MASTERTIG

Far from the ordinary

KEMPPI

MASTERTIG

Far from the ordinary

The new master of AC and DC TIG welding, MasterTig sets new standards for weld quality, usability and power efficiency.

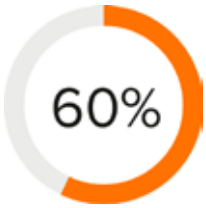
Designed for professional user groups, MasterTig product family offers a choice of power variants in 230A, 300A, 400A* and 500A* models, featuring impressive size and weight specifications.

The 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, MasterTig absorbs the knocks and impact of everyday welding life. Light in weight and compact in size, MasterTig is constructed from tough injection molded plastic, featuring impact bridge protection structures, establishing your reliable partner for workshop or site use.

*) Models launch to market 2020

KEY BENEFITS



60 % FASTER SETUP

Weld Assist guides you towards the optimal setup. Tell the machine what you intend to weld and it sets the right parameters for easy and productive welding.

30 % INCREASED WELDING SPEED

Double Pulse function accelerates travel speed in DC applications and lowers heat input by 20%. Faster welding and lower materials distortion.

20 % LOWER NOISE LEVELS

MasterTig reduces noise levels compared to leading competitors in ACDC welding applications, allowing you to quietly concentrate on quality.

Excellent ergonomy and

PERSONALIZE

Upload your company logo or favorite image to personalize your MasterTig screen saver.

MODULAR DESIGN

Choose from a range of MasterTig power models, alternative user interface, remote control options, transport carts and torches, to ensure your machine exactly meets your needs.

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.

superb user experience

up 15 to 100 m

TORCH PARTS STORAGE

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

UI CONTROL PANELS

Choose either traditional touch button control panels or the full color 7" TFT control system allowing easy, fast and accurate parameter setting. Protected by a 3mm armor shield plate, the 7" TFT display panel is both impact and scratch resistant.

WELD ASSIST

Setting your machine first time, every time with Weld Assist. Follow simple on-screen steps, selecting material, thickness, joint type and position, and Weld Assist sets the best parameters, guiding every welder towards accurate, productive welding. Weld Assist also gives recommendations for electrode size, filler wire, gas flow, groove type, pass profile and travel speed. Perfect for pWPS creation.

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 time between 15 seconds and 4 minutes, reducing electrical power consumption and localized noise levels.

BLUETOOTH

The magic of cordless remote control. Cancel remote cable repairs and improve work site 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 work site. Simply make life easy.

93A
93A

Enhanced welding

DOUBLE PULSE

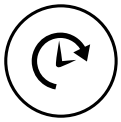
Double Pulse combines alternative pulse cycles for 30% faster welding speed and 20% reduced heat input. Lowering distortion levels and weld costs, Double Pulse is ideal for DC hand welding and mechanized applications and offers superb weld appearance.

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.

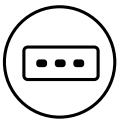
MEMORY CHANNELS

The full color TFT control panel MTP35X offers 99 memory channels per process to save the best parameter or WPS values. Copy or delete and update as needed. It's fast and simple.



WELD TIME CLOCK

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



MICROTACK

MicroTack is the fast and accurate tacking feature in both DC and AC TIG welding. Ideal for multiple, repetitive tacking on thin sheet applications, where consistent and controlled appearance are 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. Precise tacking with minimum heat input. Perfect.

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.

AUTO PULSE

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

WELD ASSIST

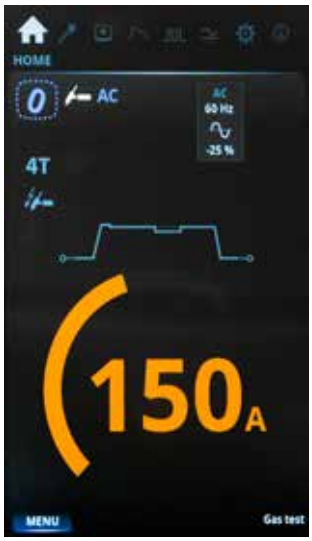
Follow simple on-screen steps, selecting material, thickness, joint type and position, and Weld Assist sets the best parameters, guiding every welder towards accurate, productive welding.

CLEAR, ACCURATE AND EASY

For fast and accurate parameter setting, choose traditional touch button control panels or the full color 7" TFT control system, including Weld Assist.

MTP23X

MTP33X



MTP35X

PERSONALIZE

Upload your company logo or favorite image to the MTP35X screen saver. It's simple and fast.

PIVOTSAFE

The P45MT transport unit integrates an innovative pivoting cylinder plate, achieving safe cylinder loading.

FLEXLITE TIG TORCHES

Flexlite TX torches feature high-strength flexible molded handles for increased comfort and lower welder fatigue. Silicone rubber material gives a firm grip and the innovative design reduces wrist loading, allowing you to concentrate on the perfect weld.

Ready equipped to fit MasterTig in either gas or water cooled models, Flexlite TX TIG torches are available in alternative power classes and lengths.

Compact welding head designs include rigid, flexible and S-shaped rotating neck models, offering superb cooling performance and good access to challenging joint designs.

TECHNICAL DATA

		MASTERTIG 235ACDC GM	MASTERTIG 235ACDC GM (VRD locked on)
Mains connection voltage	1~ 50/60 Hz	110 / 220 ... 240 V	110 / 240 V
Fuse		16 A	15 A
Open circuit voltage (average)	MMA	50 V	23 V (locked to VRD)
Rated maximum output at 40 °C (240 V)	40 % TIG	230 A / 19.2 V	230 A / 19.2 V
Rated maximum output at 40 °C (110 V)	40 % TIG	130 A / 15.2 V	130 A / 15.2 V
Range of output (240 V)	TIG	3 A / 1 V…230 A / 31 V	3 A / 1 V…230 A / 31 V
Range of output (110 V)	TIG	3 A / 1 V…130 A / 24 V	3 A / 1 V…130 A / 24 V
Operating temperature range		-20…+40 °C	-20…+40 °C
EMC class		A	A
Degree of protection		IP23S	IP23S
External dimensions	LxWxH	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight without accessories		19.1 kg	19.1 kg
Recommended generator power (min)	Sgen	8 kVA	8 kVA
Stick electrode diameters	ø mm	1.6…5.0 mm	1.6…5.0 mm
Standards		IEC 60974-1,-3,-10 IEC 61000-3-12	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006

		MASTERTIG 325DC	MASTERTIG 325DC G	MASTERTIG 325DC GM
Mains connection voltage	3~ 50/60 Hz	380 ... 460 V	380 ... 460 V	220 ... 230 460 V; 380 ... 460 V
Fuse		16 A	16 A	20 A
Open circuit voltage (average)	MMA	50 V	50 V	50 V
Rated maximum output at 40 °C	40 % TIG	300 A / 22 V	300 A / 22 V	300 A / 22 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)
Operating temperature range		-20…+40 °C	-20…+40 °C	-20…+40 °C
EMC class		A	A	A
Degree of protection		IP23S	IP23S	IP23S
External dimensions	LxWxH	544 x 205 x 443 mm	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight without accessories		21.0 kg	21.5 kg	21.5 kg
Recommended generator power (min)	Sgen	20 kVA	20 kVA	20 kVA
Stick electrode diameters	ø mm	1.6…6.0 mm	1.6…6.0 mm	1.6…6.0 mm
Standards		IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 *	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 *	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 *

* Applies only to the power source model versions where the Voltage Reduction Device (VRD) function is locked on.

		MASTERTIG 335ACDC	MASTERTIG 335ACDC G	MASTERTIG 335ACDC GM
Mains connection voltage	3~ 50/60 Hz	380 ... 460 V	380 ... 460 V	220 ... 230 V; 380 ... 460 V
Fuse		16 A	16 A	20 A
Open circuit voltage (average)	MMA	50 V	50 V	50 V
Rated maximum output at 40 °C	40 % TIG	300 A / 22 V	300 A / 22 V	300 A / 22 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)
Operating temperature range		-20…+40 °C	-20…+40 °C	-20…+40 °C
EMC class		A	A	A
Degree of protection		IP23S	IP23S	IP23S
External dimensions LxWxH	mm	544 x 205 x 443	544 x 205 x 443	544 x 205 x 443
Weight without accessories	kg	22.0 kg	22.5 kg	22.5 kg
Recommended generator power (min)	Sgen	20 kVA	20 kVA	20 kVA
Stick electrode diameters	ø mm	1.6…6.0 mm	1.6…6.0 mm	1.6…6.0 mm
Standards		IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 *	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 *	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006 *

* Applies only to the power source model versions where the Voltage Reduction Device (VRD) function is locked on.

	MASTERTIG COOLER M
Recommended coolant	MPG 4456 (Kemppi mixture)
Tank volume	3.0 l
Operating temperature range *	-20…+40 °C
Weight without accessories	12.5 kg

* With recommended coolant

FLEXLiTE TIG TORCHES		TX 135GF	TX 165GF	TX 165GS	TX 165G	TX 225G	TX 225GS	TX 255WS	TX 305WF	TX 355W
Type of cooling		Gas	Gas	Gas	Gas	Gas	Gas	Liquid	Liquid	Liquid
Type of connection	Current-gas	R1/4	R1/4	R1/4	R1/4	R1/4	R1/4	R1/4	R1/4	R1/4
Load capacity @ 40 % (Argon)	A	130	160	160	160	220	220	250	300	350
Load capacity @ 100 % (Argon)	A	-	-	-	-	-	-	200	200	250
Remote control		Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Neck type		Flexible	Flexible	Rotating	70° angle	70° angle	Rotating	Rotating	Flexible	70° angle

These equipment comply with standard IEC 60974-7.

ORDERING INFORMATION

Equipment	Description	Ordering code
MasterTig 235ACDC GM	Power source: 230 A AC/DC, generator and multi-voltage use	MT235ACDCGM
	Power source: 230A AC/DC, generator and multi-voltage use, VRD locked on	MT235ACDCGMAU
MasterTig 325DC	Power source: 300 A DC	MT325DC
MasterTig 325DC G	Power source: 300 A DC, generator use	MT325DCG
	Power source: 300 A DC, generator use, VRD locked on	MT325DCGAU
MasterTig 325DC GM	Power source: 300 A DC, generator and multi-voltage use	MT325DCGM
MasterTig 335ACDC	Power source: 300 A AC/DC	MT335ACDC
MasterTig 335ACDC G	Power source: 300 A AC/DC, generator use	MT335ACDCG
	Power source: 300 A AC/DC, generator use, VRD locked on	MT335ACDCGAU
MasterTig 335ACDC GM	Power source: 300 A AC/DC, generator and multi-voltage use	MT335ACDCGM
MasterTig Cooler M	Cooling unit, multi-voltage use	MTC1KWM
MTP23X	Control panel: Membrane panel, DC	MTP23X
MTP33X	Control panel: Membrane panel, AC/DC	MTP33X
MTP35X	Control panel: 7" TFT panel, DC, AC/DC	MTP35X
HR43	Wired remote *	HR43
HR45	Wireless remote *	HR45
FR43	Wired foot pedal remote	FR43
FR45	Wireless foot pedal remote	FR45
P43MT	Transport unit, 4 wheel undercarriage	P43MT
T25MT	Transport unit, 2 wheel cart	T25MT
P45MT	Transport unit, 4 wheel cart	P45MT

* Available in January 2020.

P43MT

T25MT

P45MT

Scan this QR code to download Kemppi Discovery App. It creates for you a vivid simulation of MasterTig placed in your environment using augmented reality technology (AR).

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 industry 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.

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