

MasterTig

FAR FROM THE ORDINARY





MasterTig



reddot winner 2020
industrial design



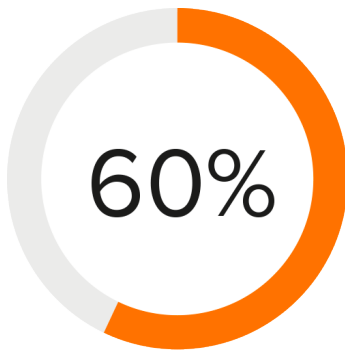
FAR FROM THE ORDINARY

MasterTig sets new standards for weld quality, usability, and power efficiency in AC and DC TIG welding. Designed for professional welders, the MasterTig product family offers a choice of power variants up to 300 A. Its modular design philosophy allows you to build the specification that best meets your needs, including alternative control panels, wireless remote controls, and transport cart options.

Stylish, practical and robust, the MasterTig absorbs the knocks of everyday welding life. The compact-sized welding equipment is constructed from tough yet lightweight injection molded plastic, featuring impact bridge protection structures. Flexible and durable **Flexlite TX** TIG torches are readily equipped to fit MasterTig to maximize welding comfort.

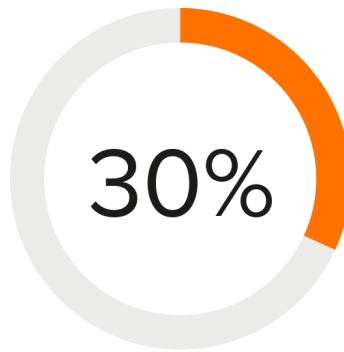


KEY BENEFITS



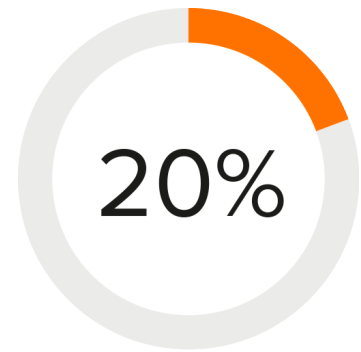
FASTER SETUP

Weld Assist guides you towards the optimal setup for easy and productive welding



INCREASED WELDING SPEED

Double Pulse function accelerates welding speed and lowers heat input by 20%



LOWER NOISE LEVELS

MasterTig reduces noise levels compared to leading competitors in AC welding applications

BENEFITS

- Choose from traditional touch button control panels or the full color 7" TFT control panel, including Weld Assist and 99 memory channels per process
- Weld Assist guides every welder towards accurate, productive welding by recommending the best parameters for different welding applications
- Several useful features available for enhanced TIG welding
- Easy, fast and convenient coolant filling and cleaning
- MasterTig transport units feature floor level cylinder loading, removing the need for heavy lifting
- Compatible with [Flexlite TX TIG torches](#)
- Foot pedal, on-torch and hand remote controls available
- Option for connecting the equipment to [WeldEye](#) cloud service



PRODUCT OPTIONS



MasterTig 235ACDC GM



MasterTig 235ACDC GM AU



MasterTig 325DC



MasterTig 325DC G



MasterTig 325DC G AU



MasterTig 325DC GM



MasterTig 335ACDC



MasterTig 335ACDC G



MasterTig 335ACDC G AU



MasterTig 335ACDC GM



FEATURES



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industrial design



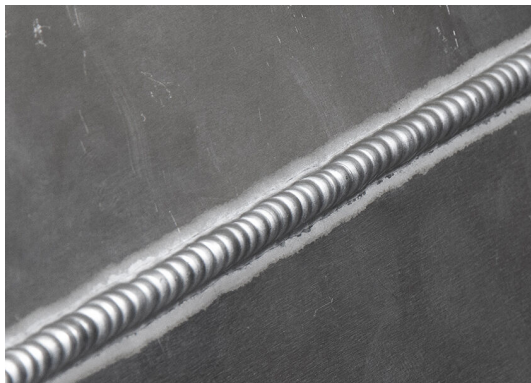
Red Dot Design Award: Product Design 2020

MasterTig TIG welding machine has been awarded with the Red Dot Award: Product Design 2020. MasterTig is a TIG welding machine that is very intuitive, user-centered, serves the needs of welders, and sets up a new benchmark for any upcoming products. Red Dot Award is one of the most prestigious design awards in the world, and the most sought-after marks of quality for good design internationally.



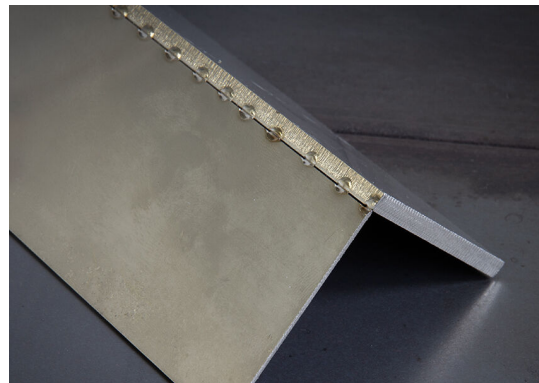
Double Pulse

Double Pulse combines alternative pulse cycles for 30% faster welding speed and 20% reduced heat input. Lowering distortion levels and weld costs, Double Pulse is ideal for DC hand welding and mechanized applications and offers superb weld seam appearance.



Optima AC

Optima AC is a customized AC TIG waveform that combines the best of the traditional sine and square waveforms – and adds a touch of magic for the optimal AC welding experience. Depending on the application, you're free to choose either sine, square, or the quiet one: Optima AC.



MicroTack

MicroTack offers fast and accurate tacking with minimum heat input in both DC and AC TIG welding. Ideal for multiple, repetitive tacking on thin sheet applications, where a consistent and controlled appearance is paramount. MicroTack can be set between 1 to 5 repeat pulse cycles or continuous cycle mode. The welding current level is set independently and the arc cycle time selected between 1 to 200 ms.



iTec

iTEC is engineered ignition technology for reliable arc starts. Particularly useful with long torch extensions for site welding or precise thin materials and low current applications, you can set the variable spark force energy.



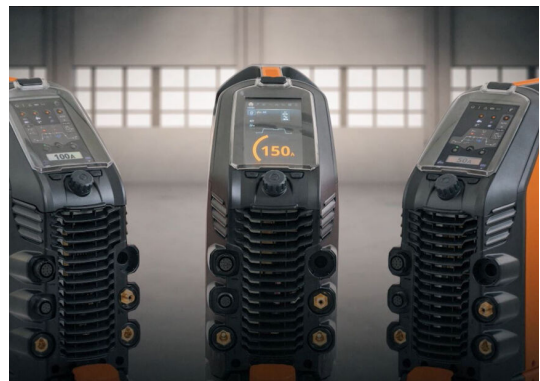
Auto Pulse

Easy and convenient, the only value to adjust is the welding current itself. Auto Pulse is ideal for applications in DC current.



AutoCool

Dynamic gas and water cooling ensures optimal temperature control and power efficiency. Depending on the welding power level and duration, the power source cooling fans moderate air flow and cooler motor run times between 15 seconds and 4 minutes, reducing electrical power consumption and localized noise levels.



UI control panels

Choose either traditional touch button control panels or the full color 7" TFT control panel. Protected by a 3mm armor shield plate, the 7" TFT control panel is both impact and scratch resistant, allows fast and accurate parameter setting with WeldAssist, and offers 99 memory channels per process to save the best parameter or WPS values.



Weld Assist

Follow simple on-screen steps, selecting material, thickness, joint type, and position, and Weld Assist sets the right parameters for easy and productive welding. It also gives recommendations for electrode size, filler wire, gas flow, groove type, pass profile, and travel speed. Perfect for pWPS creation.



Personalize

Upload your company logo or favorite image as a screensaver to personalize your MasterTig.



Impact bridge

MasterTig is designed and constructed from strong, energy absorbing, recyclable plastics, incorporating impact bridge structures that better protect the power source from the everyday knocks of welding life.



PivotSafe

MasterTig transport units feature floor level cylinder loading, removing the need for heavy lifting. The P45MT transport unit integrates an innovative pivoting cylinder plate, achieving safe cylinder loading.



Wireless Bluetooth remotes

Improve worksite safety by using Bluetooth wireless remotes. Select either hand or foot pedal modules and enjoy wireless power control from a distance of up to 15 or even 100 meters, depending on the worksite.



Torch parts storage

Quickly access frequently used TIG torch parts from the convenient, handle mounted storage tray.



Weld time clock

Ideal for total weld cycle measurement and job data records, MasterTig's weld clock is simple and fast to reset, allowing you to record and compare welding times between jobs.



ACCESSORIES



MasterTig Cooler M

Cooling unit, supports multi-voltage use. Easy, fast and convenient coolant filling.



Flexlite TX

The Flexlite TX torches are designed for use with MasterTig welding equipment. The torch range includes several neck models, offering superb cooling performance and good access to challenging joint designs.



MTP23X

Membrane panel, supports DC power sources.



MTP33X

Membrane panel, supports AC/DC power sources.



MTP35X

7" TFT panel, supports DC and AC/DC power sources.



HR43

Wired hand remote control.



HR45

Wireless hand remote control. Bluetooth range up to 100 meters.



FR43

Wired foot pedal remote control.



FR45

Wireless foot pedal remote control. Bluetooth range up to 100 meters.



P43MT

4-wheel undercarriage.



T25MT

2-wheel cart with floor level cylinder loading.



P45MT

4-wheel cart with an innovative pivoting cylinder plate.



TECHNICAL SPECIFICATIONS

POWER SOURCES 235

Connection voltage 1~ 50/60 Hz	110 / 220...240 V ± 10 %
Fuse	16 A
Stick electrode sizes	1.6...5.0 mm
Recommended generator power (min)	8 kVA
Open circuit voltage (average)	50 V
Operating temperature range	-20...+40 °C
External dimensions LxWxH	544 x 205 x 443 mm
Weight (no accessories)	19.1 kg
Degree of protection	IP23S
Standards	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1
EMC class	A
Rated maximum output at 40 °C (240 V) 40 % TIG	230 A / 19.2 V
Rated maximum output at 40 °C (240 V) 60 % TIG	200 A / 18 V
Rated maximum output at 40 °C (240 V) 100 % TIG	170 A / 16.8 V
Rated maximum output at 40 °C (240 V) 37 % MMA	180 A / 27.2 V
Rated maximum output at 40 °C (240 V) 60 % MMA	150 A / 26 V
Rated maximum output at 40 °C (240 V) 100 % MMA	120 A / 24.8 V
Rated maximum output at 40 °C (110 V) 40 % TIG	130 A / 15.2 V
Rated maximum output at 40 °C (110 V) 60 % TIG	120 A / 14.8 V
Rated maximum output at 40 °C (110 V) 100 % TIG	90 A / 13.6 V
Rated maximum output at 40 °C (110 V) 40 % MMA	85 A / 23.4 V
Rated maximum output at 40 °C (110 V) 60 % MMA	75 A / 23 V
Rated maximum output at 40 °C (110 V) 100 % MMA	55 A / 22.2 V
Range of output (110 V) TIG	3 A / 1 V ... 130 A / 24 V
Range of output (240 V) TIG	3 A / 1 V ... 230 A / 31 V
Range of output (110 V) MMA	10 A / 1 V ... 85 A / 35 V
Range of output (240 V) MMA	10 A / 10 V ... 180 A / 40 V



POWER SOURCES

MasterTig 325DC

MasterTig 325DC G

MasterTig 325DC GM

Connection voltage 3~ 50/60 Hz	380 ... 460 V $\pm 10\%$	380 ... 460 V $\pm 10\%$	220 ... 230 V; 380 ... 460 V $\pm 10\%$
Fuse	16 A	16 A	20 A
Stick electrode sizes	1.6 ... 6.0 mm	1.6 ... 6.0 mm	1.6 ... 6.0 mm
Recommended generator power (min)	20 kVA	20 kVA	20 kVA
Open circuit voltage (average)	50 V	50 V	50 V
Operating temperature range	-20 ... +40 °C	-20 ... +40 °C	-20 ... +40 °C
External dimensions LxWxH	544 x 205 x 443 mm	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight (no accessories)	21 kg	21.5 kg	21.5 kg
Degree of protection	IP23S	IP23S	IP23S
Standards	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1
EMC class	A	A	A
Rated maximum output at 40 °C (40 % TIG)	300 A / 22 V	300 A / 22 V	300 A / 22 V
Rated maximum output at 40 °C (60 % TIG)	230 A / 19.2 V	230 A / 19.2 V	230 A / 19.2 V
Rated maximum output at 40 °C (100 % TIG)	190 A / 17.6 V	190 A / 17.6 V	190 A / 17.6 V
Rated maximum output at 40 °C (40 % MMA)	250 A / 30 V	250 A / 30 V	250 A / 30 V
Rated maximum output at 40 °C (60 % MMA)	230 A / 29.2 V	230 A / 29.2 V	230 A / 29.2 V
Rated maximum output at 40 °C (100 % MMA)	190 A / 27.6 V	190 A / 27.6 V	190 A / 27.6 V
Range of output TIG	3 A / 1 V ... 300 A / 38 V	3 A / 1 V ... 300 A / 38 V	3 A / 1 V ... 300 A / 27 V (@ 220 V)
Range of output MMA	10 A / 10 V ... 250 A / 39 V	10 A / 10 V ... 250 A / 39 V	10 A / 10 V ... 250 A / 32 V (@ 220 V)



POWER SOURCES

MasterTig 335ACDC

MasterTig 335ACDC G

MasterTig 335ACDC GM

Connection voltage 3~ 50/60 Hz	380 ... 460 V $\pm 10\%$	380 ... 460 V $\pm 10\%$	220 ... 230 V; 380 ... 460 V $\pm 10\%$
Fuse	16 A	16 A	20 A
Stick electrode sizes	1.6 ... 6.0 mm	1.6 ... 6.0 mm	1.6 ... 6.0 mm
Recommended generator power (min)	20 kVA	20 kVA	20 kVA
Open circuit voltage (average)	50 V	50 V	50 V
Operating temperature range	-20 ... +40 °C	-20 ... +40 °C	-20 ... +40 °C
External dimensions LxWxH	544 x 205 x 443 mm	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight (no accessories)	22 kg	22.5 kg	22.5 kg
Degree of protection	IP23S	IP23S	IP23S
Standards	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1
EMC class	A	A	A
Rated maximum output at 40 °C (40 % TIG)	300 A / 22 V	300 A / 22 V	300 A / 22 V
Rated maximum output at 40 °C (60 % TIG)	230 A / 19.2 V	230 A / 19.2 V	230 A / 19.2 V
Rated maximum output at 40 °C (100 % TIG)	190 A / 17.6 V	190 A / 17.6 V	190 A / 17.6 V
Rated maximum output at 40 °C (40 % MMA)	250 A / 30 V	250 A / 30 V	250 A / 30 V
Rated maximum output at 40 °C (60 % MMA)	230 A / 29.2 V	230 A / 29.2 V	230 A / 29.2 V
Rated maximum output at 40 °C (100 % MMA)	190 A / 27.6 V	190 A / 27.6 V	190 A / 27.6 V
Range of output TIG	3 A / 1 V ... 300 A / 38 V	3 A / 1 V ... 300 A / 38 V	3 A / 1 V ... 300 A / 27 V (@ 220 V)
Range of output MMA	10 A / 10 V ... 250 A / 39 V	10 A / 10 V ... 250 A / 39 V	10 A / 10 V ... 250 A / 32 V (@ 220 V)



POWER SOURCES VRD LOCKED ON 235

Connection voltage 1~ 50/60 Hz	110 / 240 V ± 10 %
Fuse	15 A
Stick electrode sizes	1.6...5.0 mm
Recommended generator power (min)	8 kVA
Open circuit voltage (average)	23 V (locked to VRD)
Operating temperature range	-20...+40 °C
External dimensions LxWxH	544 x 205 x 443 mm
Weight (no accessories)	19.1 kg
Degree of protection	IP23S
Standards	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 GB 15579.1
EMC class	A
Rated maximum output at 40 °C (240 V) 40 % TIG	230 A / 19.2 V
Rated maximum output at 40 °C (240 V) 60 % TIG	200 A / 18 V
Rated maximum output at 40 °C (240 V) 100 % TIG	170 A / 16.8 V
Rated maximum output at 40 °C (240 V) 37 % MMA	180 A / 27.2 V
Rated maximum output at 40 °C (240 V) 60 % MMA	150 A / 26 V
Rated maximum output at 40 °C (240 V) 100 % MMA	120 A / 24.8 V
Rated maximum output at 40 °C (110 V) 40 % TIG	130 A / 15.2 V
Rated maximum output at 40 °C (110 V) 60 % TIG	110 A / 14.4 V
Rated maximum output at 40 °C (110 V) 100 % TIG	90 A / 13.6 V
Rated maximum output at 40 °C (110 V) 40 % MMA	85 A / 23.4 V
Rated maximum output at 40 °C (110 V) 60 % MMA	75 A / 23 V
Rated maximum output at 40 °C (110 V) 100 % MMA	55 A / 22.2 V
Range of output (110 V) TIG	3 A / 1 V ... 130 A / 24 V
Range of output (240 V) TIG	3 A / 1 V ... 230 A / 31 V
Range of output (110 V) MMA	10 A / 1 V ... 85 A / 35 V
Range of output (240 V) MMA	10 A / 10 V ... 180 A / 40 V



POWER SOURCES VRD LOCKED ON

MasterTig 325DC G AU

MasterTig 335ACDC G AU

Connection voltage 3~ 50/60 Hz	380 ... 460 V ± 10 %	380 ... 460 V ± 10 %
Fuse	16 A	16 A
Stick electrode sizes	1.6 ... 6.0 mm	1.6 ... 6.0 mm
Recommended generator power (min)	20 kVA	20 kVA
Open circuit voltage (average)	50 V	50 V
Operating temperature range	-20 ... +40 °C	-20 ... +40 °C
External dimensions LxWxH	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight (no accessories)	21.5 kg	22.5 kg
Degree of protection	IP23S	IP23S
Standards	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 GB 15579.1	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 GB 15579.1
EMC class	A	A
Rated maximum output at 40 °C (40 % TIG)	300 A / 22 V	300 A / 22 V
Rated maximum output at 40 °C (60 % TIG)	230 A / 19.2 V	230 A / 19.2 V
Rated maximum output at 40 °C (100 % TIG)	190 A / 17.6 V	190 A / 17.6 V
Rated maximum output at 40 °C (40 % MMA)	250 A / 30 V	250 A / 30 V
Rated maximum output at 40 °C (60 % MMA)	230 A / 29.2 V	230 A / 29.2 V
Rated maximum output at 40 °C (100 % MMA)	190 A / 27.6 V	190 A / 27.6 V
Range of output TIG	3 A / 1 V ... 300 A / 38 V	3 A / 1 V ... 300 A / 38 V
Range of output MMA	10 A / 10 V ... 250 A / 39 V	10 A / 10 V ... 250 A / 39 V

ACCESSORIES

MasterTig Cooler M

Product code	MTC1KWM
Recommended coolant	MPG 4456 (Kemppi mixture)
Operating temperature range	-20 ... +40 °C with recommended coolant
Weight (no accessories)	12.5 kg
Tank volume	3.0 l

WWW.KEMPPI.COM

Kemppi is the pioneering company within the welding industry. It is our role to develop solutions that make you win business. Headquartered in Lahti, Finland, Kemppi employs over 800 welding experts in 17 countries and has a revenue of more than 150 MEUR. Our offering includes welding solutions - intelligent equipment, welding management software and expert services - for both demanding industrial applications and ready-to-weld needs. Local expertise is available via our global partner network covering over 60 countries.

