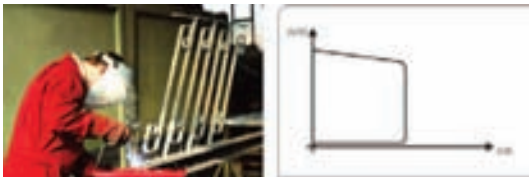
For tough, safe everyday operation on construction sites and in assembly work, the resilient MMA professional machines with metal casing offer the perfect solution. Even on long mains leads or connected to a generator, the welding electrode ignites reliably. EWM inverter technology with digital control ensures a stable arc, providing problem-free welding even for special electrodes. The CEL model versions are 100% safe for vertical-down welds with cellulose electrodes.

Highlights



■ **Ideal for every construction site**

Slimline design and effortless transport with stable carrying bar – the perfect partner for almost any construction site. Mains fluctuations are no problem for EWM power sources. Reliable welding even with weak mains supplies or extra-long cables. Well-thought-out ventilation ensures long duty cycles and protects against dirt.



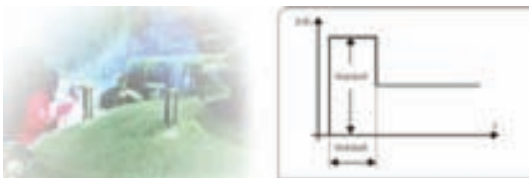
■ **Antistick and Arcforce – weld like a professional**

Extremely easy welding: The arc burns steadily without the electrode sticking or annealing.



■ **Reliable ignition and excellent welding properties**

The digital inverter technology ensures superb arc characteristics for all electrode types, a reliable, stable arc and an easily controlled molten pool. The high open circuit voltage and hotstart function guarantee reliable ignition for the long term.



■ **Hotstart for exceptional quality**

The variable Hotstart function (adjustable current and time) reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam. This solution makes lack of fusion and cold welds a thing of the past and significantly reduces excess weld metal.



■ **Reliable, safe, cost-effective**

All electronic components are particularly well protected against dust. The temperature-controlled fan prevents unnecessary intake of dirt. An all-round low-maintenance, reliable and therefore cost-effective solution!



■ **Arcforce: tuning for all electrodes**

Arcforce offers exceptional welding properties with all types of electrodes. No short circuits, even with rutile-cellulose electrodes.



Made-to-measure open circuit voltage – for worldwide use

The VRD (voltage reduction device) function reduces the open circuit voltage to safe levels. This option meets regional requirements and standards all over the world.



Antistick and Arcforce – a strong team

During the welding process, Arcforce prevents the electrode from sticking in the weld pool. However, if the electrode does stick, the Antistick automatically switches to minimum current, therefore preventing annealing and keeping the electrode in serviceable condition.



No pipeline without Pico/Stick CEL

100% reliability for vertical-down welds with cellulose electrodes.



Polarity can be freely selected

Basic or cellulose electrodes „run“ better with the minus pole on the workpiece. The welder can solve the question of the right polarity directly on site with the remote control of the Pico/Stick pws.



Convenient transport

Handy carrying handles, stable carrying bar and carrying strap, slender and convenient design



Metal casing: robust and durable

Ideal for construction sites: powder-coated sheet steel, phosphatised to prevent corrosion, impact- and scratch-resistant yet extremely light



Well-thought-out casing design

Dust remains outside: closed casing trough, increased cooling air inlets with blade/grill combination



Safe and reliable

Integrated temperature monitors protect against overload and extend the duty cycle



Easy welding machine control

Everything at a glance: self-explanatory with one-knob operation, display, large range of functions



Best protection

Operating and connection elements recessed to protect against damage



Pico 162

Pico 162 MV



Controls

Pico 162 (MV) •

Stick 350 cel (pws) –

Pico 300 cel (pws) –

Pico 180 –

Taurus Basic –

Functions

MMA •

TIG •

Gouging –

Technical data

Setting range for welding current

10 A - 150 A

10 A - 150 A

Duty cycle at ambient temperature

25 °C

40 °C

25 °C

40 °C

25 %

–

–

–

–

30 %

–

–

–

–

35 %

–

150 A

–

150 A

50 %

150 A

–

150 A

–

60 %

–

120 A

–

120 A

100 %

120 A

100 A

120 A

100 A

Open circuit voltage

105 V

105 V

Mains frequency

50 Hz / 60 Hz

50 Hz / 60 Hz

Mains fuses (slow-blow)

1 x 16 A

1 x 16 A, 1 x 25 A

Mains voltage (tolerances)

1 x 230 V (-40 % - +15 %)

1 x 230 V (-40 % - +15 %), 1 x 115 V (-15 % - +15 %)

Max. connected load

5.5 kVA

5.5 kVA

Recommended generator power

7.5 kVA

7.5 kVA

Dimensions, machine, LxWxH in mm

430 x 115 x 225

430 x 115 x 225

Weight, machine

4.8 kg

5.1 kg

Protection classification

IP 23

IP 23

Insulation class

H

H

Standards

IEC 60 974-1; -10 / CE / S-Safety sign / EMC class A

QR Code





Pico 180

Pico 300 cel

Pico 300 cel pws



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5 A - 180 A

10 A - 300 A

10 A - 300 A

25 °C

40 °C

25 °C

40 °C

25 °C

40 °C

-

180 A

-

300 A

-

300 A

180 A

-

300 A

-

300 A

-

-

-

-

-

-

-

-

-

-

-

-

-

140 A

130 A

250 A

220 A

250 A

220 A

130 A

120 A

190 A

170 A

190 A

170 A

100 V

100 V

100 V

50 Hz / 60 Hz

50 Hz / 60 Hz

50 Hz / 60 Hz

1 x 20 A

3 x 16 A

3 x 16 A

1 x 230 V (-40 % - +15 %)

3 x 400 V (-25 % - +20 %)

3 x 400 V (-25 % - +20 %)

7.2 kVA

12.1 kVA

12.1 kVA

9.7 kVA

16.4 kVA

16.4 kVA

470 x 135 x 250

515 x 185 x 350

515 x 185 x 445

8.9 kg

16.5 kg

23.5 kg

IP 23

IP 23

IP 23

H

H

H

IEC 60 974-1; -10 / CE / S-Safety sign / EMC class A





Stick 350 cel

Stick 350 cel pws



Controls

Pico 162 (MV) - -

Stick 350 cel (pws) • •

Pico 300 cel (pws) - -

Pico 180 - -

Taurus Basic - -

Functions

MMA • •

TIG - -

Gouging - -

Technical data

Setting range for welding current

20 A - 350 A

20 A - 350 A

Duty cycle at ambient temperature

25 °C

40 °C

25 °C

40 °C

30 %

-

350 A

-

350 A

40 %

-

-

-

-

60 %

-

250 A

-

250 A

100 %

-

190 A

-

190 A

Open circuit voltage

95 V

95 V

Mains frequency

50 Hz / 60 Hz

50 Hz / 60 Hz

Mains fuses (slow-blow)

3 x 25 A

3 x 25 A

Mains voltage (tolerances)

3 x 400 V (-25 % - +20 %)

3 x 400 V (-25 % - +20 %)

Max. connected load

17.8 kVA

17.8 kVA

Recommended generator power

23.7 kVA

23.7 kVA

Dimensions, machine, LxWxH in mm

700 x 230 x 455

700 x 230 x 455

Weight, machine

35.5 kg

37.5 kg

Protection classification

IP 23

IP 23

Insulation class

H

H

Standards

IEC 60 974-1; -10 / CE / S-Safety sign / EMC class A

QR Code





Taurus 405 TDM

Taurus 505 TDM



5 A - 400 A

5 A - 500 A

25 °C

40 °C

25 °C

40 °C

-

-

-

-

400 A

400 A

500 A

500 A

390 A

360 A

450 A

420 A

80 V

80 V

50 Hz / 60 Hz

50 Hz / 60 Hz

3 x 35 A

3 x 35 A

3 x 400 V (-25 % - +20 %)

3 x 400 V (-25 % - +20 %)

17.5 kVA

24.6 kVA

25 kVA

35 kVA

624 x 298 x 535

624 x 298 x 535

41 kg

45 kg

IP 23

IP 23

H

H

IEC 60 974-1; -10 / CE / S-Safety sign / EMC class A





Options/accessories

TIG torch, rotary gas valve



TIG 17 GDV 4M

TIG welding torch, rotary gas valve, gas-cooled, decentral



TIG 26 GDV 4M

TIG welding torch, rotary gas valve, gas-cooled, decentral

Gouging



GT 600 SKK95 3

Gouging torch

Air arc gouging torch for separating metals

► Suitable carbon electrodes can be found in the Accessories section of the price list!

Remote controls, 14-pole



FR30 14POL

Remote control, current

Operating point setting directly at the site of welding

Robust metal casing with rubber feet, retaining clip and holding magnet

For Stick 350 cel and Stick 350 cel PWS



FR30PWS 14POL

Remote control, current pole reversal

Operating point setting directly at the site of welding

Robust metal casing with rubber feet, retaining clip and holding magnet

For Stick 350 cel PWS



FRF30 14POL

Remote control, vertical-down weld, current

Operating point setting directly at the site of welding

Robust metal casing with rubber feet, retaining clip and holding magnet

For Stick 350 cel and Stick 350 cel PWS



FRF30 PWS 14POL

Remote control, vertical-down weld, current pole reversal

Operating point setting directly at the site of welding

Robust metal casing with rubber feet, retaining clip and holding magnet

For Stick 350 cel PWS

Remote controls, 14-pole



FR35 14POL

Remote control, hot start

Potentiometer for hot start current infinitely adjustable in % of maximum main current.

Potentiometer for hot start time infinitely adjustable from 0 to 2 sec.

Operating point setting directly at the site of welding

Robust metal casing with rubber feet, retaining clip and holding magnet

For Stick 350 cel and Stick 350 cel PWS

Remote controls, 19-pole



RT1 19POL

Remote control, current

Operating point setting directly at the site of welding

Robust metal casing with rubber feet, retaining clip and holding magnet

For Tetrrix, Picotig 190 AC/DC, Pico 180 and Pico 300 cel / cel pws machine series



RT PWS1 19POL

Remote control, vertical-down weld, current pole reversal

Operating point setting directly at the site of welding

For all Tetrrix AC/DC machines (except Tetrrix 230 AC/DC) and Pico 300 cel PWS



RTF1 19POL

Foot-operated remote control, current, with connection cable

Start/stop welding operation

Operating point setting directly at the site of welding

For Tetrrix, Picotig 190 AC/DC, Pico 180 and Pico 300 cel / cel pws machine series

Transport carts



Trolley 39-1

Transport carts

For transporting a power source

For Phoenix 404, 405 / 505 and Taurus 404, 405 / 505