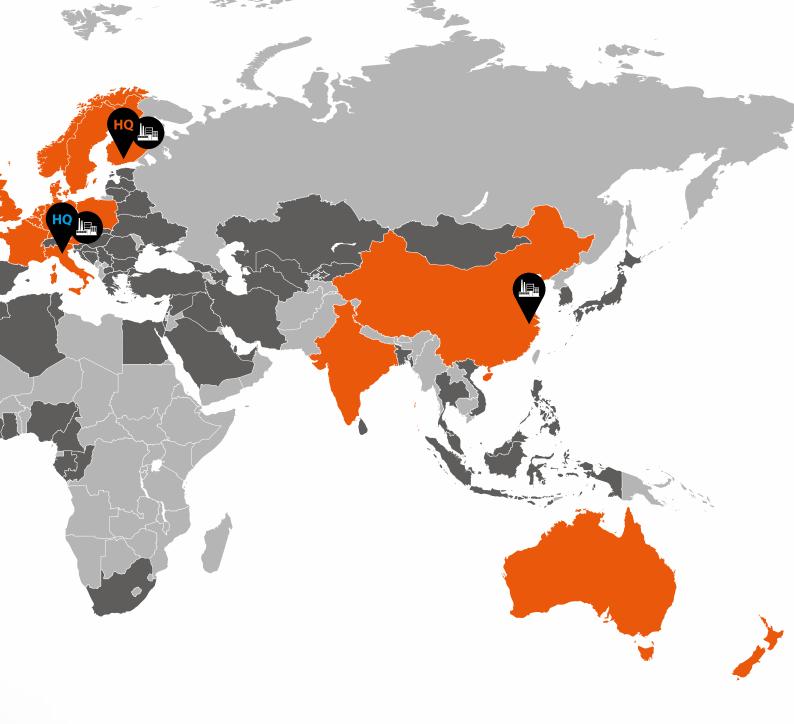
MANUAL WELDING PRODUCT CATALOGUE

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KEMPPI Globally local

Kemppi business operates all around the world. The company headquarters and main production units are located in Finland. Kemppi sales organisations have been established in Finland, Sweden, Norway, Denmark, Germany, France, United Kingdom, Netherlands, Poland, Australia, Italy, India and China. Kemppi also has representatives in more than 60 countries, responsible for country based product distribution, sales and customer service.

For a full list of Kemppi sales companies, distributors and dealers, visit www.kemppi.com



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MinarcMig Auto

Portable welding machine

- Precise weld quality and arc ignition with adaptive regulation
- Just select material type and the plate thickness and weld in auto mode
- 220A / 190A MIG/MAG welding power from a 16A supply
- Automatic or manual mode power regulation
- Compatible with Fe, Fe FCW, Ss, Al, CuSi filler wires, 1 kg, and 5 kg wire spools
- A large graphical backlit display guides you in low-light conditions
- Designed for use with long power extension cables (up to 100m)
- A 3-meter welding torch with an ergonomic gun handle, cable set, and carrying strap included.
- Suitable for mains network or generator use
- Designed and manufactured in Finland
- 3-year warranty

Big power from a small MIG/MAG welding machine

MinarcMig Auto 190/220 welding machines are crafted to meet the distinct needs of welders on the move, combining the convenience of a portable and lightweight design with high-performance MIG/MAG welding capabilities.

Every welder develops unique methods and skills through years of dedicated learning. The new MinarcMig Auto welding machines seamlessly integrate significant MIG/MAG welding capacity and top-tier quality into a small portable machine that caters to a wide range of projects.

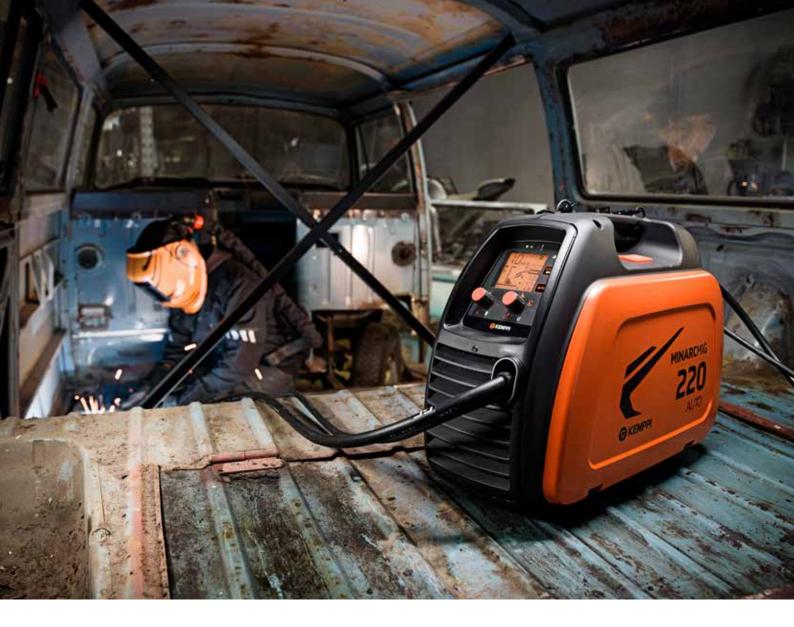
The MinarcMig 190 Auto and 220 Auto models feature automatic and manual mode set-ups as well as an adaptive arc regulation system to ensure precise welding quality and accurate ignition. Simplify the welding process – just take MinarcMig, select the material type and the plate thickness, and start welding. It is compatible with various materials, including steel, stainless steel, aluminum, and CuSi brazing filler wires.

These little giants deliver portable MIG/MAG welding power, offering 190 amps at a 35% duty cycle or 220 amps at a 20% duty cycle from a 16 A, 1-phase mains supply.

The ready-to-weld MinarcMig 190 Auto and 220 Auto MIG/MAG welding machines come with the new Flexlite GC MIG welding torch, which includes integrated cable bending support and an ergonomic gun handle and optional fit pistol grip as standard.

MinarcMig Auto models ensure premium results, allowing you to celebrate your perfected welding skills wherever your work takes you.





VALUE FEATURES



POWERFUL PERFORMANCE ANYWHERE

Secure excellent weld quality every time, everywhere. The best-level welding power from a 1-phase 230V power supply provides flexibility in choosing and moving around worksites.



EASE OF USE

An intuitive and user-friendly interface makes operating the machine easy for both experienced welders and beginners. The AUTO setting by material type and plate thickness simplifies the welding process and improves welding quality.



ENHANCED MOBILITY AND EFFORTLESS WELDING

Experience the freedom to weld effortlessly. The lightweight and portable design allows easy and safe movement.

Technical specifications

MinarcMig Auto	Minarchia 100 Auto	Minarchia 220 Auto	Minarchig 100 Auto All	Minarchia 220 Auto All
	MinarcMig 190 Auto	MinarcMig 220 Auto	MinarcMig 190 Auto AU	MinarcMig 220 Auto AU
Connection voltage 1~ 50/60 Hz	230 V ±15%	230 V ±15%	230 V ±15%	230 V ±15%
Welding range	20 A / 15 V190 A / 26 V	20 A / 15 V220 A / 28 V	20 A / 15 V190 A / 26 V	20 A / 15 V220 A / 28 V
Output 20% ED	-	220 A	-	220 A
Output 35% ED	190 A	-	190 A	-
Output 60% ED	140 A	160 A	140 A	160 A
Output 100% ED	100 A	120 A	100 A	120 A
Open circuit voltage	7075 V	7075 V	7075 V	7075 V
Wire feed mechanism	2-roll, single-motor	2-roll, single-motor	2-roll, single-motor	2-roll, single-motor
Wire spool weight, max.	5 kg	5 kg	5 kg	5 kg
Wire spool diameter, max.	200 mm	200 mm	200 mm	200 mm
Mains fuse	16 A	16 A	15 A	15 A
Operating temperature range	-2040 °C	-2040 °C	-2040 °C	-2040 °C
External dimensions LxWxH	450 x 227 x 368 mm	450 x 227 x 368 mm	450 x 227 x 368 mm	450 x 227 x 368 mm
Weight (no accessories)	14.2 kg	14.2 kg	14.2 kg	14.2 kg
Degree of protection	IP23	IP23	IP23	IP23
Standards	IEC 60974-1, -5, -10, IEC 610	000-3-12	IEC 60974-1, -5, -10, IEC 6100	00-3-12, AS 60974.1
EMC class	А	А	A	А
Storage temperature range	-4060 °C	-4060 °C	-4060 °C	-4060 °C
Shielding gas pressure (max)	0.5 MPa	0.5 MPa	0.5 MPa	0.5 MPa

* The AU model is for the Australian and New Zealand markets. They have different mains plugs.

Ordering information

Product name	Product code
MinarcMig 190 Auto	61008190
MinarcMig 220 Auto	61008220
MinarcMig 190 Auto AU	61008190AU
MinarcMig 220 Auto AU	61008220AU
Accessories	
GC 223 G MIM 3m torch including optional fit pistol grip handle	GC223GMIM3 (3m)
MST 400	6185294
Earth return cable 25 mm ² , 3 m	6184004
Shoulder strap	9592163
Shielding gas hose 4.5 m	W001077
Euro Adapter for MinarcMig	Euro adapter kit - W008366 Wire liner, 0.6-0.8 mm for Euro Adapter - SP008578 Red wire liner, 0.9-1.0 mm for Euro Adapter -SP008856



Optional fit pistol grip included as standard.



Carry strap for easy movement on site.





Kempact RA

Switch on the new standard

- Modern, energy efficient power source
- Excellent welding performance with mixed or C02 shielding gas
- Precise, clean arc ignition
- Maximum output at 35 % duty cycle
- Large, clear LCD display
- WireLine[™] service indicator
- GasMate[™] chassis design featuring floor level cylinder loading
- Brights[™] cabinet lighting
- HotSpot[™] heat treatment function
- 2T/4T gun switch latching
- Spot and cycle arc timer
- Parts storage trays
- Designed and manufactured in Finland
- 3 year warranty

New standards in compact MIG/MAG class

Designed for the modern welding workshop, Kempact RA expresses stylish and purposeful design through high build quality and functional user benefits, making weld tasks productive, accurate and efficient.

Kempact RA is built on Kemppi's latest power source platform, ensuring optimal welding performance and excellent power cost efficiency. Eleven model options include 250 and 320 ampere power sources, including a choice of either Regular (R) or Adaptive (A) control panel interface, which serve the wide ranging needs of metal fabrication workshops. Welding gun and earth return lead pack are included.

New technical features include reduced energy costs of more than 10 %

when compared to conventional step controlled power sources, Brights[™] cabinet lighting for easy wire loading in low light conditions, WireLine[™] service alert function that signals routine wire-path maintenance needs, plus the integrated GasMate[™] chassis design, making gas cylinder loading and machine movement easy and safe. Whichever model you select, Kempact RA ensures you get the most from every welding task.





VALUE FEATURES



SAVINGS ON ENERGY COSTS Compared to conventional stepcontrolled power sources



50% FASTER MACHINE SETTING Using the memory channels



KEMPPI WARRANTY 3 YEARS Covers machine parts and labor

12

MIG/MAG WELDING

Turn on the heat with HotSpot

Perfect for vehicle repair and thin sheet fabrication environments, the HotSpot[™] function with four different heat settings makes metal shrinking and component heating simple and convenient. Simply fit the carbon electrode set to the FE welding gun and activate HotSpot[™] on the control panel. An electrical circuit is created once the carbon electrode touches the work piece, which gently heats the metal's surface. HotSpot[™] can also be used to heat and release corroded nuts and bolts and other metal components.

Floor level design

The GasMate chassis design makes gas cylinder collection, storage and movement easy. Gas cylinders are floor level loaded and secured with a strong fabric webbing system.

Kempact RA gets the job done

Kempact RA is the ideal solution for a variety of MIG/MAG welding applications. From vehicle repair to light and medium fabrication workshops, Kempact RA gets the job done, simply and reliably.

Special features in Kempact Adaptive (A) models

In addition to all standard features provided in Regular panels with manual setup, Adaptive panels offer plate thickness control, filler materials selection and four memory channels combined with an adaptive mode setup for your convenience.

Special features in Kempact Regular (R) models

Regular (R) models have a manual setup function for voltage and wirefeed speed and incorporate a wide range of standard features including GAS type selection, 2T/4T gun latching mode, SPOT/CYCLE arc timer as well as HOT SPOT function, a specialist localised heat treatment function for professional thin sheet fabricators and automotive repair engineers.



GasMate chassis design makes gas cylinder collection, storage and movement easy. Gas cylinders are floor level loaded and secured with strong fabric webbing.



The large and clear LCD control panels make parameter setting and reference easy. Parts trays provide convenient storage and access.



The wire cabinet is placed at a convenient easyto-access height, making wire spool changes and wireline maintenance simple. LED cabinet lighting is also included as standard.



Kempact Adaptive (A) models include special features, including plate thickness control, filler material selection or the use of memory channels to help adjust the power setting.

Technical specifications

КЕМРАСТ		251R, 251A
Connection voltage	1~, 50/60 Hz	240V (±15%)
Rated power at max. current	30 % ED I1max (250 A)	8.5 kVA
Supply current	30 % ED I1max (250 A)	36 A
	100 % ED I1eff (150 A)	17 A
Connection cable	H07RN-F	3G2.5 (2.5 mm ² , 5 m)
Fuse	Type C	20 A
Welding range		10 V / 20 A – 29 V / 250 A
Power factor at max.	250 A / 26.5 V	0.99
Efficiency at 100% ED	150 A / 21.5 V	0.82
Wire feed speed adjustment range		1.0-18.0m/min
Voltage adjustment range		8.0-29.0V
External dimensions	LxWxH	623 x 579 x 1070 mm
Weight (without gun and cables)		44 kg
EMC class		A
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10, IEC 61000-3-12		

Kempact		253R, 253A		323R, 323A
Connection voltage	3~, 50/60 Hz	400V (±15%)	3~, 50/60 Hz	400V (±15%)
Rated power at max. current	35 % ED I1max (250 A)	8.5 kVA	35 % ED I1max (320 A)	12 kVA
Supply current	35 % ED I1max (250 A)	11.9 A	35 % ED I1max (320 A)	17.2 A
	100 % ED I1eff (150 A)	6.1 A	100 % ED I1eff (190 A)	8.2 A
Connection cable	H07RN-F	4G1.5 (1.5 mm ² , 5 m)	H07RN-F	4G1.5 (1.5 mm ² , 5 m)
Fuse	Type C	10A	Type C	10A
Welding range		10 V / 20 A - 31 V / 250 A		10 V / 20 A – 32.5 V / 320 A
Power factor at max.	250 A / 26.5 V	0.93	320 A / 30 V	0.94
Efficiency at 100% ED	150 A / 21.5 V	0.88	190 A / 23.5 V	0.86
Wire feed speed adjustment range		1.0-18.0m/min		1.0-20.0m/min
Voltage adjustment range		8.0-31.0V		8.0-32.5V
External dimensions	L x W x H	623 x 579 x 1070 mm	L×W×H	623 x 579 x 1070 mm
Weight (without gun and cables)		44 kg		44 kg
EMC class		А		A
Standards: IEC 60974-1, IEC 60974-5, IE	Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10			

Technical specifications

	252 AMV		323 RMV/AMV
2 50/6011		2 50/6011	
,		,	230 V -15%400 V +15%
40% ED I1max (250 A)(230V)	9 kVA	35% ED I1max (320A)(230V)	13.5 kVA
40% ED I1max (250A)(400V)	8.5 kVA	35% ED I1max (320A)(400V)	12.5 kVA
40% ED I1max (250A)(230V)	22.2 A	35% ED I1max (320A)(230V)	33.3 A
40% ED I1max (250A)(400V)	12.3 A	35% ED I1max (320A)(400V)	17.8 A
100% ED I1eff (150A)(230V)	10.8 A	100% ED I1eff (190A)(230V)	14.8 A
100% ED I1eff (150A)(400V)	6.2 A	100% ED I1eff (190A)(400V)	8.3 A
H07RN-F	4G1.5 (1.5 mm², 5 m)	H07RN-F	4G1.5 (1.5 mm ² , 5 m)
Type C (230V)	16 A	Type C (230V)	16 A
Type C (400V)	10 A	Type C (400V)	10 A
10V/20A - 31V/250A		10V/20A - 32.5V/320A	
250A/26.5V (230V)	0.94	320A/30V (230V)	0.94
250A/26.5V (400V)	0.93	320A/30V (400V)	0.94
150A/21.5V (230V)	0.79	190A/23.5V (230V)	0.80
150A/21.5V (400V)	0.82	190A/23.5V (400V)	0.83
	1.0-18.0m/min		1.0-20.0m/min
	8.0-31.0V		8.0-32.5V
L×W×H	623 x 579 x 1070 mm	L×W×H	623 x 579 x 1070 mm
	44 kg		44 kg
	А		A
C 60974-10			
	40% ED 11max (250A)(230V) 40% ED 11max (250A)(400V) 100% ED 11eff (150A)(230V) 100% ED 11eff (150A)(400V) H07RN-F Type C (230V) 10V/20A - 31V/250A 250A/26.5V (230V) 250A/26.5V (230V) 150A/21.5V (230V) 150A/21.5V (230V) L x W x H	40% ED 11max (250 A)(230V) 9 kVA 40% ED 11max (250A)(230V) 22.2 A 40% ED 11max (250A)(230V) 12.3 A 40% ED 11max (250A)(230V) 12.3 A 100% ED 11eff (150A)(230V) 10.8 A 100% ED 11eff (150A)(230V) 6.2 A H07RN-F 4G1.5 (1.5 mm², 5 m) Type C (230V) 16 A 10V/20A - 31V/250A 0.94 250A/26.5V (230V) 0.93 150A/21.5V (230V) 0.79 150A/21.5V (400V) 0.82 150A/21.5V (400V) 0.82 L xW x H 623 x 579 x 1070 mm L xW x H A A 44 kg	3~, 50/60 Hz 230 V -15%400 V +15% 3~, 50/60 Hz 40% ED 11max (250 A)(230V) 9 kVA 35% ED 11max (320A)(230V) 40% ED 11max (250A)(400V) 8.5 kVA 35% ED 11max (320A)(400V) 40% ED 11max (250A)(230V) 22.2 A 35% ED 11max (320A)(230V) 40% ED 11max (250A)(230V) 12.3 A 35% ED 11max (320A)(400V) 100% ED 11eff (150A)(230V) 10.8 A 100% ED 11eff (190A)(230V) 100% ED 11eff (150A)(400V) 6.2 A 100% ED 11eff (190A)(400V) H07RN-F 4G1.5 (1.5 mm², 5 m) H07RN-F Type C (230V) 10 A Type C (230V) 10V/20A - 31V/250A 0.94 320A/30V (230V) 250A/26.5V (230V) 0.94 320A/30V (400V) 150A/21.5V (400V) 0.93 320A/30V (400V) 150A/21.5V (400V) 0.82 190A/23.5V (230V) 150A/21.5V (400V) 0.82 190A/23.5V (400V) 16 1.0-18.0m/mi



Kempact 251 models feature the GT02C two roll wire drive unit



Kempact 253/323 models feature the Dura-Torque four roll wire drive unit.

MODEL DESCRIPTION	SALES PACKAGE CODE
KEMPACT 251R, GXe 305 G 3,5M	P2303GXe
KEMPACT 251R, GXe 305 G 5M	P2304GXe
KEMPACT 251R, GX 253 G 3,5M	P2203GX
KEMPACT 251R, GX 253 G 5M	P2204GX
KEMPACT 251A, GXe 305 G 3,5M	P2305GXe
KEMPACT 251A, GXe 305 G 5M	P2306GXe
KEMPACT 251A, GX 253 G 3,5M	P2205GX
KEMPACT 251A, GX 253 G 5M	P2206GX
KEMPACT 253R, GXe 305 G 3,5M	P2207GXe
KEMPACT 253R, GXe 305 G 5M	P2208GXe
KEMPACT 253R, GX 253 G 3,5M	P2246GX
KEMPACT 253R, GX 253 G 5M	P2249GX
KEMPACT 253R, GXe 405 G 3,5M	P2225GXe
KEMPACT 253R, GXe 405 G 5M	P2226GXe
KEMPACT 253R, GXe 205 G 3,5M	P2269GXe
KEMPACT 253R, GXe 205 G 5M	P2270GXe
KEMPACT 253A, GXe 305 G 3,5M	P2209GXe
KEMPACT 253A, GXe 305 G 5M	P2210GXe
KEMPACT 253A, GX 253 G 3,5M	P2247GX
KEMPACT 253A, GX 253 G 5M	P2248GX
KEMPACT 253A, GXe 205 G 3,5M	P2271GXe
KEMPACT 253A, GXe 205 G 5M	P2272GXe
KEMPACT 323R, GXe 405 G 3,5M	P2211GXe
KEMPACT 323R, GXe 405 G 5M	P2212GXe
KEMPACT 323R, GXe 305 G 3,5M	P2229GXe
KEMPACT 323R, GXe 305 G 5M	P2230GXe
KEMPACT 323R, GX 253 G 3,5M	P2250GX
KEMPACT 323R, GX 253 G 3,5M	P2251GX
KEMPACT 323R, GXe 205 G 3,5M	P2273GXe
KEMPACT 323R, GXe 205 G 5M	P2274GXe
KEMPACT 323A, GXe 405 G 3,5M	P2213GXe
KEMPACT 323A, GXe 405 G 5M	P2214GXe
KEMPACT 323A, GXe 305 G 3,5M	P2231GXe
KEMPACT 323A, GXe 305 G 5M	P2232GXe
KEMPACT 323A, GX 253 G 3,5M	P2252GX
KEMPACT 323A, GX 253 G 5M	P2253GX
KEMPACT 323A, GXe 205 G 3,5M	P2275GXe
KEMPACT 323A, GXe 205 G 5M	P2276GXe
KEMPACT 253AMV, GXe 305 G 3,5M	P2217GXe
KEMPACT 253AMV, GXe 305 G 5M	P2218GXe
KEMPACT 253AMV, GXe 205 G 3,5M	P2277GXe
KEMPACT 253AMV, GXe 205 G 5M	P2278GXe

MODEL DESCRIPTION	SALES PACKAGE CODE
KEMPACT 323RMV, GXe 405 G 3,5M	P2219GXe
KEMPACT 323RMV, GXe 405 G 5M	P2220GXe
KEMPACT 323RMV, GXe 305 G 3,5M	P2233GXe
KEMPACT 323RMV, GXe 305 G 5M	P2234GXe
KEMPACT 323RMV, GXe 205 G 3,5M	P2279GXe
KEMPACT 323RMV, GXe 205 G 5M	P2280GXe
KEMPACT 323AMV, GXe 405 G 3,5M	P2221GXe
KEMPACT 323AMV, GXe 405 G 5M	P2222GXe
KEMPACT 323AMV, GXe 305 G 3,5M	P2235GXe
KEMPACT 323AMV, GXe 305 G 5M	P2236GXe
KEMPACT 323AMV, GXe 205 G 3,5M	P2281GXe
KEMPACT 323AMV, GXe 205 G 5M	P2282GXe
KEMPACT 251R, GC 253 G 3,5M	P2203GC
KEMPACT 251A, GC 253 G 3,5M	P2205GC
KEMPACT 253A, GC 323 G 3,5M	P2288GC
KEMPACT 253A, GC 323 G 5M	P2289GC
KEMPACT 253A, GC 253 G 3,5M	P2210GC
KEMPACT 253A, GC 253 G 5M	P2248GC
KEMPACT 323R, GC 253 G 3,5M	P2250GC
KEMPACT 323R, GC 253 G 5M	P2251GC
KEMPACT 323R, GC 323 G 3,5M	P2291GC
KEMPACT 323R, GC 323 G 5M	P2255GC
KEMPACT 323A, GC 253 G 3,5M	P2252GC
KEMPACT 323A, GC 253 G 5M	P2253GC
KEMPACT 323A, GC 323 G 5M	P2256GC
KEMPACT 323A, GC 323 G 3,5M	P2257GC
KEMPACT 253R, GC 253 G 5M	P2290GC
KEMPACT 253R, GC 323 G 3,5M	P2299GC
KEMPACT 253R, GC 323 G 5M	P2292GC
KEMPACT 253R, GC 253 G 3,5M	P2208GC
KEMPACT 251R, GC 253 G 3,5M	P2267GC
KEMPACT 251A, GC 253 G 3,5M	P2268GC





Master M

205 / 323

Welding power made portable

- ED 40 % @ 320 A for M 323 and @ 200 A for M 205
- Manual, Auto and Auto Pulse* (*M 205 only)
- MIG/MAG/TIG/MMA
- Weld Assist auto setting
- Lightweight and robust structure
- Self charging LED work lights
- 6 Channel memory
- Water cooler option
- Generator compatible
- Max Cool arc performance tool (M 323 only)
- Designed and manufactured in Finland
- 3 year warranty

Weld big, fast and easy

The Master M 205 and Master M 323 set new standards for industrial MIG welding power, performance and portability. With a compact, light-weight design that's easy to carry, you'll enjoy having a portable MIG welder that can be moved wherever you need it. If you're working in tight spaces, the colour LCD screen is bright and easy to read, and self-charging LED lights can be turned on to improve safety and conveniently light-up your work area, with or without the mains power connected.

The portable Master M 205 and Master M 323 are easy to use. Featuring Kemppi 'Weld Assist', the automatic parameter setting technique, you'll start welding quickly and accurately, first time, every time. Weld Assist is a simple solution that can also be used by welders with basic experience. Just select the material thickness, joint type, joint position and start welding.

The Master M 205 is a compact and portable industrial pulse MIG/MAG welder, with 200 amps of power at 40% duty cycle. Take on a wider range of materials with pulse welding and do your best work anywhere with the convenience of the 1-phase, dual voltage power supply. Save time and get to work quickly with 37 built-in MIG/MAG welding programs for Fe, Ss, AIMg5, AISi5, CuSi3, CuAl8 filler materials. The Master M 205 comes with 17 programs for pulse MIG and 20 programs for 1-MIG.

The Master M 323 is a high-performance industrial MIG/MAG welding machine, that delivers 320 amps of power at a 40% duty cycle. Compact and portable, Master M 323 is ready for the big jobs anywhere on site. Find the right welding parameters quickly and save time with 28 welding programs for Fe, Ss, AlMg5, AlSi5, CuSi3, CuAl8, and FC-CrNiMo filler materials. Also included is complete high quality 'Root welding' and gap bridging, with MAX Cool performance software, delivered as standard.



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VALUE FEATURES



PORTABLE WELDING POWER lightweight and high performance.



HIGH-QUALITY WELDING RESULTS

with a wide range of supported materials and thicknesses.



INTUITIVE USER INTERFACE

including Weld Assist to support welders in any circumstances.

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MIG/MAG WELDING

Expand your options



WELD ASSIST

Weld Assist is a guidance tool for faster setup. Simply select the joint type, welding position and material thickness and you're ready to weld. An excellent instructive and educational tool, Weld Assist parameters can also be adjusted manually for individual preference.



WORK LIGHTS

Improve work efficiency and safety with or without mains power connected. LED lighting is also included in the wire feed cabinet.



MASTER M COOLER

Keeps your welding gun cool and the arc conditions smooth and stable. The cooler tank is easy to clean and has integrated LED lighting, so you can monitor the cooling liquid level and make routine maintenance easy.



SAFE-TO-LIFT DESIGN

When using suitable lifting equipment Master M can be lifted by the handle, ensuring safe lifting and easy movement on site.



GAS GUARD

Gas guard is a standard feature on Master M 323, preventing welding if the shielding gas supply is interrupted or is not connected. Master M 323 also features a gas regualtion valve as standard.



POWERLOG

Powerlog trigger logic allows three alternative power levels during welding. Use a standard gun trigger to select the power level required for the job.



AUTOMATIC CALIBRATION

Auto cable calibration measures the welding circuit resistance and calibrates the digital meters, ensuring that the arc voltage value displayed accurately measures the voltage of the welding arc. Critical for accurate WPS compliance.



Build the package to suit your application, including Gas or Water cooled packages, a range of welding guns and transport carts.



Internal cabinet lighting and external LED work lights supports the welders work, improving safety, efficiency and convenience in low light conditions.



Master M is the portable industrial welding power house to tackle any welding task quickly and efficiently.



Large, colour LCD display is easy to read and use. Back lit navigation buttons help guide the user, and all models feature display impact protection panels and clear, hinged, polycarbonate display covers.

Master M

Technical specifications Master M 205 / 323

Mains connection voltage 1– 50%0 Hz Into - 130 V ±10 % 220 - 20 V ±10 % Into - 130 V ±10 % 220 - 240 V ±10 % Into - 130 V ±10 % 220 - 240 V ±10 % Output at +40 °C 40% [300 - 400 V ±10 % 300 £10 - 350 V ±10 % NA 200 A (MMA 150 Å) 200 A (MMA 250 Å) 0 (uput at +40 °C 40% [20 - 260 V ± 10 % 200 A (MMA 150 Å) 200 A (MMA 150 Å) 200 A (MMA 250 Å) 0 (uput at +40 °C 60% [20 - 260 V ± 10 % 306 (110 - 130 V ± 10 Å) 306 (100 - 30 V ± 10 Å) 300 A (MMA 250 Å) 0 (uput at +40 °C 60% [20 - 260 V ± 10 Å) 30 A (MMA 150 Å) NA 200 A (MMA 250 Å) 0 (uput at +40 °C 100% [380 - 460 V] N/Å 100 A (MMA 150 Å) 170 A (MMA 150 Å)	FEATURE		MASTER M 205 GM	MASTER M 205 GM AU	MASTER M 323 GM
Mains connection voltage 3 - 50%0 Hz Image: solution voltage 3 - 50%0 Hz Image:					
ControlSince <t< td=""><td></td><td></td><td>220 - 240 V ±10 %</td><td>220 - 240 V ±10 %</td><td></td></t<>			220 - 240 V ±10 %	220 - 240 V ±10 %	
Image: start is a start is start	Mains connection voltage 3~ 50/60 Hz				
60%60%170 A (MAN 150 A)170 A (MAN 200 A)200 A (MAN 200 A)100%100%50 A (MAN 200 A)55 A (MAN 80 A)55 A (MAN 80 A)37 A (MAN 150 A)100%10	Output at +40 ℃	40% [220 -230 V]	200 A (MMA 175 A)	200 A (MMA 175 A)	280 A (MMA 255 A)
Indext (Construction)100 (200-230V) 75 A (MMA 150 A)140 A (MMA 150 A) 75 A (MMA 65 A)175 A (MMA 150 A) 75 A (MMA 65 A)Welding current and voltage range Ma (5120-230V)N/A (520-230V)N/A (55/10V.200/28V)N/A (55/10V.200/28V)Sh/10V.230/24V (55/10V.200/28V)MMA (520-230V) MMA (220-230V)N/A (55/10V.150/21V)N/A (55/10V.200/28V)Sh/10V.200/28V (55/10V.255/33V)Gun connectionImage and the constructionN/A 		60% [220 - 230 V]	170 A (MMA 150 A)	170 A (MMA 150 A)	230 A (MMA 205 A)
Mic 220-320VJ Mic 110-130VJSA/10V_200A/28V SA/10V_120A/21VSA/10V_200A/28V SA/10V_120A/21VSA/10V_2280 A/32V SA/10V_20A/21VMMA [220-320VJ MMA [110-130VJNA ISA/10V_10A/24VISA/10V_20A/21V SA/10V_10A/24VISA/10V_20A/24V SA/10V_20A/24VMMA [220-230VJ MMA [110-130VJNA ISA/10V_10A/24VISA/10V_20A/24V SA/10V_10A/24VISA/10V_20A/24V SA/10V_202A/24VGun connectionNA IG [380-460V] TG [110-130V]NA ISA/1V_20A/24VISS/10V_20A/24V SA/1V_20A/24VISS/10V_20A/24V SA/1V_20A/24VIGun connectionNA IG [110-130V]NA ISA/1V_20A/24VISS/10V_20A/24VI SA/1V_20A/24VISS/10V_20A/24VI SA/1V_20A/24VIGun connectionPEuroEuroEuroEuroWire feed mechanism-2-roll, single-motor2-roll, single-motorDiameter of feed rolls-20132 mm32 mmFiller wiresFe0.8-10 mm0.8-10 mm0.8-12 mmMr/Cc2-roll32 mmFiller wiresSo (30 type)0.5-12 m/min0.8-12 mmMire feed speed0.5-25 m/min0.5-25 m/min0.8-12 mmWire feed speed0.5-25 m/min0.5-25 m/min0.2-25 m/minWire spool deight (max)-So (30 mm0.0 mm0.0 mmMire feed speed0.5-25 m/min0.5-25 m/min0.5-25 m/minWire spool deight (max)-So (30 mm0.5-140 °C-Operating temperature rangeSorage temperature range </td <td></td> <td>100% [220 - 230 V]</td> <td>140 A (MMA 120 A)</td> <td>140 A (MMA 120 A)</td> <td>175 A (MMA 150 A)</td>		100% [220 - 230 V]	140 A (MMA 120 A)	140 A (MMA 120 A)	175 A (MMA 150 A)
MMA [20 -330 v] MMA [10 -130 v]\$\$A/10V175A/31 v \$\$A/10V100A/244\$\$A/10V255 A/33 v NAMMA [20 -330 v] MMA [10 -130 v]\$\$A/10V100A/244\$\$NA\$\$NAMMA [20 -330 v] MSA/10V100A/241\$\$NA\$\$NA\$\$NASAI D - 200 A/28 v TG (11 -130 v)\$\$NA NA\$\$NA\$\$NAGun connectionImage: SAI NA\$\$NA NA\$\$NA NAWire feed mechanismImage: SAI NA\$\$200 A/28 v \$\$NA NA\$\$NA NADiameter of feed rollsImage: SAI NA\$\$200 A/28 v \$\$NA\$\$NA NAFiler wiresFe\$\$8 -10 mm\$\$8 -10 mm\$\$8 -12 mmMar CeImage: SAI NA\$\$8 -10 mm\$\$8 -10 mm\$\$8 -12 mmMar Ce\$\$1 mm\$\$8 -12 mmMar Ce\$\$1 mm\$\$1 m	Welding current and voltage range	MIG [220 -230 V]	15A/10V200A/28V	15A/10V200A/28V	15 A/10 V280 A/32 V
TigTig15A/1V200A/28V 15A/1V120A/21V15A/1V200A/28V 15A/1V120A/21V15A/1V200A/28V 15A/1V120A/21VGun connectionEuroEuroEuroEuroWire feed mechanism2-roll, single-motor2-roll, single-motor2-roll, single-motorDiameter of feed rolls32 mm32 mm32 mm32 mmFiller wiresFe08-1.0 mm08-1.0 mm08-1.0 mm08-1.2 mmMr/Fc-12 mm08-1.2 mmFuseSow type16/16 A16/16 A16/32 AWire feed speedSow type16/16 A16/16 A16/32 AWire spool weight (max)Sig200 mm200 mm200 mmShelding as pressure (max)So200 mm200 mm200 mmShelding as pressure (max)AAAADegree of protectionImmanAAAADegree of protectionLWMHSox 250 x379 mm50x 250 x379 mm50x 250 x379 mmWeight without accessoriesLWMHSox 250 x379 mm50x 250 x379 mm50x 250 x379 mmWeight without accessoriesLWMHSixASixASixASixARecommended generator power (mim30WSixASixASixASource of protectionSixASixASixASixASixASixASixASixASixASixASixASixASixASixASixASixASixASixASixAS		MMA [220 -230 V]	15A/10V175A/31V	15A/10V175A/31V	15 A/10 V255 A/33 V
Wire feed mechanismI-roll, single-motor2-roll, single-motor2-roll, single-motorDiameter of feed rolls032 mm32 mm32 mmFiller wiresFe0.8 - 1.0 mm0.8 - 1.0 mm0.8 - 1.2 mmMarce0.8 - 1.0 mm0.8 - 1.0 mm0.8 - 1.2 mm0.8 - 1.2 mmMarce1.2 mmMarce0.8 - 1.2 mm0.8 - 1.2 mm0.8 - 1.2 mmFuseSlow type16/16 A16/16 A16/12 AWire feed speedSlow type0.5 - 25 m/min0.7 - 25 m/minWire spool weight (max)5 kg5 kg30 mmShielding gas pressure (max)0.5 MPa0.5 MPa0.5 MPaOperating temperature range-0.1 + 40°C-0.1 + 40°C-0.1 + 40°CKord speedMarce of protectionMarce of protectionWeight without accesoriesMarce of protectionWeight without accesoriesNeight without accesoriesRecommended generator power(min20V15 k/A5 k/A20 k/A-NormerStarge temperature rangeStarge temperat		TIG [220 -230 V]	15A/1V200A/28V	15 A/1 V200 A/28 V	15 A/1 V280 A/33 V
Diameter of feed rollsImage of feed rollsSeame<	Gun connection		Euro	Euro	Euro
Filer wiresFe0.8-1.0 mm0.8-1.0 mm0.8-1.2 mmSa0.8-1.0 mm0.8-1.0 mm0.8-1.2 mmMc/Fc1.2 mmAl0.8-1.2 mm0.8-1.2 mm0.8-1.2 mmFuseSlow type16/16 A16/16 A16/32 AWire feed speed-0.5-25 m/min0.5-25 m/min0.7.25 m/minWire spool wieght (max)-Skg5 kg5 kgWire spool diameter (max)-0.5 MPa0.5 MPa0.5 MPaOperating temperature range20440 °C-20440 °C-20440 °CStorage temperature range40460 °C-40460 °C-40460 °CExternal dimensionsLxWxHS20 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWieight without accessories-6kVA6kVA18kVA3kVARecommended generator power (min)230V15 kVA15 kVA15 kVA20 kVA	Wire feed mechanism		2-roll, single-motor	2-roll, single-motor	2-roll, single-motor
Finiter Writes Ss 0.8-1.0 mm 0.8-1.0 mm 0.8-1.2 mm Mc/Fc - - 1.2 mm Al 0.8-1.2 mm 0.8-1.2 mm 0.8-1.2 mm Fuse Slow type 16/16 A 16/16 A 16/32 A Wire feed speed Sow type 16/16 A 16/16 A 16/32 A Wire spool weight (max) Fuse 0.5-25 m/min 0.5-25 m/min 0.7.25 m/min Wire spool diameter (max) Fuse 200 mm 200 mm 200 mm 200 mm Shielding gas pressure (max) Fuse 0.5 MPa 0.5 MPa 0.5 MPa 0.5 Mpa Operating temperature range Fuse 40+60 °C -20+40 °C	Diameter of feed rolls		32 mm	32 mm	32 mm
Mc/Fc1.2 mmId08-1.2 mm08-1.2 mm0.8-1.2 mmFuseSlow type16/16 A16/16 A16/32 AWre feed speed-0.5 - 25 m/min0.5 - 25 m/min0.7 - 25 m/minWre spool weight (max)-SkgSkgSkgSkgWre spool diameter (max)-200 mm200 mm200 mmShielding gas pressure (max)-0.5 MPa0.5 MPa0.5 MPaOperating temperature range0.1.40 °C-0.1.40 °C-0.1.40 °CStorage temperature range-AAADegree of protectionILWMHS20 x250 x379 mm520 x250 x379 mm520 x250 x379 mmWeight without accessories-16,2 kg16,2 kg18,5 kgRecommended generator power (min230V15 KVA15 KVA20 KVA	Filler wires	Fe	0.8 - 1.0 mm	0.8 - 1.0 mm	0.8 - 1.2 mm
AI0.8 - 1.2 mm0.8 - 1.2 mm0.8 - 1.2 mmFuseSlow type16 / 16 A16 / 16 A16 / 32 AWire feed speed0.5 - 25 m/min0.5 - 25 m/min0.725 m/minWire spool weight (max)5 kg5 kg5 kg5 kgWire spool diameter (max)200 mm200 mm200 mm200 mmShielding gas pressure (max)6.5 MPa0.5 MPa0.5 MPa0.5 MPaOperating temperature range-20+40 °C-20+40 °C-20+40 °CStorage temperature range-40+60 °C-40+60 °C-40+60 °CEMC classAAAADegree of protectionLWXH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesLWXH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmRated power at max current6 KVA6 KVA6 KVA3 kVARecommended generator power (min)230V15 kVA50 kVA50 kVA		Ss	0.8 - 1.0 mm	0.8 - 1.0 mm	0.8 - 1.2 mm
Fuse Slow type 16 / 16 A 16 / 16 A 16 / 32 A Wire feed speed 0.5 - 25 m/min 0.5 - 25 m/min 0,725 m/min Wire spool weight (max) 5 kg 5 kg 5 kg Wire spool diameter (max) 0.5 MPa 200 mm 200 mm 200 mm Shielding gas pressure (max) 0.5 MPa 0.5 MPa 0.5 MPa 0.5 MPa Operating temperature range -20+40 °C -20+40 °C -20+40 °C -20+40 °C Storage temperature range -40+60 °C -40+60 °C -40+60 °C -40+60 °C EMC class Income temperature range Income temperateme range In		Mc/Fc	-	-	1.2 mm
Wire feed speed0.5 - 25 m/min0.5 - 25 m/min0,725 m/minWire spool weight (max)5 kg5 kg5 kgWire spool diameter (max)200 mm200 mm200 mmShielding gas pressure (max)0.5 MPa0.5 MPa0.5 MPaOperating temperature range-20+40 °C-20+40 °C-20+40 °CStorage temperature range-40+60 °C-40+60 °C-40+60 °CEMC classAAAADegree of protectionLWWAH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesI16,2 kg16,2 kg13 kVARated power at max current230V15 kVA15 kVA20 kVA		Al	0.8 - 1.2 mm	0.8 - 1.2 mm	0.8 - 1.2 mm
Wire spool weight (max)5 kg5 kg5 kgWire spool diameter (max)200 mm200 mm200 mm200 mmShielding gas pressure (max)0.5 MPa0.5 MPa0.5 MPa0.5 MpaOperating temperature range-20+40 °C-20+40 °C-20+40 °CStorage temperature range-40+60 °C-40+60 °C-40+60 °CEMC classAAADegree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesI6 kVA6 kVA13 kVARated power at max current230V15 kVA15 kVA20 kVA	Fuse	Slow type	16 / 16 A	16 / 16 A	16 / 32 A
Wire spool diameter (max)200 mm200 mm200 mmShielding gas pressure (max)0.5 MPa0.5 MPa0.5 MPaOperating temperature range-20+40 °C-20+40 °C-20+40 °CStorage temperature range-40+60 °C-40+60 °C-40+60 °CEMC classAAADegree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesI6kVA6kVA13 kVARated power at max current230V15 kVA15 kVA20 kVA	Wire feed speed		0.5 - 25 m/min	0.5 - 25 m/min	0,725 m/min
Shielding gas pressure (max)0.5 MPa0.5 MPa0.5 MPa0.5 MpaOperating temperature range-20+40 °C-20+40 °C-20+40 °CStorage temperature range-40+60 °C-40+60 °C-40+60 °CEMC classAAADegree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesIIA2 kgIA2 kgI3 kVARated power at max current230V15 kVA15 kVA20 kVA	Wire spool weight (max)		5 kg	5 kg	5 kg
Operating temperature range-20+40 °C-20+40 °C-20+40 °CStorage temperature range-40+60 °C-40+60 °C-40+60 °CEMC classAAADegree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesII6,2 kgI6,2 kgI8,5 kgRated power at max current230V15 kVA15 kVA20 kVA	Wire spool diameter (max)		200 mm	200 mm	200 mm
Storage temperature range-40+60 °C-40+60 °CEMC classAAADegree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesI162 kg162 kg18,5 kgRated power at max current6 kVA6 kVA13 kVARecommended generator power (min)230V15 kVA15 kVA20 kVA	Shielding gas pressure (max)		0.5 MPa	0.5 MPa	0.5 Mpa
EMC classAAADegree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessoriesI16,2 kg16,2 kgRated power at max current6 kVA6 kVA13 kVARecommended generator power (min)230V15 kVA15 kVA	Operating temperature range		-20+40 °C	-20+40 °C	-20+40 °C
Degree of protectionIP23SIP23SIP23SExternal dimensionsLxWxH520 x 250 x 379 mm520 x 250 x 379 mm520 x 250 x 379 mmWeight without accessories16,2 kg16,2 kg18,5 kgRated power at max current6 kVA6 kVA13 kVARecommended generator power (min)230V15 kVA15 kVA	Storage temperature range		-40+60 °C	-40+60 °C	-40+60 °C
External dimensions LxWxH 520 x 250 x 379 mm 520 x 250 x 379 mm 520 x 250 x 379 mm Weight without accessories 16,2 kg 16,2 kg 18,5 kg Rated power at max current 6 kVA 6 kVA 13 kVA Recommended generator power (min) 230V 15 kVA 15 kVA 20 kVA	EMC class		A	А	A
Weight without accessories16,2 kg16,2 kg18,5 kgRated power at max current6 kVA6 kVA13 kVARecommended generator power (min)230V15 kVA15 kVA20 kVA	Degree of protection		IP23S	IP23S	IP23S
Weight without accessories16,2 kg16,2 kg18,5 kgRated power at max current6 kVA6 kVA13 kVARecommended generator power (min)230V15 kVA15 kVA20 kVA		LxWxH	520 x 250 x 379 mm	520 x 250 x 379 mm	520 x 250 x 379 mm
Rated power at max current 6 kVA 6 kVA 13 kVA Recommended generator power (min) 230V 15 kVA 15 kVA 20 kVA	Weight without accessories				
Recommended generator power (min) 230V 15 kVA 15 kVA 20 kVA	5		-	-	-
		230V			
	Standards		IEC 60974-1, -10	IEC 60974-1, -10	IEC 60974-1, -10

MODEL DESCRIPTION	ORDERING CODES
Master M 205 GM	MSM205GM
Master M 205 GM AU	MSM205GMAU
Master M 323 GM	MSM323GM
ACCESSORIES	ORDERING CODES
Master Cooler 05M	MSMC05M
S10M Slider	S10M
T22M Transport carriage	T22M
T32A 2-wheel light trolley	T32A
Master M 323 Rotameter Kit	SP024820
Master M 205/323 Power Source Filter Kit	SP023492
Cabinet Heater Kit	SP021614
MMA Euro Connector 500A	SP801140
MODEL DESCRIPTION	SALES PACKAGE CODE
Master M 205, GXe 305G 3,5M	P519GXe3
Master M 205, GXe 305G HD 5M	P520GXe3
Master M 205, MSMC05 COOLER, GXe 305 W 3,5M	P521CGXe3
Master M 205, MSMC05 COOLER, GXe 305 W 5M	P522CGXe3
Master M 205, GX 255 G 3,5M	P527GX2
Master M 205, GX 255 G 5M	P528GX2
Master M 205 GM AU, GXe 305 G 3,5M	P519GXe3AU
Master M 205 GM AU, GXe 305 G 5M	P520GXe3AU
Master M 205 GM AU, MSMC05 COOLER, GXe 305 W 3,5M	P521CGXe3AU
Master M 205 GM AU, MSMC05 COOLER, GXe 305 W 5M	P522CGXe3AU
Master M 205, GXe 205 G 3,5M	P529GXe2
Master M 205, GXe 205 G 5M	P530GXe2
Master M 323 GM, GXe 305 G 3,5M	P523GXe3
Master M 323 GM, GXe 305 G 5M	P524GXe3
Master M 323 GM, MSMC05 COOLER, GXe 305 W 3,5M	P525CGXe3
Master M 323 GM, MSMC05 COOLER, GXe 305 W 5M	P526CGXe3

S10M Slider T32A





reddot winner 2023 industrial design

Master M

353 / 355 / 358



Extend the MIG welding experience

- Model options 353, 355 and 358
- ED 40% @ 350A for industrial welding
- Manual, Auto and Auto Pulse
- MIG/MAG/TIG/MMA
- Weld Assist auto setting
- Self charging LED work lights
- Channel memory
- Gun trigger Power logic
- Kinetic spool brake
- Wide connection voltage
- Generator compatible
- Water cooler option
- MAX and Wise arc performance tools
- SuperSnake GTX sub feeder
- WeldEye ArcVision Industry 4.0
- Designed and manufactured in Finland
- 3 year warranty

Compact MIG welding machine

Designed and manufactured in Finland, Master M is a premium compact MIG/MAG welding machine series that elevates industrial welding performance and usability. Digital arc control, fast setup techniques and excellent power-to-weight ratio set new standards for weld quality and work efficiency.

Choose from three class leading models (353, 355 or 358) featuring

alternative Manual, Auto and Auto Pulse (355 and 358 models) specifications. Weld with gas-cooled guns, or select the optional Master M cooling system for an integrated liquid cooled package, that maximizes use of the 350A 40% ED welding power.

Experience new levels of productivity and welding control by switching to MAX arc performance processes (optional with Master M 355 and 358 models).

Add MAX arc performance processes to your delivery package or consider for a future upgrade.

Switch on LED work lights for safety and convenience. The integrated selfcharging LED work light system is a standard feature on all Master M models. This useful light source operates with or without mains power, which improves safety and increases productivity in low light conditions.

Ideal for workshop or site use, Master M is manufactured from injectionmolded reinforced plastics, capable to absorb the knocks and impacts of everyday welding life.



Master M



VALUE FEATURES



ELEVATE PRODUCTIVITY

MAX and Wise arc performance processes elevate productivity, increase welding speed, improve weld pool control and reduce heat input.



FASTER SETUP

Up to 60% faster than setting parameters manually, Weld Assist is your guidance tool for fast parameter setting. Simply select your joint type, welding position and material thickness and you're ready to weld.



WORK LONGER

Compact and multi-process Master M delivers 350A MIG/MAG welding power @ 40% ED at 40 °C.

MIG/MAG WELDING

Expand your options



WELD ASSIST

Weld Assist is a guidance tool for faster setup. Simply select the joint type, welding position and material thickness and you're ready to weld. It is an excellent instructive and educational tool, and Weld Assist parameters can also be adjusted manually for individual preference.



WORK LIGHTS

Improve work efficiency and safety with or without mains power connected. LED lighting is also included in the wire feed cabinet.



MASTER M COOLER

Keeps your welding gun cool and the arc conditions smooth and stable. The cooler tank is easy to clean and has integrated LED lighting, so you can monitor the cooling liquid level and make routine maintenance easy.



SAFE-TO-LIFT DESIGN

When using suitable lifting equipment Master M can be lifted by the handle, ensuring safe lifting and easy movement on site.



GAS GUARD

Prevents welding if the shielding gas supply is interrupted or is not connected. Gas guard is a standard feature on 355 and 358 models.



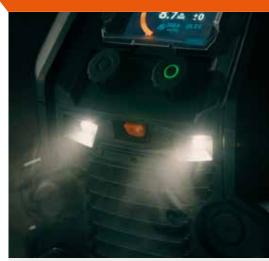
POWERLOG

Powerlog trigger logic allows three alternative power levels during welding. Use a standard gun trigger to select the power level required for the job.



AUTOMATIC CALIBRATION

Auto cable calibration measures the welding circuit resistance and calibrates the digital meters, ensuring that the arc voltage value displayed matches accurately the voltage of the welding arc. Critical for accurate WPS compliance.



Internal cabinet lighting and external LED work lights supports the welder improving safety, efficiency and convenience in low light conditions.



Water cooled packages are supported with two alternative transport carriage options, T25MT (two wheel), or P45MT (four wheel).



Master M models feature large, colour displays that are easy to read and use. Back lit navigation buttons help guide the user, and all models feature display impact protection panels and clear, hinged, polycarbonate display covers.

Technical specifications Master M 353 / 355 / 358

FEATURE		MASTER M G	MASTER M GM
			380 - 460 V ±10 %
Mains connection voltage 3~ 50/60 Hz		380 - 460 V ± 10 %	220 - 230 V ±10 %
	40% [380 - 460 V] 40% [220 -230 V]	350 A (MMA 330 A)	350 A (MMA 330 A) 300 A (MMA 280 A)
	60% [380 - 460 V] 60% [220 -230 V]	280 A	280 A 240 A
Output at +40 ℃	100% [380 - 460 V] 100% [220 -230 V]	220 A	220 A 190 A
	MIG [380 - 460 V] MIG [220 -230 V]	15 A/10 V - 350 A/ 45 V	15 A/10 V - 350 A/ 45 V 15 A/10 V - 300 A/ 40 V
	MMA [380 - 460 V] MMA [220 -230 V]	15 A/10 V - 330 A/ 45 V	15 A/10 V - 330 A/ 45 V 15 A/10 V - 280 A/ 40 V
Welding current and voltage range	TIG [380 - 460 V] TIG [220 -230 V]	15 A/1 V - 350 A/ 45 V	15 A/1 V - 350 A/ 45 V 15 A/1 V - 300 A/ 40 V
Gun connection		Euro	Euro
Wire feed mechanism		4-roll, single-motor	4-roll, single-motor
Diameter of feed rolls		32 mm	32 mm
	Fe	0.8 - 1.2 mm	0.8 - 1.2 mm
	Ss	0.8 - 1.2 mm	0.8 - 1.2 mm
	Mc/Fc	0.8 - 1.2 mm	0.8 - 1.2 mm
Filler wires	Al	0.8 - 1.2 mm	0.8 - 1.2 mm
Wire feed speed		0.5 - 25 m/min	0.5 - 25 m/min
Wire spool weight (max)		20 kg	20 kg
Wire spool diameter (max)		300 mm	300 mm
Shielding gas pressure (max)		0.5 MPa	0.5 MPa
Operating temperature range		-20+40 °C	-20+40 °C
Storage temperature range		-40+60 °C	-40+60 °C
EMC class		А	A
Degree of protection		IP23S	IP23S
External dimensions LxWxH		602 x 298 x 447 mm	602 x 298 x 447 mm
Weight without accessories		27 kg	27 kg
Recommended generator power (min)	400V	20 kVA	20 kVA
Standards		IEC 60974-1, -10	IEC 60974-1, -10

FEATURE	MASTER M COOLER	MASTER M COOLER MV
Cooling power at 1 I/min	1.0 kW	1.0 kW
Recommended coolant	MGP 4456 (Kemppi mixture)	MGP 4456 (Kemppi mixture)
Tank volume	3	3
Operating temperature range with recommended coolant	-20+40 °C	-20+40 °C
Storage temperature range	-40+60 °C	-40+60 °C
EMC class	A	А
Degree of protection (when mounted)	IP23S	IP23S
External dimensions LxWxH	635 x 305 x 292	635 x 305 x 292
Weight without accessories	14,9 kg	14,9 kg
Standards	IEC 60974-2, -10	IEC 60974-2, -10

MODEL DESCRIPTION	SALES PACKAGE CODE
Master M 353 G	MSM353G
Master M 353 GM	MSM353GM
Master M 355 G	MSM355G
Master M 355 GM	MSM355GM
Master M 358 G	MSM358G
Master M 358 GM	MSM358GM
Master M COOLER	MSMC1KW
Master M COOLER MULTI VOLTAGE	MSMC1KWM
T35A TWO WHEEL TRAVEL CART NO CYLINDER	Т35А
T25MT TWO WHEEL CART INTERMEDIATE CYLINDER	T25MT
P45MT FOUR WHEEL CART LARGE CYLINDER	P45MT
P43MT FOUR WHEEL CART NO CYCLINDER	P43MT
CABINET HEATER KIT	SP021614
ROTA METER GAS FLOW REGUALTION KIT	SP801136
SUPERSNAKE KIT	SP023803
Master M POWER SOURCE FILTER KIT	SP023312
MMA EURO CONNECTOR 500A	SP801140
HR40 TWO KNOB WIRED HAND REMOTE CONTROL	HR40
GXR10 GUN REMOTE CONTROL	GXR10
MSM MAX Speed	MSM80000
MSM MAX Cool	MSM70000
MSM MAX Position	MSM90000
MSM WiseFusion	MSM40000
MSM WisePenetration	MSM50000
MSM WiseSteel	MSM60000
Note: Power source packages include Cas Hose and Earth Poturn Load	

Note: Power source packages include Gas Hose and Earth Return Lead



MODEL DESCRIPTION	SALES PACKAGE CODE
Master M 353G, GXe 305 G 3,5M	P501GXe3
Master M 353G, GXe 305 G 5M	P502GXe3
Master M 353G, MSMC1KW, GXe 305 W 3,5M	P501CGXe3
Master M 353G, MSMC1KW, GXe 305 W 5M	P502CGXe3
Master M 353G, GXe 405 G 3,5M	P501GXe4
Master M 353G, GXe 405 G 5M	P502GXe4
Master M 353G, MSMC1KW, GXe 405 W 3,5M	P501CGXe4
Master M 353G, MSMC1KW, GXe 405 W 5M	P502CGXe4
Master M 353G, GXe 308 G A 3,5M	P501GXe31
Master M 353G, GXe 308 G A 5M	P502GXe31
Master M 353G, MSMC1KW, GXe 308 W A 3,5M	P501CGXe31
Master M 353G, MSMC1KW, GXe 308 W A 5M	P502CGXe31
Master M 353G, GXe 408 G A 3,5M	P501GXe41
Master M 353G, GXe 408 G A 5M	P502GXe41
Master M 353G, MSMC1KW, GXe 408 W A 3,5M	P501CGXe41
Master M 353G, MSMC1KW, GXe 408 W A 5M MIG	P502CGXe41
Master M 353 GM, GXe 308 G A 3,5M	P503GXe31
Master M 353 GM, GXe 308 G A 5M	P504GXe31
Master M 353 GM, MSMC1KWM, GXe 308 W A 3,5M	P503CGXe31
Master M 353 GM, MSMC1KWM, GXe 308 W A 5M	P504CGXe31
Master M 353 GM, GXe 408 G A 3,5M	P503GXe41
Master M 353 GM, GXe 408 G A 5M	P504GXe41
Master M 353 GM, MSMC1KWM, GXe 408 W A 3,5M	P503CGXe41
Master M 353 GM, MSMC1KWM, GXe 408 W A 5M	P504CGXe41
Master M 353GM, GXe 305 G 3,5M	P503GXe3
Master M 353GM, GXe 305 G 5M	P504GXe3
Master M 353GM, MSMC1KWM, GXe 305 W 3,5M	P503CGXe3
Master M 353GM, MSMC1KWM, GXe 305 W 5M	P504CGXe3
Master M 353GM, GXe 405 G 3,5M	P503GXe4
Master M 353GM, GXe 405 G 5M	P504GXe4
Master M 353GM, MSMC1KWM, GXe 405 W 3,5M	P503CGXe4
Master M 353GM, MSMC1KWM, GXe 405 W 5M	P504CGXe4
Master M 353G, GXe 205 G 5M	P501GXe2
Master M 355G, GXe 305 G 3,5M	P505GXe3
Master M 355G, GXe 305 G 5M	P506GXe3
Master M 355G, MSMC1KW, GXe 305 W 3,5M	P505CGXe3
Master M 355G, MSMC1KW, GXe 305 W 5M	P506CGXe3
Master M 355G, GXe 405 G 3,5M	P505GXe4
Master M 355G, GXe 405 G 5M	P506GXe4
Master M 355G, MSMC1KW, GXe 405 W 3,5M	P505CGXe4
Master M 355G, MSMC1KW, GXe 405 W 5M	P506CGXe4
Master M 355 G, GXe 308 G A 3,5M	P505GXe31
Master M 355 G, GXe 308 G A 5M	P506GXe31
Master M 355 G, MSMC1KW, GXe 308 W A 3,5M	P505CGXe31
Master M 355 G, MSMC1KW, GXe 308 W A 5M	P506CGXe31
Master M 355 G, GXe 408 G A 3,5M	P505GXe41
Master M 355 G, GXe 408 G A 5M	P506GXe41
Master M 355 G, MSMC1KW, GXe 408 W A 3,5M	P505CGXe41
Master M 355 G, MSMC1KW, GXe 408 W A 5M	P506CGXe41

MODEL DESCRIPTION	SALES PACKAGE CODE
Master M 355 GM, GXe 308 G A 3,5M	P507GXe31
Master M 355 GM, GXe 308 G A 5M	P508GXe31
Master M 355 GM, MSMC1KWM, GXe 308 W A 3,5M	P507CGXe31
Master M 355 GM, MSMC1KWM, GXe 308 W A 5M	P508CGXe31
Master M 355 GM, GXe 408 G A 3,5M	P507GXe41
Master M 355 GM, GXe 408 G A 5M	P508GXe41
Master M 355 GM, MSMC1KWM, GXe 408 W A 3,5M	P507CGXe41
Master M 355 GM, MSMC1KWM, GXe 408 W A 5M	P508CGXe41
Master M 355GM, GXe 305 G 3,5M	P507GXe3
Master M 355GM, GXe 305 G 5M	P508GXe3
Master M 355GM, MSMC1KWM, GXe 305 W 3,5M	P507CGXe3
Master M 355GM, MSMC1KWM, GXe 305 W 5M	P508CGXe3
Master M 355GM, GXe 405 G 3,5M	P507GXe4
Master M 355GM, GXe 405 G 5M	P508GXe4
Master M 355GM, MSMC1KWM, GXe 405 W 3,5M	P507CGXe4
Master M 355GM, MSMC1KWM, GXe 405 W 5M	P508CGXe4
Master M 358 G, GXe 305 G 3,5M	P509GXe3
Master M 358G, GXe 305 G 5M	P510GXe3
Master M 358G, MSMC1KW, GXe 305 W 3,5M	P509CGXe3
Master M 358G, MSMC1KW, GXe 305 W 5M	P510CGXe3
Master M 358G, GXe 405 G 3,5M	P509GXe4
Master M 358G, GXe 405 G 5M	P510GXe4
Master M 358G, MSMC1KW, GXe 405 W 3,5M	P509CGXe4
Master M 358G, MSMC1KW, GXe 405 W 5M	P510CGXe4
Master M 358 G, GXe 308 G A 3,5M	P509GXe31
Master M 358 G, GXe 308 G A 5M	P510GXe31
Master M 358 G, MSMC1KW, GXe 308 W A 3,5M	P509CGXe31
Master M 358 G, MSMC1KW, GXe 308 W A 5M	P510CGXe31
Master M 358 G, GXe 408 G A 3,5M	P509GXe41
Master M 358 G, GXe 408 G A 5M	P510GXe41
Master M 358 G, MSMC1KW, GXe 408 W A 3,5M	P509CGXe41
Master M 358 G, MSMC1KW, GXe 408 W A 5M	P510CGXe41
Master M 358GM, GXe 305 G 3,5M	P511GXe3
Master M 358GM, GXe 305 G 5M	P512GXe3
Master M 358GM, MSMC1KWM, GXe 305 W 3,5M	P511CGXe3
Master M 358GM, MSMC1KWM, GXe 305 W 5M	P512CGXe3
Master M 358GM, GXe 405 G 3,5M	P511GXe4
Master M 358GM, GXe 405 G 5M	P512GXe4
Master M 358GM, MSMC1KWM, GXe 405 W 3,5M	P511CGXe4
Master M 358GM, MSMC1KWM, GXe 405 W 5M	P512CGXe4
Master M 358 GM, GXe 308 G A 3,5M	P511GXe31
Master M 358 GM, GXe 308 G A 5M	P512GXe31
Master M 358 GM, MSMC1KWM, GXe 308 W A 3,5M	P511CGXe31
Master M 358 GM, MSMC1KWM, GXe 308 W A 5M	P512CGXe31
Master M 358 GM, GXe 408 G A 3,5M	P511GXe41
Master M 358 GM, GXe 408 G A 5M	P512GXe41
Master M 358 GM, MSMC1KWM, GXe 408 W A 3,5M	P511CGXe41
Master M 358 GM, MSMC1KWM, GXe 408 W A 5M	P512CGXe41





X3 FastMig

X3S / X3P

Brilliantly simple, brutally effective

- 420 A and 450 A models at 60% duty cycle
- Process options include Manual / AUTO Synergic / Pulse MIG/MAG, MMA and gouging (model dependent)
- X3S features 42 welding curves and X3P 67 welding curves
- Integrated cooler in the water-cooled
 power source
- Intuitive icon-based LCD user interface featuring 5 memory channels, wire size and gas type selection, Gas test & wire inch, welding circuit calibration, 2T/4T, Crater fill, Hot start, Post current adjustment, Safety lock
- GRe50 on-torch remote control or HR53 handheld wired remote control with display
- 2- and 4-wheel trolley options
- Option to suspend the wire feeder with a boom hanger
- Safe lift design in the wire feeder
- Option to attach baulk welding wire packs to the wire feeder
- Integrated storage for parts in the wire feeder's side door
- Designed and manufactured in Finland

Tough, simple and precise

X3S FastMig Synergic and X3P FastMig Pulse are your fast route for completing highquality welds in wide ranging welding and fabrication environments. Robust and durable, X3S and X3P FastMig can handle the knocks of everyday industrial welding life, and the new icon-based user interface saves time with fast-setup and easy parameter selection, giving you immediate control over key functions for reliable high-quality welding.

Powerful and productive, the 420A X3S FastMig Synergic and 450A X3P FastMig Pulse deliver 60% duty cycle; a perfect combination for production applications where capable, accurate and reliable welding equipment is essential, supporting fast changing and variable work tasks.

As standard the X3 FastMig systems include the heavy duty, impact resistant, plastic molded HD300 wire feed unit. Featuring dual-wall construction and strong Dura torque 4x4 wire drive mechanism, the HD300 wire feed unit features a 'safe lift' design, allowing the cabinet to be lifted and suspended over the worksite by the handle.

X3 FastMig offers a range of optional accessories designed for alternative work environments, including a 4-wheel gas cylinder cart, 4-wheel wire feeder trollies and a wire feeder protection slider. Add a wire feeder boom hanger, allowing the wire feed unit to be easily rail mounted at a convenient angle over the working area.





VALUE FEATURES



SIMPLE TO SET AND WELD

Designed for simplicity and ease of use, the X3 FastMig offers both AUTO and MANUAL weld parameter set-up options, via its icon-based user interface, for fast and accurate parameter selection.



HIGH QUALITY, CLEAN WELDING RESULTS

X3 FastMig models deliver performance across a range process options including MIG/MAG/Manual/ Synergic/Pulse/MMA/Gouging.



POWERFUL AND PRODUCTIVE

X3 FastMig models deliver 60% duty cycle (MIG/MAG), supporting fast changing and variable industrial welding tasks.

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Versatile welding programs as Standard

X3 FastMig comes with pre-installed welding programs enabling fast setup. The programs cover Fe, Ss, AlSi5, AlMg5, Fe Metal, Fe Rutil, FC-CrNiMo filler wires, from 0.8mm to 2.0mm. No matter your welding needs, you can trust the X3 FastMig to deliver high-quality results.



Start welding fast

X3 FastMig features a non-language-based LCD user interface that's clear, easy and fast to set up, for both professional and semi-professional welders.





The tough and robust plastic cased wire feeder cabinet features a dual wall construction designed to absorb the knocks of indusrtial use in heavy welding and fabrication applications.



X3 FastMig offers 60% duty cycle, efficiently supporting industrial welding applications. You can elect to use eirther a standard filler wire spool or pay-off pack for the welding wire supply.



You can lift the combined weight of the X3 HD300 Wire Feeder, including the welding torch, filler wire, and cables set with the crane, and suspend it from the handle.

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Technical specifications

Feature	X3S FastMig 420 SYN G	X3S FastMig 420 SYN W	X3P FastMig 450 PULSE G	X3P FastMig 450 PULSE W
Mains connection voltage 3~ 50/60 Hz	380 - 415 V ±10 %	380 - 415 V ±10 %	380-415 ±10%	380-415 ±10%
Output at +40 °C				
60% MIG	420 A	420 A	450 A	450 A
100% MIG	350 A	350 A	380 A	380 A
60% MMA	400 A	400 A	430 A	430 A
100% MMA	330 A	330 A	360 A	360 A
Welding current and voltage range				
MIG	15 A/12 V - 420 A/40 V	15 A/12 V - 420 A/40 V	15A/12V - 450A/45V	15A/12V - 450A/45V
MMA	15 A/10 V - 400 A/41 V	15 A/10 V - 400 A/41 V	15A/15V - 430A/46V	15A/15V - 430A/46V
Gouging	15 A/10 V - 400 A/41 V	15 A/10 V - 400 A/41 V	15A/15V - 430A/46V	15A/15V - 430A/46V
Operating temperature range	-20+40 °C	-20+40 °C	-20+40	-20+40
Storage temperature range	-40+60 °C	-40+60 °C	-40+60	-40+60
EMC class	А	А	А	А
Degree of protection	IP23	IP23	IP23	IP23
External dimensions LxWxH	698 x 251 x 361 mm	698 x 251 x 613 mm	698 x 251 x 361 mm	698 x 251 x 613 mm
Weight without accessories	35 kg	47 kg	35 kg	47 kg
Standards	IEC 60974-1, -10	IEC 60974-1, -2, -10	IEC 60974-1, -10	IEC 60974-1, -2, -10
Product code	X3S420G	X3S420W	X3P450G	X3P450W

Ordering information

Description	Product code
X3S Power Source Syn 420 G	X35420G
X3S Power Source Syn 420 W	X3S420W
X3P Power Source Pulse 450 G	X3P450G
X3P Power Source Pulse 450 W	X3P450W
X3 Wire Feeder HD300	X3HD300
X3 4-wheel Trolley	X3T4
X5 Wire Feeder 2-wheel trolley	X5702010000
X5 Wire Feeder Trolley	X5702020000
X5 Wire Feeder HD300 Hanger for Boom	X5702041000
X5 Wire Feeder HD300 Protection Sliders with gun support	X5702091000
Interconnection cable 70-G 1,5M	X37001MG
Interconnection cable 70-W 1,5M	X37001MW
Interconnection cable 95-G 1,5M	X39501MG
Interconnection cable 95-W 1,5M	X39501MW
Interconnection cable 70-G 5M	X37005MG
Interconnection cable 70-W 5M	X37005MW
Interconnection cable 70-G 10M	X37010MG
Interconnection cable 70-W 10M	X37010MW
Interconnection cable 70-G 15M	X37015MG

Ordering information

Description	Product code
Interconnection cable 70-W 15M	X37015MW
Interconnection cable 70-G 20M	X37020MG
Interconnection cable 70-W 20M	X37020MW
Interconnection cable 70-G 25M	X37025MG
Interconnection cable 70-W 25M	X37025MW
Interconnection cable 70-G 30M	X37030MG
Interconnection cable 70-W 30M	X37030MW
Extension Cable 70 1m	SP800550
HR53 Digital Hand Remote	HR53
GXe torch mounted remote control	GRe50
Splitter 3/7-pin Used with HR53 / HD300	6185773
Wire Conduit Cable with Connectors 1.8m	SP600535
Wire Conduit Cable with Connectors 3m	SP600536
Wire Conduit Cable with Connectors 4m	SP800803
Wire Conduit Cable with Connectors 5m	SP600537
Wire Conduit Cable with Connectors 6m	SP800829
Wire Conduit Cable with Connectors 8m	SP600686
Wire Conduit Cable 10m	SP600780
Wire Conduit Cable 15m	SP600781
Wire Conduit Cable 20m	SP600782
Wire Conduit Cable 30.5m	SP600783
Snap connector for wire conduit (male)	W005197
Snap connector for drum or spool holder (female)	W005189
Quick Connector + Adapter 3/8 DT400	SP801035





Scan for more info



OKENP

X5 FastMig / X5P FastMig Pulse

More than a great weld

- Modular industrial welding system
- 400A and 500A 60% duty cycle
- Manual, Auto and Auto Pulse
- MIG/MAG/TIG/MMA/GOUGE
- Weld Assist auto setting
- Digital WPS option
- 100 Channel memory
- Gun trigger Power logic
- Wide connection voltage
- Generator compatible
- Water cooler option
- Wise and MAX arc performance tools
- SuperSnake GTX sub feeder
- WeldEye 'Arc Vision' Industry 4.0
- Designed and manufactured in Finland
- 3 year warranty

Applications

- MIG/MAG
- DCTIG
- MMA welding
- Gouging

Versatile industrial MIG/MAG welder

Designed and manufactured in Finland, X5 FastMig is a modular multiprocess industrial welding system, focused primarily on high performance MIG/MAG welding.

Engineered for ease of use, adaptability and exceptional welding quality, process and equipment options include Manual, Auto and Auto Pulse MIG/MAG welding packages, alternative wire feed units, MMA, gouging and TIG processes, extended reach feeding systems, arc performance software tools and a range of supporting accessories.

Integrated digital wireless connectivity opens up a wealth of welding insight through X5 FastMig APC models, including welding management software and digital WPS (dWPS) functionality, thus delivering the benefits of digital transformation to the very heart of the welding workplace.

360° MODULAR WELDING SYSTEM

Select from alternative power sources, wire feeding solutions, Manual, Auto or Auto Pulse user interfaces and software tools.

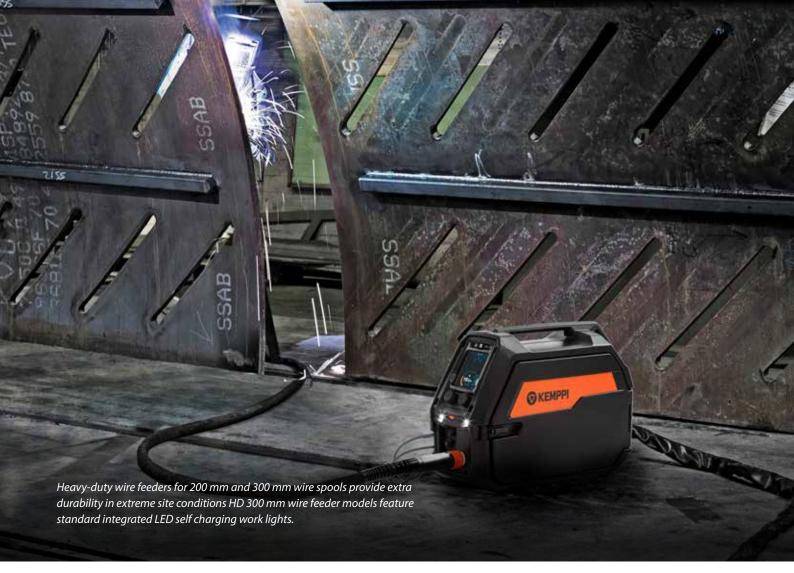
ELEVATE PRODUCTIVITY

MAX and Wise arc performance tools elevate productivity, increase welding speed, improve weld pool control and lower heat input

FASTER SETUP

Weld Assist is the quick setup guidance tool. Simply select your joint style, welding position and material thickness and you're ready to weld.





VALUE FEATURES



FASTER WELDING, BETTER QUALITY

X5 and X5P FastMig are industrial, multi-process welding solutions, featuring options for Manual, Auto and Auto pulsed performance specifications. Premium arc control and precise ignition produce high quality welds with less spatter, faster than before.



EFFORTLESS OPERATION

Automatic welding parameter adjustment with optimal settings is fast and easy. The graphical 5.7"TFT display satisfies both experienced welding professionals and new talent.



FLEXIBLE EQUIPMENT SETUP

X5 FastMig adapts seamlessly to different welding applications and work environments. The wide range of accessories improves welding quality and ergonomics and streamlines production processes.

MIG/MAG WELDING

Make weld tasks easy



DIGITAL WPS

Use the dWPS to automatically set and weld within the correct parameter values and receive alerts on any deviations on the screen.



WELD ASSIST

Up to 60% faster than manual mode, Weld Assist sets the welding machine based on your selections for joint type, welding position and material thickness.



TOUCH SENSE IGNITION (TSI)

Minimizes weld spatter and reduces the need for post-weld cleaning.



WIRE FEEDERS

Select the wire feeder model that best meets your needs, from the toploading X5 Wire Feeder for 300 mm wire spools, extra heavy duty site wire feeders for 200 mm and 300 mm wire spools, or the SuperSnake GTX distance and access solutions.

They feature robust wire feed mechanisms, quick-release wire feed rolls, wire and gas test buttons, kinetic spool brake and integrated cabinet lighting, providing a wire feed solution for any application.



POWERLOG

Allows three alternative power level steps during welding, select the power step you need for your task using the standard gun trigger.



AUTOCOOL ENERGY SAVE

Dynamic cooling manages the air flow and cooling circuit run times automatically based on the welding duration, thus reducing electrical power consumption and noise.



WELDEYE ARCVISION

A digital service that tracks and records arc-on time and welding parameters for better insight into your welding activities. WeldEye ArcVision digitally collects raw data from connected welding stations and presents it in clear tables and graphs that can be filtered based on various needs. This integrated Industry 4.0 solution is available for a free no obligation test and trial period.



TRANSPORT CARRIAGES

Choose from two-wheel and four-wheel carriage options, including fastconnect storage and transportation of wire feed units, innovative floor level gas cylinder loading, improved safety and easier movement around the workshop and on-site.



Four-wheel wire feeder carriage features a 'fast-connect' design, enabling easy docking with standard X5 FastMig power sources, thus ensuring secure ground level storage and transportation.



Top-loading wire feeder design ensures ergonomics and safety when changing heavy filler wire spools.



Ultimate welding comfort and long-lasting, high-quality consumables with Flexlite GX welding guns.

Build your system

X5 FastMig is more than just a great weld, it is a 360-degree modular welding solution. Whether your welding challenge is in the workshop or onsite, X5 FastMig performs to meet your specific needs.

Choose from 400A or 500A power sources, Manual, Auto and Auto Pulse welding performance, optional welding software and dedicated arc performance processes for clean, high-quality weld seams, increased weld pool control and excellent productivity.

Visualize welding activity through digital dashboards that support welding quality, personnel qualification and documentation needs. WELDING MANAGEMENT **360**°

WELDING

WELDEYE CLOUD SERVICE

DIGITAL WPS WELDEYE ARCVISION

WELDING SOFTWARE

MAX AND WISE ARC PERFORMANCE PROCESSES

WELD ASSIST



Technical specifications

X5 POWER SOURCE		400	400 PULSE	400 PULSE+	400 MV PULSE+
Mains connection voltage 3~ 50/60 Hz		380460 V ±10 %	380 - 460 ±10 %	380 - 460 ±10 %	220 - 230 ±10 % 380 - 460 ±10 %
Output at +40 °C	40 % ED 60 % ED 100 % ED	- 400 A 350 A	- 400 A 350 A	- 400 A 350 A	400 @ [220 - 230 V] 400 @ [380 - 460 V] 350
Welding current and voltage range	MIG MMA TIG		15 A/10 V 400 A/50V 15 A/10 V 400 A/50V 15 A/1 V 400 A/50V	15 A/10 V 400 A/50V 15 A/10 V 400 A/50V 15 A/1 V 400 A/50V	15 A/10 V 400 A/45V 15 A/10 V 400 A/45V 15 A/1 V 400 A/45V
Operating temperature range		-20+40 °C	-20+40 °C	-20+40 °C	-20+40 °C
Storage temperature range		-40+60 °C	-40+60 °C	-40+60 °C	-40+60 °C
EMC class		A	A	A	A
Degree of protection		IP23S	IP23S	IP23S	IP23S
External dimensions L x W x H		750 x 263 x 456 mm	750 x 263 x 456 mm	750 x 263 x 456 mm	750 x 263 x 456 mm
Weight without accessories		39.0 kg	39.5 kg	39.5 kg	43,5 kg

X5 POWER SOURCE		500	500 PULSE	500 PULSE+
Mains connection voltage 3~ 50/60 Hz		380460 V ±10 %	380460 V ±10 %	380460 V ±10 %
Output at +40 °C	60 % ED 100 % ED	500 A 430 A	500 A 400 A	500 A 400 A
Welding current and voltage range	MIG MMA TIG		15 A/10 V 500 A/50 V 15 A/10 V 500 A/50 V 15 A/1 V 500 A/50 V	15 A/10 V 500 A/50 V 15 A/10 V 500 A/50 V 15 A/1 V 500 A/50 V
Operating temperature range		-20+40 °C	-20+40 °C	-20+40 °C
Storage temperature range		-40+60 °C	-40+60 °C	-40+60 °C
EMC class		A	A	A
Degree of protection		IP23S	IP23S	IP23S
External dimensions L \times W \times H		750 x 263 x 456 mm	750 x 263 x 456 mm	750 x 263 x 456 mm
Weight without accessories		39.5 kg	39.5 kg	39.5 kg

X5 WIRE FEEDER	200	300	300HD
Gun connection	Euro	Euro	Euro
Wire feed mechanism	4-roll, single-motor	4-roll, single-motor	4-roll, single-motor
Diameter of feed rolls	32 mm	32 mm	32 mm
Filler wires	Fe 0.8 1.6 mm Ss 0.8 1.6 mm Mc/Fc 0.8 2.0 mm Al 0.8 2.4 mm	Fe 0.8 2.0 mm Ss 0.8 2.0 mm Mc/Fc 0.8 2.4 mm Al 0.8 2.4 mm	Fe 0.8 2.0 mm Ss 0.8 2.0 mm Mc/Fc 0.8 2.4 mm Al 0.8 2.4 mm
Wire feed speed	0.5 25 m/min	0.5 25 m/min	0.5 25 m/min
Wire spool weight (max)	5 kg	20 kg	20 kg
Wire spool diameter (max)	200 mm	300 mm	300 mm
Operating temperature range	0.5 MPa	0.5 MPa	0.5 MPa
Feeder UI	-20+40 °C	-20+40 °C	-20+40 °C
Storage temperature range	-40+60 °C	-40+60 °C	-40+60 °C
EMC class	A	А	A
Degree of protection	IP23S	IP23S	IP23S
External dimensions LxWxH	565 x 218 x 339 mm	650 x 230 x 410 mm	670 x 240 x 465 mm
Weight without accessories	9.7 kg	10.9 kg	14.4 kg

Cooling units	X5 Cooler	X5 Cooler MV
Rated cooling power (at 1 l/min)	1,1 kW	1.0 kW
Recommended coolant	MGP 4456 (Kemppi mixture)	MGP 4456 (Kemppi mixture)
Tank volume	4	4
Operating temperature range (with recommended coolant)	-10+40 °C	-10+40 °C
Storage temperature range	-40+60 °C	-40+60 °C
EMC class	A	A
Degree of protection (when mounted)	IP23S	IP23S
Weight without accessories	14,3 kg	15,7 kg

Model configurations

X5 FastMig allows different system configurations for different applications. Any X5 power source and wire feeder model combination is possible and will enable you to weld, but the configuration guidelines presented in the table below need be followed to access all of the features of each configuration option.

X5 FastMig minimum configuration requirements for each system (Manual/Auto/Pulse).

	X5 FASTMIG MANUAL (1	X5 FASTMIG AUTO (2	X5 FASTMIG PULSE ⁽³
Wire feeder	X5 Wire Feeder 200 Manual	X5 Wire Feeder 300 AP	X5 Wire Feeder 300 AP
	X5 Wire Feeder 300 Manual	X5 Wire Feeder 300 APC	X5 Wire Feeder 300 APC
	X5 Wire Feeder HD300 M	X5 Wire Feeder HD300 AP	X5 Wire Feeder HD300 AP
		X5 Wire Feeder HD300 APC	X5 Wire Feeder HD300 APC
Power Source	X5 Power Source 400	X5 Power Source 400	X5 Power Source 400 Pulse
	X5 Power Source 500	X5 Power Source 500	X5 Power Source 400 Pulse+
			X5 Power Source 500 Pulse
			X5 Power Source 500 Pulse+
			X5 Power Source 400 MV Pulse+

¹⁾ X5 FastMig Manual equipment is intended for welding with manual controls.

²⁾ X5 FastMig Auto equipment additionally enables automatic 1-MIG welding with additional welding processes as an option.

³⁾ X5 FastMig Pulse equipment additionally enables automatic 1-MIG and pulse welding with additional welding processes as an option.

Ordering information

Power Sources	Ordering code
X5 Power Source 400	X5110400000
X5 Power Source 400 WP	X5110400010
X5 Power Source 500	X5110500000
X5 Power Source 500 WP	X5110500010
X5 Power Source 400 Pulse	X5130400000
X5 Power Source 400 Pulse WP	X5130400010
X5 Power Source 400 Pulse+	X5100400000
X5 Power Source 400 Pulse+ WP	X5100400010
X5 Power Source 400 MV Pulse+	X5100400100
X5 Power Source 400 MV Pulse+ WP	X5100400110
X5 Power Source 500 Pulse	X5130500000
X5 Power Source 500 Pulse WP	X5130500010
X5 Power Source 500 Pulse+	X5100500000
X5 Power Source 500 Pulse+ WP	X5100500010

Wire Feeders	Ordering code
X5 Wire Feeder 200 Manual	X5220200000
X5 Wire Feeder 300 Manual	X5220300000
X5 Wire Feeder 300 AP	X5240300000
X5 Wire Feeder 300 APC	X5250300000
X5 Wire Feeder HD300 M	X5260300000
X5 Wire Feeder HD300 AP	X5270300000
X5 Wire Feeder HD300 APC	X5280300000

Software	Ordering code
MAX Cool	MSM70000 (Product code for Master M) X570000 (Product code for X5 FastMig)
MAX Position	MSM90000 (Product code for Master M) X590000 (Product code for X5 FastMig)
MAX Speed	MSM80000 (Product code for Master M) X580000 (Product code for X5 FastMig)
WiseFusion	X5500001 (Product code for X5 FastMig) X8500000 (Product code for X8 MIG Welder) MSM40000 (Product code for Master M)
WisePenetration	X5500002 (Product code for X5 FastMig) X8500002 (Product code for X8 MIG Welder MSM50000 (Product code for Master M)
WiseSteel	X5500000 (Product code for X5 FastMig) X8500001 (Product code for X8 MIG Welder) MSM60000 (Product code for Master M)
WiseRoot+	X8500003 (Product code for X8 MIG Welder) X5500003 (Product code for X5 FastMig)
WiseThin+	X8500004 (Product code for X8 MIG Welder) X5500004 (Product code for X5 FastMig)
WeldEye ArcVision	9990797
X5 Work Pack Pulse	X5520002
X5 Work Pack 1-MIG	X5520000
Welding Programs, X5 FastMig	Please contact your local Kemppi dealer or refer to Kemppi Software Hub.

Accessories	Item code
X5 Cooler	X560000000
X5 Cooler MV	X560000100
Flexlite GX - X5 FastMig Kemppi design and manufacture quality professional MIG/MAG welding torches, meeting wide ranging application needs. For a full listing following the link below: https://www.kemppi.com/en-US/offering/category/ accessories/welding-torches/	GX203G35 (3.5 m), GX203G5 (5 m) GX253G35 (3.5 m), GX253G5 (5 m) GX303G35 / GX303W35 (3.5 m), GX303G5 / GX303W5 (5 m) GX403G35 / GX403W35 (3.5 m), GX403G5 / GX403W5 (5 m) GX503W35 (3.5m), GX503W5 (5m) GX205G35 (3.5 m), GX205G5 (5m) GX255G35 (3.5 m), GX205G5 (5 m) GX305G35 / GX305W35 (3.5 m), GX305G5 / GX305W5 (5 m) GX305GS6 (6 m), GX305GS8 (8 m) GX305G35 / GX405W35 (3.5 m), GX405G5 / GX405W5 (5 m) GX405G35 / GX405W35 (3.5 m), GX405G5 / GX405W5 (5 m) GX405G35 / GX405W35 (3.5 m), GX405G5 / GX405W5 (5 m) GX405W56 (6 m), GX405W58 (8 m) GX405W56 (6 m), GX405W58 (8 m) GX405W55 (3.5 m), GX505W5 (5 m) GX605W5 (5 m)
Flexlite TX - X5 FastMig	TX223GE4 (4 m) TX253WSE4 (4 m) TX353WE4 (4 m)
SuperSnake GTX - subfeeder (subfeeder)	PackagesSuperSnake GTX GAS 10m package, 50mm ² : P400GTXSuperSnake GTX GAS 15m package, 50mm ² : P401GTXSuperSnake GTX GAS 20m package, 50mm ² : P402GTXSuperSnake GTX WATER 10m package, 50mm ² : P404GTXSuperSnake GTX WATER 10m package, 50mm ² : P405GTXSuperSnake GTX WATER 20m package, 50mm ² : P405GTXSuperSnake GTX WATER 20m package, 50mm ² : P405GTXSuperSnake GTX WATER 10m package, 50mm ² : P405GTXSuperSnake GTX WATER 20m package, 50mm ² : P405GTXSuperSnake GTX WATER 10m package, 70mm ² : P405GTXSuperSnake GTX WATER 10m package, 70mm ² : P407GTXSuperSnake GTX WATER 10m package, 70mm ² : P408GTXAll packages include SuperSnake GTX motor drive unit and frame(SGTXMDUPF01) and cableOtherSuperSnake GTX motor drive unit: SGTXMDU01SuperSnake GTX motor drive unit and frame: SGTXMDUPF01SuperSnake GTXG 10m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXG105CBLSuperSnake GTXG 10m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXG105CBLSuperSnake GTXG 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXG105CBLSuperSnake GTXG 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXG205CBLSuperSnake GTXW 10m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXW105CBLSuperSnake GTXW 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXW105CBLSuperSnake GTXW 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXW105CBLSuperSnake GTXW 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXW105CBLSuperSnake GTXW 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXW105CBLSuperSnake GTXW 20m cable, 50mm ² (Std liner FE 1.0-1.6mm): SGTXW105CBLSuperSnake GTXW 20

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Ordering information

Accessories	Ordering code
GRe (Gun Remote)	GRe
HR40 (Remote contol)	HR40
X5 Gas Cylinder Cart	X5701020000
X5 Trolley Cart	X5701030000
X5 Wire Feeder Trolley	X5702020000
X5 Wire Feeder 2-wheel Trolley	X5702010000
X5 Accessory Tray	X5701040000
GH 20 Gun Holder	6256020
Wire Feeder Cabinet Heater	X8700010000
Wire Feeder Cabinet Heater, X5 200	SP021613
X5 Wire Feeder 200 Protection Frame	X5702080000
X5 Wire Feeder Rotating Plate	SP801116
X5 Double Wire Feeder Rotating Plate	X5702070000
X5 Wire Feeder Hanger for Boom	X5702040000
X5 Double Wire Feeder Hanger for Boom	X5702050000
X5 Wire Feeder Counterbalance Arm	X5702060000
X5 Wire Feeder Gun Support for Wire Feeder Trolley	X5702092000
X5 Wire Feeder HD300 Cabinet Heater	SP023363
X5 Wire Feeder HD300 Hanger for Boom	X5702041000
X5 Wire Feeder HD300 Protection Sliders with Gun Support	X5702091000
X5 Wire Feeder HD300 Rotameter Kit	SP024832
X5 Interconnection Cable 70-g (Gas cooled)	X57002MG X5 Interconnection Cable 70-g 2m X57005MG X5 Interconnection Cable 70-g 5m X57010MG X5 Interconnection Cable 70-g 10m X57020MG X5 Interconnection Cable 70-g 20m X57030MG X5 Interconnection Cable 70-g 30m
X5 Interconnection Cable 70-gV (Gas cooled, voltage sensing)	X57002MGV Interconnection Cable 70-gV 2m X57005MGV Interconnection Cable 70-gV 5m X57010MGV Interconnection Cable 70-gV 10m X57020MGV Interconnection Cable 70-gV 20m X57030MGV Interconnection Cable 70-gV 30m
X5 Interconnection Cable 70-w (Water cooled)	X57002MW X5 Interconnection Cable 70-w 2m X57005MW X5 Interconnection Cable 70-w 5m X57010MW X5 Interconnection Cable 70-w 10m X57020MW X5 Interconnection Cable 70-w 20m X57030MW X5 Interconnection Cable 70-w 30m
X5 Interconnection Cable 70-wV (Water cooled, voltage sensing)	X57002MWV X5 Interconnection Cable 70-wV 2m X57005MWV X5 Interconnection Cable 70-wV 5m X57010MWV X5 Interconnection Cable 70-wV 10m X57020MWV X5 Interconnection Cable 70-wV 20m X57030MWV X5 Interconnection Cable 70-wV 30m
X5 Interconnection Cable 95-gV (Gas cooled, voltage sensing)	X59502MGV (2m)
X5 Interconnection Cable 95-w (Water cooled)	X59502MW (2m)
X5 Interconnection Cable 95-wV (Water cooled, voltage sensing)	X59502MWV (2m)
Double Feeder Y-Cable	X570DF000

Accessories	Ordering code
Power Source Air Filter	SP016870 (10 PCS)
Wire Drum Kit	W012757 Wire Drum Kit (5m) W012758 Wire Drum Kit (10m) W012759 Wire Drum Kit (20m) W012760 Wire Drum Kit (27m)
Digital Connectivity Module	6265051
MMA Welding Cable, 50 mm²	6184501 Welding Cable 50 mm ² (5 m) 618450101 Welding Cable 50 mm ² (5 m/MYK) 6184502 Welding Cable 50 mm ² (10 m) 6184503 Welding Cable 50 mm ² (15 m)
MMA Welding Cable, 70 mm ²	6184701 (5m)
MMA Welding Cable, 95 mm ²	6184901 (5m)
Earth Return Cable, 70 mm ²	6184711 Earth Cable 70 mm ² (5 m) 6184712 Earth Cable 70 mm ² (10 m) 6184713 Earth Cable 70 mm ² (15 m) 6184714 Earth Cable 70 mm ² (20 m)
Earth Return Cable, 95 mm ²	6184921 (5m)
X5 Remote Kit 5 m	X5RK5
X5 Remote Kit 10 m	X5RK10





SuperSnake GTX / GTX04HD

Ultimate access and distance solution

- Connects with Euro-connected
 welding guns
- Compatible with all X5 / X5P FastMig and Master M 350 models
- 10-,15-, 20- and 25-meter water and gas-cooled models
- Suitable for 1.0mm to 1.6mm Fe/Ss/Al/ FC/MC filler wires
- Easy parameter adjustment close at hand
- Clear meter display in all light conditions
- Safe lock switch prevents accidental activation
- LED cabinet lighting makes wire change and maintenance easy
- Designed and manufactured in Finland

Applications

- Heavy and medium-heavy metal fabrication workshops
- Shipyards and offshore industry
- Installation and site work

Improving occupational safety

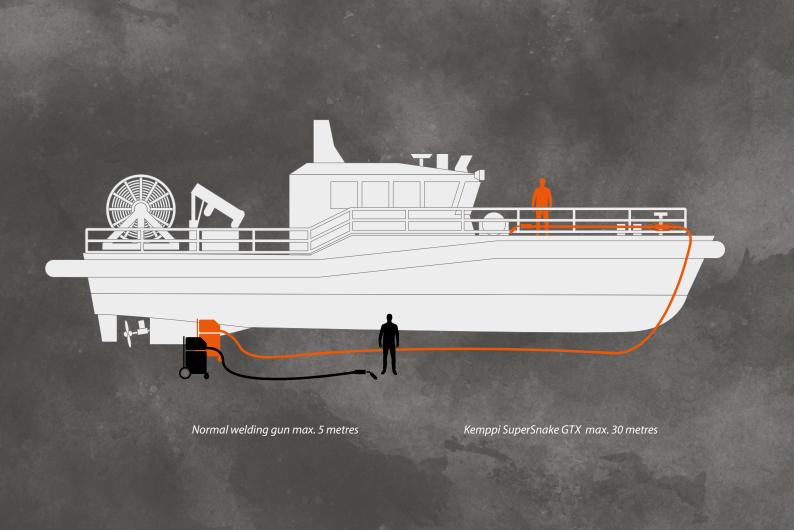
SuperSnake GTX models are the latest distance wire feeding champions, serving the excellent X5 / X5P FastMig and Master M 350 models. Taking quality welding to locations other brands just can't reach, SuperSnake GTX / GTX04HD feature 10/15/20/25-meter reach packages with either a 2 roll drive system, or the heavy duty 4 roll drive models. Both options feature metal protection frames, digital metering, safety isolation switch, wire inch and gas test buttons as standard.

Improving both productivity and personnel safety, SuperSnake GTX models offer the ultimate synchronized sub-feeding system for those hard-to-reach welding sites, providing an attractive alternative to the motorized push-pull welding guns that offer limited reach, or heavy wire feeders with extended cable sets.

SuperSnake GTX / GTX04HD serve both gas and water-cooled applications, supported by standard welding guns with Euro connectors, and synchronizing perfectly with Kemppi's industrial MIG/MAG welders.

Extending the reach of standard MIG welding guns with Euro connections, the SuperSnake GTX models guarantee reliable wire feeding up to 30 meters from the primary wire feeding unit. Lift it, drag it, pull it! It's a perfect choice for challenging heavy and medium-heavy metal fabrication and installation work.





VALUE FEATURES



DURABLE AND ROBUST Lift it, drag it, pull it, it's designed for welders.



IMPROVED OCCUPATIONAL SAFETY

Significantly less time spent on moving between the power source and welding station.



EASY ACCESS SOLUTION

Quality welding results up to 30 meters from the primary wire feeder.

MIG/MAG WELDING



SuperSnake GTX provides reliable wire feeding up to 30 meters from the primary wire feeding unit.



SuperSnake GTX features digital metering, safety isolation switch, wire inch and gas test buttons as standard.



Feature	SuperSnake GTX		SuperSnake GTX04HD	
Output 40 °C	60 % ED 100 % ED	350 A 270 A	60 % ED 100 % ED	350 A 270 A
Wire feed mechanism	2-roll		4-roll, single-motor	
Wire feed speed	125 m/min		125 m/min	
Feeder body dimensions L x W x H	400 mm x 127 mm x 150 mm		561 x 241 x 200 mm	
Wire recommendations	Fe/Ss	ø 1.01.6 mm	Fe/Ss	ø 1.01.6 mm
	Al	ø 1.21.6 mm	Al	ø 1.21.6 mm
	FC/MC	ø 1.21.6 mm	FC/MC	ø 1.21.6 mm
Cable diameter	50/70 mm ²		50/70 mm²	
Protection class	IP23S		IP23S	

Ordering information

Product description	Ordering code
SuperSnake GTX04HD (incl. motor drive unit and frame)	SGTX04HD01
Interconnection cables	
SuperSnake GTXG 10m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXG105CBL
SuperSnake GTXG 15m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXG155CBL
SuperSnake GTXG 20m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXG205CBL
SuperSnake GTXG 25m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXG255CBL
SuperSnake GTXW 10m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXW105CBL
SuperSnake GTXW 15m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXW155CBL
SuperSnake GTXW 20m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXW205CBL
SuperSnake GTXW 25m cable, 50mm ² (Std liner FE 1.0-1.6mm)	SGTXW255CBL
SuperSnake GTXW 10m cable, 70mm ² (Std liner FE 1.0-1.6mm)	SGTXW107CBL

Product description	Sales package code
SuperSnake GTX GAS 10 m package, 50 mm ²	P400GTX
SuperSnake GTX GAS 15 m package, 50 mm ²	P401GTX
SuperSnake GTX GAS 20 m package, 50 mm ²	P402GTX
SuperSnake GTX GAS 25 m package, 50 mm ²	P403GTX
SuperSnake GTX WATER 10 m package, 50 mm ²	P404GTX
SuperSnake GTX WATER 15 m package, 50 mm ²	P405GTX
SuperSnake GTX WATER 20 m package, 50 mm ²	P406GTX
SuperSnake GTX WATER 25 m package, 50 mm ²	P407GTX
SuperSnake GTX WATER 10 m package, 70 mm ²	P408GTX



GTX04HD is easy to grab and move. Metal frame and cabinet construction are both robust and light in weight.



The 4 x 4 wire drive mechanism is strong, accurate, and easy to adjust. LED wire line light inside the cabin.



MinarcTig Evo 200 / 200MLP



The finest TIG welding quality

- 200 A DC @ 35% duty cycle, 1-phase, 230 V
- Smooth welding quality
- Refined arc ignition from 5 A
- Pre-gas and post-gas timer
- Slope in/out timer
- Torch switch latching
- MLP and Pulse welding option
- Remote current controls options
- PFC technology for ultimate energy efficiency
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Installation and setup
- Repair and maintenance
- Thin sheet metal fabrication workshops
- Chemical and process industry

Smooth, refined and powerful

MinarcTig Evo is just what you'd expect from a Kemppi TIG welding

machine. Accurate and refined HF ignition and the required control, power and work capacity to reliably complete a variety of professional welding tasks. MinarcTig Evo is the ideal DC TIG welding solution for light industrial manufacturing, installation, repair and maintenance applications. The lightweight compact equipment is a real bonus for welding professionals on the move.

Choose from either the MinarcTig Evo 200 or the MinarcTig Evo 200MLP.

The powerful PFC power source design combines useful performance advantages, including excellent energy efficiency and the ability to reliably perform using extra long power supply cables of more than 100 meters long.

MinarcTig Evo models include large LED metering displays and feature a range of functions including pre-gas and post-gas time control, slope current time controls and remote control options. MLP models are equipped with additional functions including Minilog control and semi-automatic arc pulse function. MinarcTig Evo is a dual-process machine that also provides quality MMA welding for a range of DC electrode types.





VALUE FEATURES



LIGHTWEIGHT AND PORTABLE No extra lift assist required



10 % INCREASED WELDING SPEED With Pulsed TIG function



CABLE LENGTH POSSIBLE For increased utility in site welding environments

Technical specifications

MinarcTig Evo 200/200MLP Connection voltage	1~, 50/60 Hz		230 V ±15 % (AU 240 V ±15 %)
÷	T~, 50/60 H2 TIG	35 % ED	230 V ±15 % (AU 240 V ±15 %) 200 A/4.9 kVA
Rated power at max. current			170 A/5.7 kVA
	MMA	35 % ED	
Supply current, I _{1max}	TIG		21.1 A
	MMA		24.8 A
Supply current, I _{1eff}	TIG		12.7 A
	MMA		14.7 A
Connection cable	H07RN-F		3G1.5 (1.5 mm ² , 3 m)
Fuse	type C		16 A
Output 40 °C	TIG	35 % ED	200 A /18 V
		60 % ED	160 A /16.4 V
		100 % ED	140 A /15.6 V
	MMA	35 % ED	170 A /26.8 V
		60 % ED	130 A /25.2 V
		100 % ED	110 A /24.4 V
Welding range	TIG		5 A /10.2 V200 A /18.0 V
	MMA		10 A /20.4 V170 A /26.8 V
Open circuit voltage			95 V (VRD 30 V, AU VRD 12 V)
Idle power	TIG		10 W
	MMA		30 W
Power factor at 100 % ED	TIG		0.99
	MMA		0.99
Efficiency at 100 % ED	TIG		77 %
	MMA		83 %
Striking voltage			612 kV
Stick electrodes, MMA	Ø		1.54.0 mm
External dimensions	$L \times W \times H$		449 × 210 × 358 mm
Weight (without cables)			11 kg
Temperature class			F (155 °C)
Degree of protection			IP23S
EMC class			A
Operating temperature range			-20+40 °C
Storage temperature range			-40+60 °C
Standards: IEC 60974-1, IEC 60974-3, IEC	C 60974-10 JEC 61000-3-12		

Ordering information

MinarcTig Evo 200		MinarcTig Evo 200 MLP	
TX 225 G, 4 m	P0640TX	TX 225 G, 4 m	P0642TX
VRD, TX 225 G, 4 m	P0672TX	* AU, TX 225 G, 4 m	P0674TX
VRD, TX 225 G, 8 m	P0673TX	* AU, TX 225 G, 8 m	P0675TX
TX 225 G, 8 m	P0641TX	TX 225 G, 8 m	P0643TX
TX 225 G S, 4 m	P0645TX	TX 225 G S, 8 m	P0647TX
TX 165 G S, 4 m	P0648TX	TX 165 G S, 4 m	P0650TX
TX 165 G S, 8 m	P0649TX	TX 165 G S, 8 m	P0651TX
TX 135 G F, 4 m	P0652TX	TX 135 G F, 4 m	P0654TX
TX 135 G F, 8 m	P0653TX	TX 135 G F, 8 m	P0655TX
TX 165 G F, 4 m	P0656TX	TX 165 G F, 4 m	P0658TX
TX 165 G F, 8 m	P0657TX	TX 165 G F, 8 m	P0659TX
TX 225 G S, 4 m	P0644TX	TX 165 G S, 16 m	P0671TX
TX 165 G S, 16 m	P0670TX	TX 225 G S, 4 m	P0646TX
TX 305 W F 4 m, COOLER	P0676TX	TX 305 W F 4 m, COOLER	P0678TX
TX 305 W F 8 m, COOLER	P0677TX	TX 305 W F 8 m, COOLER	P0679TX
TX 255 W S 4 m, COOLER	P0687TX	TX 255 W S 4 m, COOLER	P0689TX
TX 255 W S 8 m, COOLER	P0688TX	TX 255 W S 8 m, COOLER	P0690TX
TX 355 W 4 m, COOLER	P0691TX	TX 355 W 4 m, COOLER	P0693TX
TX 355 W 8 m, COOLER	P0692TX	TX 355 W 8 m, COOLER	P0694TX
MST 400 transport unit		6185294	

* The AU model is for the Australian and New Zealand markets.





MinarcTig 250 / 250MLP

Powerful, portable and compact

- Excellent low current ignition
- Clear parameter display
- Pre-gas and post-gas timer
- Slope in/out timer
- Torch switch latching
- Pulse welding option
- Suitable for mains or power generator use
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Installation and setup
- Repair and maintenance
- Thin sheet metal fabrication
 workshops
- Chemical and process industry

Refined TIG welding quality for precise applications

MinarcTig 250 is the ideal DC TIG welding solution for installation, repair and maintenance applications. The 250 amp model provides top-quality results, while the compact lightweight case is a real bonus for professionals who need to move around the site.

MinarcTig 250 is a dual-process machine, providing an impressive DC TIG and MMA welding experience. In addition to the basic 250 machine, there is the 250MLP model, equipped with special features, such as Minilog and pulsed arc function. The high 35% duty and the lightweight case combine real performance advantages, while exceptional control in low current ignition means refined TIG welding quality for precise applications.

Combine with Kemppi Flexlite TX Tig torches for perfect welding performance and comfort.





MinarcTig 250MLP panel

MinarcTig 250 panel

VALUE FEATURES



PURE EXCELLENCE Low current ignition



COMPACT SIZE Makes it easy to carry anywhere



DUAL-PROCESS OPTION Allows you to be more versatile

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Technical specifications

MinarcTig 250MLP/250			
Connection voltage	50/60 Hz		3~, 400 V (-20+15 %)
Rated power at maximum current	TIG		7.2 kVA
	MMA		8.2 kVA
Connection cable	H07RN-F		4G1.5 (5 m)
Fuse, slow			10 A
Output 40° C	TIG	30 % ED	250 A / 20.1 V
		60 % ED	180 A / 17.2 V
		100 % ED	160 A / 16.4 V
	MMA	35 % ED	220 A / 28.8 V
		60 % ED	170 A / 26.8 V
		100 % ED	150 A / 26.0 V
Welding range	TIG		5 A / 10.2 V – 250 A / 20.1 V
	MMA		10 A / 20.4 V – 220 A / 28.8 V
Open circuit voltage			95 V
Power factor at maximum current	TIG		0.92
	MMA		0.91
Efficiency at maximum current	TIG		80 %
	MMA		86 %
Stick electrode	Ø		1.5–5.0 mm
External dimensions	LxWxH		400 x 180 x 340 mm
Weight (without cables)			11 kg

Ordering information

MinarcTig 250		MinarcTig 250MLP	
TX 165 G F, 4 m	P0607TX	TX 165 G F, 4 m	P0611TX
TX 165 G F, 8 m	P0608TX	TX 165 G F, 8 m	P0612TX
TX 225 G, 4 m	P0609TX	TX 225 G, 4 m	P0613TX
TX 225 G, 8 m	P0610TX	TX 225 G, 8 m	P0614TX
TX 165 G S, 4 m	P0625TX	TX 135 G F, 4 m	P0615TX
TX 165 G S, 4 m	P0626TX	TX 135 G F, 8 m	P0616TX
TX 225 G S, 4 m	P0632TX	TX 165 G S, 4 m	P0617TX
TX 225 G S, 8 m	P0633TX	TX 165 G S, 8 m	P0618TX
TX 135 G F, 4 m	P0636TX	TX 225 G S, 4 m	P0634TX
TX 135 G F, 8 m	P0637TX	TX 225 G S, 8 m	P0635TX
TX 165 G S, 16 m	P0668TX	TX 165 G S, 16 m	P0669TX
Accessories			
Welding cable	5 m, 25 mm ²	6184201	
Earth return cable	5 m, 25 mm ²	6184211	
MST 400 transport unit		6185294	





Minarc T

223 ACDC

Weld and clean with one TIG machine

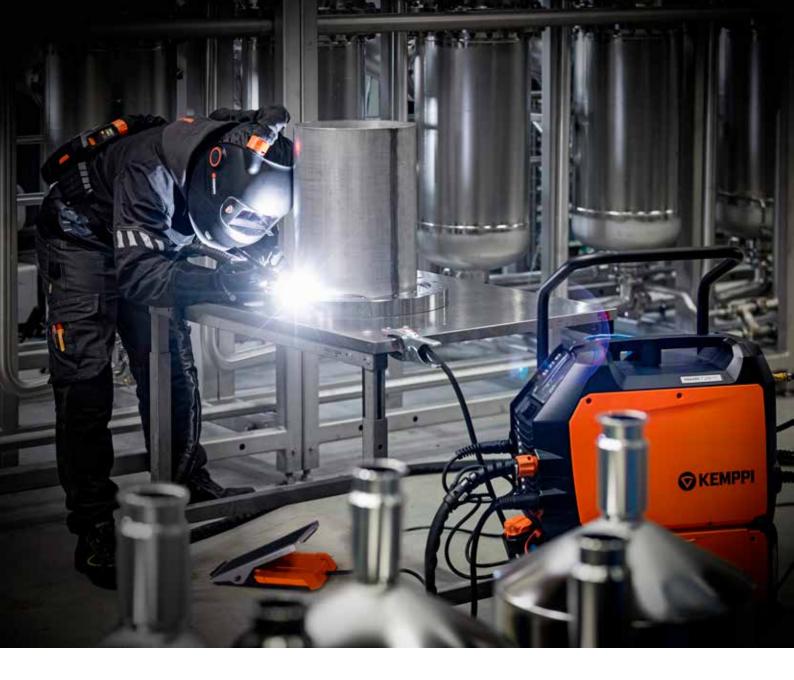
- Premium multi-voltage AC/DC TIG welding machine with built-in weld cleaning function
- DC+ and DC- MMA welding
- 220 A with 20% duty cycle from a 1-phase power supply
- MAX WeldClean electrolytic cleaning process speeds up post weld processing
- Large LCD display
- Four memory channels
- Auto Pulse with frequency control
- AC balance control
- Three alternative transport cart options
- Set parameters remotely with an optional on-torch remote
- Control your welding with the FR41
 wired foot pedal
- Designed and manufactured in Finland

Complete and finish perfect welds

Minarc T 223 ACDC GM is an entirely new 220 A single-phase AC/DC TIG welding machine with built-in electrolytic weld cleaning capability. This portable multi-voltage welding machine allows you to perform high-quality TIG welding and professional weld cleaning with one machine.

Take the **MinarcT 223 ACDC GM** anywhere on-site and save time by completing and finishing perfect welds in one spot. The new **MAX WeldClean** electrolytic cleaning process is simple and easy to use. It just takes a moment to convert your TIG torch to cleaning mode, where an efficient combination of electric current and phosphoric acid offers quick removal of oxidation and discoloration around the weld, delivering perfectly clean welds.

Powerful and versatile, the **MinarcT 223 ACDC GM** TIG welding machine comes with important features like the Auto Pulse function, AC frequency control, memory channels, and convenient remote control options. A large color display with impact protection and a clear user interface make choosing settings in a wide range of light conditions easy.



VALUE FEATURES



PREMIUM WELDING QUALITY

Accurate and precise 220 A TIG welding with easy-to-use controls on a large color display.



POWERFUL ELECTROLYTIC WELD CLEANING

MAX WeldClean is a simple electrolytic cleaning process that removes oxidation and discoloration, finishing welds fast.



EASY TO CARRY

Move your machine where you need it and save time by welding and finishing in the same spot.

TIG WELDING



Converting your standard TIG torch into an electrolytic cleaning brush in a few simple steps has several key benefits.

- 1. The TIG torch is always connected and ready to be used for cleaning. Simply swap the welding set-up to cleaning set-up, as illustrated above.
- 2. Cleaning set-up options include either a single brush or multi-brush configuration, covering all sizes of welds and joint types.
- 3. As standard the Kemppi TIG torch features a 'safety on/off switch', making cleaning with Minarc T 223 ACDC safer in practice overall.
- 4. TIG torch options include either 4m, 8m lengths, extending your cleaning reach and access options.

Note: After using the electrolytic cleaning process, always wash and thoroughly dry your TIG torch head components and consumables in clean water, removing any remaining cleaning fluids or residues before recommencing TIG welding.

MAX WeldClean

The new MAX WeldClean process is simple and fast to use. Converting your TIG torch to cleaning mode takes just a few moments, so your perfect welds are clean and ready in less time.

Process steps:

1.) Weld

- 2.) Convert the TIG torch
- 3.) Clean the welds with low current and cleaning solution
- 4.) Neutralize with water

5.) Ready

You can watch the video of the weld cleaning process with this QR code.





Minarc T 223 ACDC GM is a professional TIGwelder with high-quality welding performance and easy-to-use controls. It offers AC and DC TIG welding for working on a wider range of metals and thicknesses.



MINARC T 223 ACDC and MAX WeldClean lets you weld and clean with one machine. Save time and money by quickly activating cleaning mode for a powerful electrolytic weld cleaning process right after completing a weld.



A large, clear, and bright color LCD display is easy to see in different work environments, and an intuitive control knob combined with simple onscreen process selection makes welding easier.

Technical specifications

Minarc T 223 ACDC GM	MIT223ACDCGM
Connection voltage 1~ 50/60 Hz	220240 V ±10%; 110120 V ±10%
Fuse	16 A
Minimum generator power	8 kVA
Output (TIG) 20% ED	220 A
Output (TIG) 40% ED	130 A (@MV low range)
Output (TIG) 60% ED	170 A; 110 A (@MV low range)
Output (TIG) 100% ED	160 A; 90 A (@MV low range)
Output (MMA) 35% ED	170 A
Output (MMA) 40% ED	90 A (@MV low range)
Output (MMA) 60% ED	130 A; 70 A (@MV low range)
Output (MMA) 100% ED	110 A; 60 A (@MV low range)
Open circuit voltage	95 V
Stick electrode sizes	1.64.0 mm
Welding current and voltage range, TIG @ 220–230 V	5 A/8 V220 A/20 V
Welding current and voltage range, TIG @ 110–130 V	5 A/8 V130 A/16 V
Welding current and voltage range, MMA @ 220–230 V	15 A/15 V170 A/34 V
Welding current and voltage range, MMA @ 110–130 V	15 A/15 A90 A/30 V
Operating temperature range	-20+40 °C
External dimensions LxWxH	520 x 250 x 379 mm
Weight (no accessories)	16.8 kg
Degree of protection	IP23
Standards	EN IEC 60974-1, -3, -10 IEC 61000-3-12 AS 6097.1 AS 1674.2
EMC class	A
Storage temperature range	-40+60 °C
Minarc T 223 ACDC GM ALL	
Minarc T 223 ACDC GM AU	MIT223ACDCGMAU 230, 240 V +10% 110 V +10%
Connection voltage 1~ 50/60 Hz	230240 V ±10%; 110 V ±10%
Connection voltage 1~ 50/60 Hz Fuse	230240 V ±10%; 110 V ±10% 15 A
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power	230240 V ±10%; 110 V ±10% 15 A 8 kVA
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED	230240 V ±10%; 110 V ±10% 15 A 8 kVA 220 A
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED	230240 V ±10%; 110 V ±10% 15 A 8 kVA 220 A 120 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED	230240 V ±10%; 110 V ±10% 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED	230240 V ±10%; 110 V ±10% 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED	230240 V ±10%; 110 V ±10% 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED	230240 V ±10%; 110 V ±10% 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED	230240 V ±10%; 110 V ±10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 170 A 130 A; 70 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 120 A; 60 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 60 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 60 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 60 A (@MV low range) 130 A; 60 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Stick electrode sizes	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 120 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 120 A; 00 A (@MV low range)
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Output voltage Stick electrode sizes	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 23 V 1.64.0 mm 5 A/8 V220 A/20 V
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, TIG @ 110–130 V	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 200 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 70 A (@MV low range) 140 A; 60 A (@MV low range) 5 A/8 V220 A/20 V 5 A/8 V220 A/20 V
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 120 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 70 A (@MV low range) 140 A 15 A/15 V120 A/15 V 15 A/15 V170 A/34 V
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MAA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Output (MMA) 100% ED Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 220–230 V	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 120 A (@MV low range) 130 A; 70 A (@MV low range) 15 A/15 V170 A/34 V 15 A/15 V170 A/34 V 15 A/15 V170 A/30 V
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Open circuit voltage Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 210–130 V Welding current and voltage range, MMA @ 110–130 V Welding current and voltage range, MMA @ 110–130 V	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 120 X 110 A; 60 A (@MV low range) 15 A/15 V 15 A/15 V 15 A/15 V
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Open circuit voltage Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 210–130 V Welding current and voltage range, MMA @ 110–130 V Welding current and voltage range, MMA @ 110–130 V	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 200 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 130 A; 70 A (@MV low range) 130 A; 70 A (@MV low range) 140 A 15 A/15 V 15 A/15 V 15 A/15 V 15 A/15 V
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MAA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, TIG @ 110–130 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 110–130 V Operating temperature range External dimensions LxWxH Weight (no accessories)	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 200 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 120 X 110 A; 60 A (@MV low range) 150 A; 70 A (@MV low range) 150 A; 70 A (@MV low range) 150 A; 70 A (@MV low range) 160 A; 90 A (@MV low range) 150 A; 70 A (@MV low range) 150 A; 70 A (@MV low range) 150 A; 70 A (@MV low range) 150 A; 50 A (@MV low range) 160 B; 00 A 150 A; 70 A (@MV low range) 160 B; 00 A (@MV low range) 170 A 180 A; 70 A (@MV low range) 190 A; 10 A (@MV low range) 190 A; 100 A/15 V 190 A; 120 A/15 V 190 A; 150 A/30 V 190 A; 150 A; 379 mm 190 A; 250 x 379 mm
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Output voltage Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 110–130 V Operating temperature range External dimensions LxWxH Weight (no accessories) Degree of protection	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 23 V 23 V 1640 mm 5 A/8V220 A/20 V 5 A/8V220 A/20 V 5 A/8V120 A/15 V 15 A/15 V170 A/34 V 15 A/15 V170 A/34 V 15 A/1590 A/30 V -20+40 °C 520 x 250 x 379 mm 16.80 kg IP23
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Open circuit voltage Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 210–130 V Welding current and voltage range, MMA @ 110–130 V Operating temperature range External dimensions LxWxH Weight (no accessories) Degree of protection Standards	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 23 V 23 V 164.0 mm 5 A/8 V220 A/20 V 15 A/15 V170 A/34 V 15 A/15 V170 A/34 V 16.80 kg 1P23 EN IEC 60974-1, -3, -10 IEC 61000-3-12
Connection voltage 1~ 50/60 Hz Fuse Minimum generator power Output (TIG) 20% ED Output (TIG) 40% ED Output (TIG) 60% ED Output (TIG) 100% ED Output (MMA) 35% ED Output (MMA) 35% ED Output (MMA) 40% ED Output (MMA) 60% ED Output (MMA) 100% ED Output (MMA) 100% ED Output voltage Stick electrode sizes Welding current and voltage range, TIG @ 220–230 V Welding current and voltage range, MMA @ 220–230 V Welding current and voltage range, MMA @ 110–130 V Operating temperature range External dimensions LxWxH Weight (no accessories) Degree of protection	230240 V ± 10%; 110 V ± 10% 15 A 15 A 8 kVA 220 A 120 A (@MV low range) 170 A; 100 A (@MV low range) 160 A; 90 A (@MV low range) 170 A 90 A (@MV low range) 130 A; 70 A (@MV low range) 110 A; 60 A (@MV low range) 23 V 23 V 1640 mm 5 A/8V220 A/20 V 5 A/8V220 A/20 V 5 A/8V120 A/15 V 15 A/15 V170 A/34 V 15 A/15 V170 A/34 V 15 A/1590 A/30 V -20+40 °C 520 x 250 x 379 mm 16.80 kg IP23

Ordering information

Master Cooler 05M	МЅМСО5М		
Recommended coolant	MGP 4456 (Kemppi mixture)		
Operating temperature range	-20+40 °C		
External dimensions LxWxH	555 x 253 x 215 mm		
Weight (no accessories)	11.5 kg		
Degree of protection	IP23S		
Standards	IEC 60974-2, -10		
Tank volume	2.3		
EMC class	A		
Cooling power	0.5 kW		
Storage temperature range	-40+60 °C		
	Description		Product code
Minarc T 223 ACDC GM	Power Source		MIT223ACDCGM
Minarc T 223 ACDC GM AU	Power Source		MIT223ACDCGMAU
Master Cooler 05M	Cooling unit		MSMC05M
T22M	Transport carriage		T22M
T32A	2-wheel light trolley		T32A
S10M Skies			\$10M
FR41	Remote foot control		FR41
TXR10	Remote control		TXR10W/TXR10G
TXR20	Remote control		TXR20W / TXR20G
MAX WeldClean Starter Kit, Small Head, Single Brush	Supports small torch head for sing	gle brush	MAXCSTKSS
MAX WeldClean Starter Kit, Large Head, Single Brush	Supports large torch head for sing	gle brush	MAXCSTKS
MAX WeldClean Starter Kit, Large Head, Multi Brush	Supports large torch head for mul-	lti brush	MAXCSTKL
Earth return cable 35 mm ² , 5 m			6184311
Earth return cable 35 mm ² , 10 m			6184312
Earth return cable 35 mm ² , 15 m			6184313
Earth return cable 35 mm ² , 20 m			6184314
Earth return cable 50 mm ² , 5 m			6184511
Earth return cable 50 mm ² , 10 m			6184512
Earth return cable 50 mm ² , 20 m			6184514
Earth return cable 50 mm ² , 30 m			6184517
Model description		s package code	
Minarc T 223 ACDC GM + TX225G4	P23T22	225G4	
Minarc T 223 ACDC GM + TX225G8	P23T2	25G8	
Minarc T 223 ACDC GM + Master M COOLER + TX355W4	P23T3	55W4	
Minarc T 223 ACDC GM + Master M COOLER + TX355W8	P23T3	355W8	
Minarc T 223 ACDC GM + TX225G4 + FR41	P23T2	25G4R	
Minarc T 223 ACDC GM + TX225G8 + FR41	P23T2	25G8R	
Minarc T 223 ACDC GM + Master M COOLER + TX355W4 + FR41	P23T3	355W4R	
Minarc T 223 ACDC GM + TX225GS4	P23T2	25GS4	
Minarc T 223 ACDC GM + TX225GS8	P23T22	25GS8	
Minarc T 223 ACDC GM + Master M COOLER + TX255WS4	P23T2:	255WS4	
Minarc T 223 ACDC GM + Master M COOLER + TX255WS8	P23T2	255WS8	
Minarc T 223 ACDC GM + TX225GS4 + FR41	P23T2	25GS4R	
Minarc T 223 ACDC GM + TX225GS8 + FR41		25GS8R	
Minarc T 223 ACDC GM + Master M COOLER + TX255WS4 + FR41		255WS4R	
Minarc T 223 ACDC GM + Master M COOLER + TX255W54 + FR41		255WS8R	
Minarc T 223 ACDC GM AU + TX225G4		25G4AU	
Minarc T 223 ACDC GM AU + TX225G4 Minarc T 223 ACDC GM AU +TX225G8		25G8AU	
Minarc T 223 ACDC GM AU + Master M COOLER + TX355W8		S55W8AU	
Minarc T 223 ACDC GM AU + Master M COOLER + TX355W8+FR41	P2313:	55W8RAU	



MasterTig DC / MasterTig ACDC

Far from the ordinary

- 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
- Designed and manufactured in Finland
- 3 year warranty

Excellent ergonomics and superb user experience

OKER

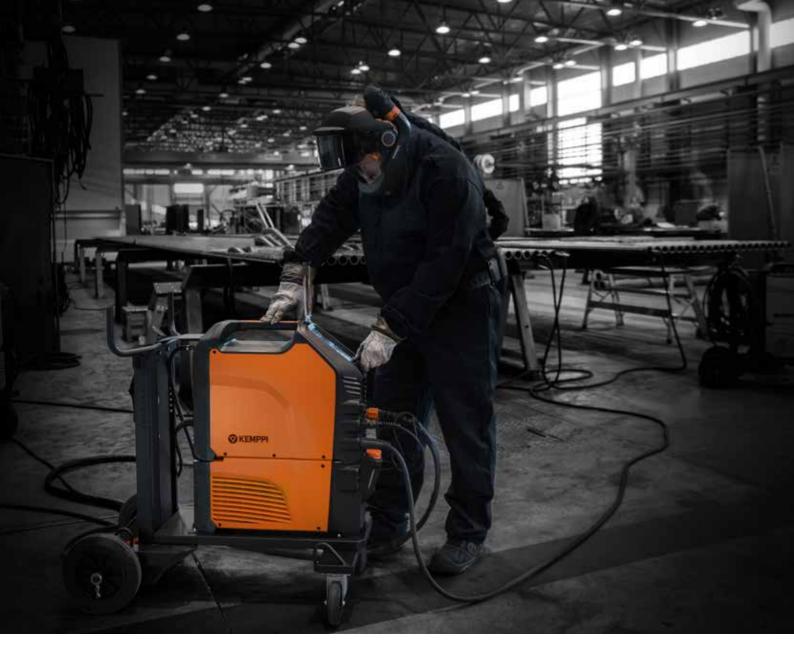
MasterTig is the new master of AC and DC TIG welding, setting new standards for weld quality, usability and power efficiency.

Designed for professional user groups, the 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 shocks of everyday welding life. Light in weight and compact in size, MasterTig is constructed from tough injection molded plastic, featuring impact bridge protection structures, and is your reliable partner for workshop or site use.





VALUE FEATURES



30% INCREASED WELDING SPEED

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



60% FASTER SETUP Weld Assist guides you towards the optimal setup for easy and productive

welding



20 % LOWER NOISE LEVELS

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

TIG WELDING

Enhanced welding



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 interfaces remote control options, transport carts and torches, to ensure your machine meets your exact 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. MasterTig 535 ACDC is fitted with metal side plates.



PIVOTSAFE

MasterTig transport units feature floor level cylinder loading, thus eliminating the need for heavy lifting. The P45MT transport unit has na innovative integrated pivoting cylinder plate for safe cylinder loading.



TORCH PARTS STORAGE

Quickly access frequently used TIG torch parts from the convenient storage tray mounted in the handle. Feature not included in MasterTig 535 ACDC.



UI CONTROL PANELS

Choose between the 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. MasterTig 535 ACDC includes the MTP35X panel as standard.



WELD ASSIST

Set up your machine the first time and every time with Weld Assist. Follow simple on-screen steps to select material, thickness, joint type and position, and Weld Assist will set the optimal parameters, guiding every welder through accurate, productive welding. Weld Assist also gives recommendations for electrode size, filler wire, gas flow, groove type, pass profile and travel speed. Perfect for creating pWPS.



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. MasterTig 535 ACDC also includes an LED water level indicator



WIRELESS

The magic of cordless remote control. Eliminate costly cable repairs and improve work site safety by using wireless remotes. Select either hand or foot pedal modules and enjoy wireless power control from a distance of up to 15 meters, or even 100 meters, depending on the work site. Make life easy.



Kemppi Flexlite TX torches feature high-strength and flexible rubber handles, for increased comfort and lower welder fatigue.



Upload your favourite image or company logo as a screen saver to the MTP35X display.



MasterTig 535 ACDC can be lifted by crane using the standard lifting eyes attached to the top of the machine.

Technical specifications

		MasterTig 235ACDC GM	MasterTig 235ACDC GM (VRD locked on)
Mains connection voltage	1~ 50/60 Hz	110/220240V±10%	110/240V±10%
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 V230 A / 31 V	3 A / 1 V230 A / 31 V
Range of output (110 V)	TIG	3 A / 1 V130 A / 24 V	3 A / 1 V130 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	ømm	1.65.0 mm	1.65.0 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 335ACDC	MasterTig 325DC G MasterTig 335ACDC G	MasterTig 325DC GM MasterTig 335ACDC GM
Mains connection voltage	3~ 50/60 Hz	380460 V ±10 %	380460 V ±10 %	220230 V; 380460 V ±10 %
Fuse		16 A	16 A	20 A
Open circuit voltage (average)	MMA	50 V 23 V*	50 V 23 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 V300 A / 38 V	3 A / 1 V300 A / 38 V	3 A / 1 V300 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 22.0 kg	21.5 kg 22.5 kg	21.5 kg 22.5 kg
Recommended generator power (min)	Sgen	20 kVA	20 kVA	20 kVA
Stick electrode diameters	ømm	1.66.0 mm	1.66.0 mm	1.66.0 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
	* Applies only to the power source model versions where the Voltage Reduction Device (VRD) function is locked on.			







Technical specifications

		,	,		
		MasterTig 425DC G	MasterTig 425DC G (VRD locked on)	MASTERTIG 535 ACDC GM	MASTERTIG 535 ACDC GM (VRD locked on)
Mains connection voltage	3~ 50/60 Hz	380460 V ±10 %	380460 V ±10 %	220230 V; 380460 V ±10 %	220230 V; 380460 V ±10 %
Fuse		16 A	16 A	32 A	32 A
Open circuit voltage (average)	MMA	50 V	23 V (locked to VRD)	50 V	23 V (locked to VRD)
Rated maximum output at 40 °C	30 % TIG	400 A / 26 V	400 A / 26 V	40 % ED 500A/30V (400V) 40 % ED 450A/28V (220V)	40 % ED 500A/30V (400V) 40 % ED 450A/28V (220V)
Range of output	TIG	3 A / 1 V400 A / 41 V	3 A / 1 V400 A / 41 V	3 A/1 V-500 A /37 V (400V) 3 A/1 V-450 A /32 V (220 V)	3 A/1 V-500 A /37 V (400V) 3 A/1 V-450 A /32 V (220 V)
Operating temperature range		-20+40 °C	-20+40 °C	-20 +40 °C	-20 +40 °C
EMC class		А	A	А	A
Degree of protection		IP23S	IP23S	IP23S	IP23S
External dimensions	LxWxH	544 x 205 x 443 mm	544 x 205 x 443 mm	860 x 263 x 610 mm	860 x 263 x 610 mm
Weight without accessories		23.6 kg	23.6 kg	57 kg	57 kg
Recommended generator power (min)	Sgen	20 kVA	20 KVA	35 kVA	35 kVA
Stick electrode diameters	Ø	1.67.0 mm	1.67.0 mm	1,67,0 mm	1,67,0 mm
Standards		IEC 60974-1,-3,-10 IEC 61000-3-12	IEC 60974-1,-3,-10 IEC 61000-3-12 AS 60974.1-2006	IEC60974-1,-3,-10, AS60974.1, GB/T15579.1	IEC60974-1,-3,-10, AS60974.1, GB/T15579.1

MasterTig Coolers	MasterTig Cooler M	MasterTig MXL Cooler
Recommended coolant	MPG 4456 (Kemppi mixture)	MPG 4456 (Kemppi mixture)
Tank volume	3.0 l	3.01
Operating temperature range *	-20+40 °C	-20+40 °C
	* With recommended coolant	
Weight without accessories	12.5 kg	25 kg
Rated cooling power at 1 l/min	0.9 kW	1.7 kW
Storage temperature range	-20 +60 °C	-20 +60 °C
EMC class	A	A
Degree of protection (when mounted)	IP23S	IP23S
Standards	IEC 60974-2, IEC 60974-10	IEC 60974-2, -10

FlexFlite 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	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4
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 60074.7									

These equipment comply with standard IEC 60974-7.

Ordering information

MasterTig 235ACDC GMPower source: 230 A AC/DC, generator and multi Power source: 230A AC/DC, generator and multi Power source: 230A AC/DC, generator and multi	i-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
MasterTig 325DC G Power source: 300 A DC, generator use, VRD loc	ked on MT325DCGAU
MasterTig 325DC GM Power source: 300 A DC, generator and multi-ve	oltage use MT325DCGM
MasterTig 335ACDC Power source: 300 A AC/DC	MT335ACDC
MasterTig 335ACDC G Power source: 300 A AC/DC, generator use	MT335ACDCG
MasterTig 335ACDC G Power source: 300 A AC/DC, generator use, VRD	locked on MT335ACDCGAU
MasterTig 335ACDC GM Power source: 300 A AC/DC, generator and mu	ti-voltage use MT335ACDCGM
MasterTig 425DC G Power source: 400 A DC, generator use	MT425DCG
MasterTig 425DC G Power source: 400 A DC, generator use, VRD loc	ked on MT425DCGAU
MasterTig 535 ACDC GM Power source: 500 A AC/DC, 3-phase generator	and multi-voltage use, includes MTP35X, MT535ACDCGM
MasterTig 535 ACDC GM Power source: 500 A AC/DC, 3-phase generator on, includes MTP35X, MT535ACDCGMAU	and multi-voltage use, VRD locked MTP35X, MT535ACDCGMAU
MasterTig Cooler MXL MasterTig 535 Cooler 1.7Kw multi-voltage XL	MTC17KWMXL
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
MT535ACDC Transport unit, 4 wheel cart	X5701020000

MODEL DESCRIPTION	SALES PACKAGE CODE
MASTERTIG 535 AC/DC 500 GM 4M WC FR CART	P0916TX
MASTERTIG 535 AC/DC 500 GM 8M WC FR CART	P0917TX
MASTERTIG 535 AC/DC 500 GMVRD 4M WC FR CART	P0918TX
MASTERTIG 535 AC/DC 500 GMVRD 8M WC FR CART	P0919TX

MasterTig

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ØKE





Minarc

150/220

Little giants of the MMA welding world

- Excellent welding quality and ignition
- 1ph 230V and 3ph 400V models
- Automatic dynamics feature
- Lightweight and high power
- Excellent work duty performance
- VRD model options
- Scratch TIG feature
- Ready to weld packages
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Metal workshops
- Construction industry
- Agriculture
- Repair and maintenance

Lightweight, compact and super portable

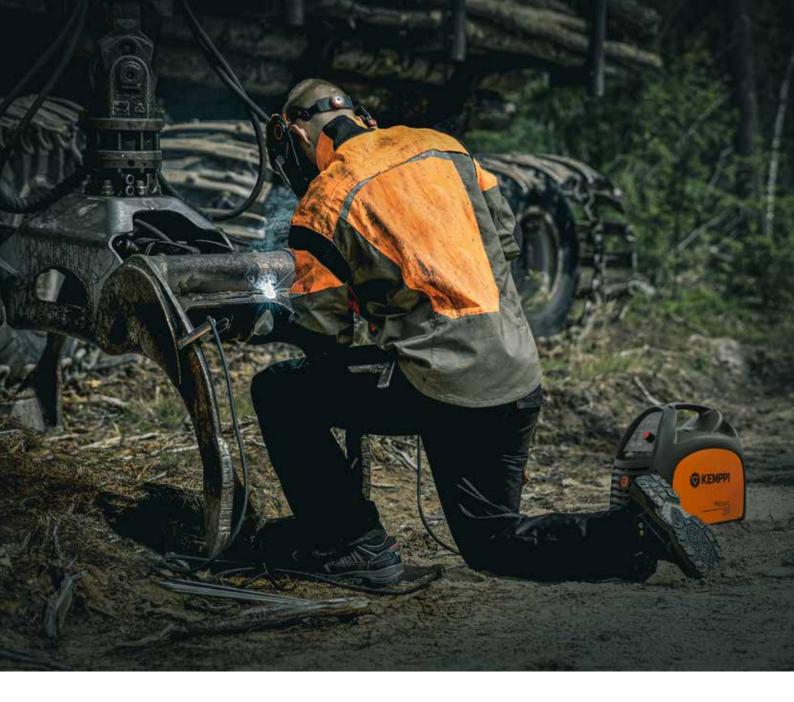
Minarc 150 and 220 MMA welding machines are lightweight, robust, durable and impact resistant, the ideal choice for workshop and site environments.

Superior arc performance based on high voltage reserves and automatic 'Arc Force' control, guarantee the arc will remain stable in all welding positions, even when connected with extra-long welding and power cables up to 100m.

Automatic Hot Start gives perfect ignition in all conditions and the Anti-sticking function decreases the risk of the MMA electrode sticking to the base material and aids short arc control. Protection against overload, humidity and dust ingress means excellent reliability, and TIG welding is possible thanks to the scratch -TIG function and GV TIG torches. Minarc 220 features a remote-control option.

Specific Minarc models feature the VRD function (Voltage Reduction Device) that lowers the open circuit voltage for welding environments that may present wet, damp or humid conditions.





VALUE FEATURES



EASY START With ready to weld packages



EXCELLENT WELDING QUALITY Outstanding arc performance



GREAT PACKAGE Lightweight, high power and duty cycle

Technical specifications Minarc 150

Minarc 150		
Connection voltage	1~, 50 /60 Hz	230 V ±15 %
Rated power	35 % ED MMA	140 A/7.5 kVA
	50 % ED MMA	-
	100 % ED MMA	100 A/5.1 kVA
	35 % ED TIG	150 A/5.0 kVA
	50 % ED TIG	-
	100 % ED TIG	110 A/3.3 kVA
Connection cable	H07RN-F	3G2.5 (3.3 m)
Fuse, delayed		16 A
Welding range	MMA	10 A/20.5 V-140 A/25.6 V
	TIG	10 A/10.5 V – 150 A/15.6 V
Plug type		Schuko
Open circuit voltage		85 V (30 V/VRD)
Power factor at max current		0.60
Efficiency at max current		80 %
Stick electrode	ømm	1.5–3.25
External dimensions	L x W x H, mm	320 x 123 x 265
Weight	kg	4

Technical specifications Minarc 220

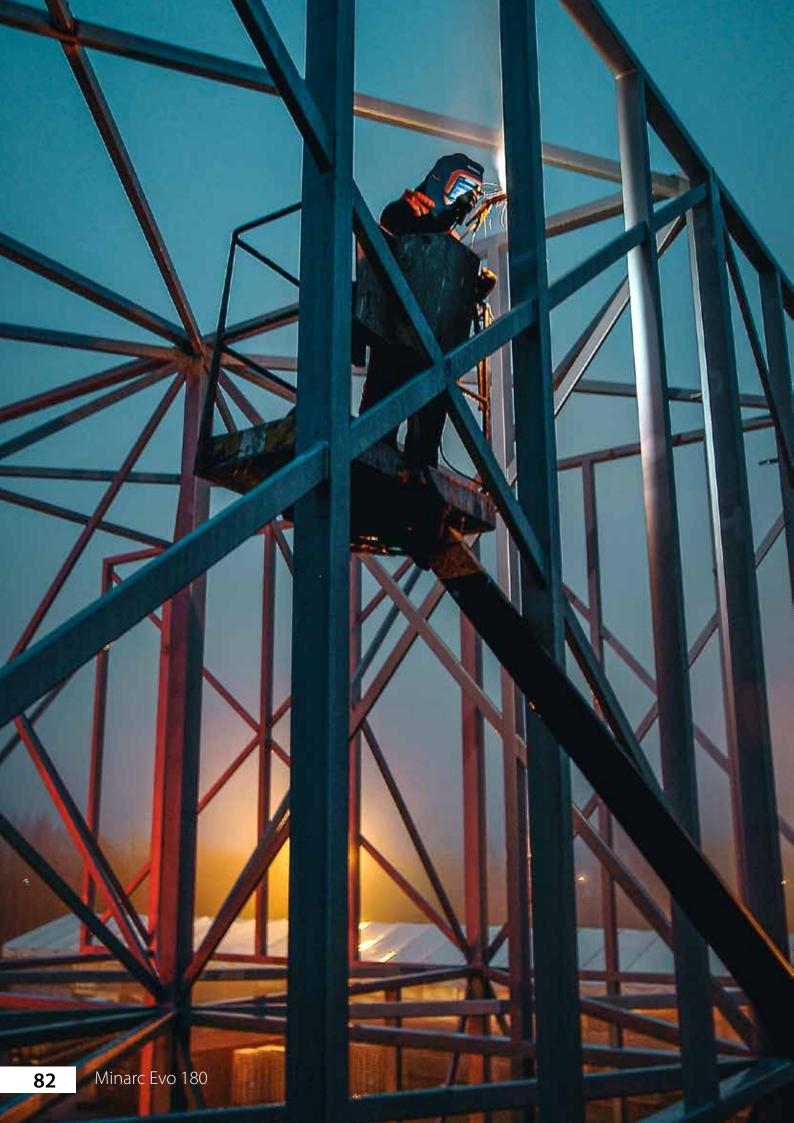
Minarc 220			
Connection voltage	3~, 50/60 Hz		400 V -20 %+15 %
Rated power	MMA	35 % ED	220 A
		100 % ED	150 A
Output 40 °C	MMA	35 % ED	220 A / 28.8 V
		60 % ED	170 A / 26.8 V
		100 % ED	150 A / 26.0 V
	TIG	35 % ED	220 A / 18.8 V
		60 % ED	180A / 17.2 V
		100 % ED	160 A / 16.4 V
Connection cable	H07RN-F		4G1.5 (5 m)
Fuse, delayed			10 A
Welding range	MMA		10 A / 20.4 V-220 A / 28.8 V
	TIG		10 A / 10.4 V-220 A / 18.8 V
Open circuit voltage			85 V (30 V/VRD)
Power factor at maximum current	MMA		0.91 (TIG 0.92)
Efficiency at max current			0.86 (TIG 0.80)
Stick electrode	Ø		1.5–5.0 mm
External dimensions	L x W x H		400 × 180 × 340 mm
Weight			9.2 kg

Ordering information Minarc 150

Minarc 150			
Minarc 150, incl. earth and welding ca	61	102150	
Minarc 150 VRD, incl. earth and weldin	61	102150VRD	
Accessories			
Earth return cable	5 m, 16 mm ²	61	184015
Welding cable	5 m, 16 mm ²	61	184005
Carrying straps	95	592162	
TIG torch Flexlite TX 163 GVD94		TX	X163GVD94

Ordering information Minarc 220

Minarc 220, incl. earth return and	welding cable (5 m), connection cable	6102220
Accessories		
Earth return cable	5 m, 25 mm²	6184211
Welding cable	5 m, 25 mm²	6184201
Carrying straps		9592162
TIG torch Flexlite TX 223GVD134		TX223GVD134





Minarc Evo 180

Wherever your work takes you

- Premium welding performance
- Use with all electrode types
- Use with long supply cables
- PFC technology for ultimate energy efficiency
- High current output and duty cycle
- Lightweight and portable
- Robust and durable
- Precise lift TIG technology
- Mains network or generator use
- Optional remote control
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Metal workshops
- Construction industry
- Agriculture
- Repair and maintenance

More powerful and affordable than ever before

The little MMA giant is back, stronger than ever. Minarc Evo 180 is the latest MMA model from the popular Minarc Evo family. It has all the great qualities of its predecessor, and then some. Upgraded, improved and more powerful, it serves the agile welder better than ever with greater welding capacity.

Outstanding welding performance is no overstatement. Every element of Minarc Evo 180 is designed to meet the needs of professional welders on the move. Where size, weight and welding quality are concerned, there is no equal.

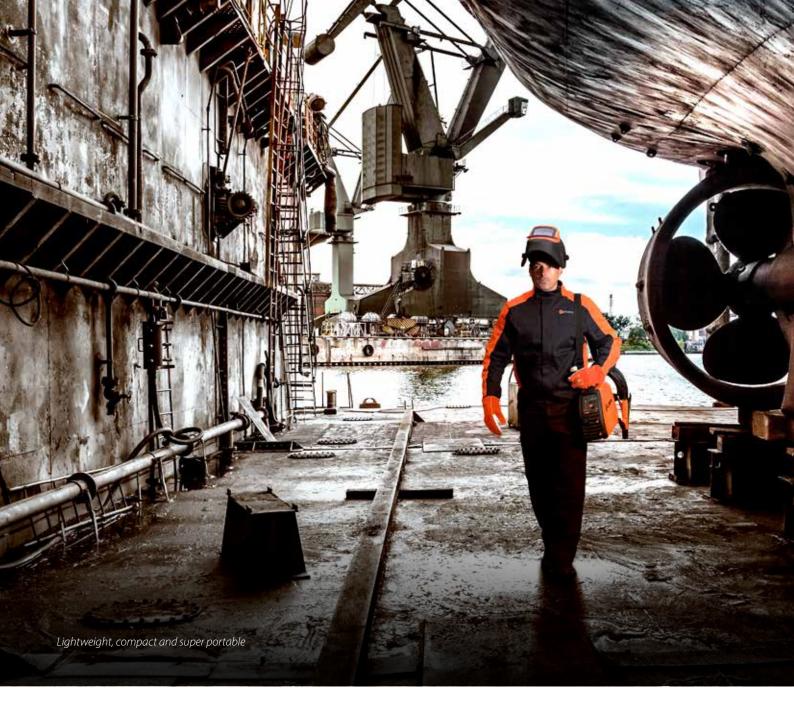
Ideal for site use, you can use Minarc Evo 180 from mains or generator power supplies, even with extra long supply cables. Minarc Evo is easy to carry, so you can normally take everything you need in one journey.

Large voltage reserves and automatic arc force control provide excellent arc stability in all welding positions and for a wide range of electrode types, making sure you get quality welding results every time.

The large and clear meter display makes accurate current setting simple and easy, and precise lift TIG ignition ensures high quality DC TIG welding. Connect a remote control unit and you can adjust welding parameters at distance during welding, for ultimate convenience and weld pool control.







VALUE FEATURES



LIGHTWEIGHT 5,85 KG Easy to carry anywhere.



PROFESSIONAL PERFORMANCE

Portable, powerful, capable

Technical specifications

Minarc Evo 180		
Connection voltage	1~ 50/60 Hz	230 V ±15 % (AU 240 V ± 15 %)
Rated power at max. current	30 % ED MMA	170 A / 5.7 kVA
	35 % ED TIG	180 A / 4.0 kVA
Output (40 °C) MMA	30 % ED	170 A / 26.8 V (140AU: 28 % ED 140A / 25.6 V)
	60 % ED	140 A / 25.6 V
	100 % ED	115 A / 24.6 V (140 AU: 80 A/23.2 V)
Output (40 °C) TIG	35 % ED	180 A / 17.2 V
	60 % ED	150 A / 15 V
	100 % ED	130 A / 15.2 V
Open circuit voltage		90 V (VRD 30 V; AU VRD 12 V)
Power factor at 100 % ED		0.99
Efficiency at 100 % ED (MMA)		84 %
Stick electrodes	Ø	1.54 mm
External dimensions	L x W x H	361 x 139 x 267 mm
Weight (with connection cable)		5.85 kg
EMC class		A
Norms IEC 60974-1, -10, IEC 61000-3-12		

Ordering information

Minarc Evo 180 (incl. earth return and welding cables (3 m) and shoulder strap)						
Minarc Evo 180		61002180				
Minarc Evo 140 AU*		61002140AU				
Minarc Evo 180 AU*	61002180AU					
Minarc Evo 180 VRD		61002180VRD				
Earth return cable	5 m, 16 mm ²	6184015				
Welding cable	5 m, 16 mm ²	6184005				
Shoulder strap		9592163				
Optional: TIG torch Flexlite TX 163 GVD94	4 m	TX163GVD94				
R10 Hand held remote control	5 m	6185409				

* The AU model is for the Australian and New Zealand markets. They have different mains plugs.



ØKENPP



A bit of extra to the ordinary

- Specific design for MMA welding
- Compact and lightweight
- Designed for all electrode types, also for cellulosic electrodes.
- MMA and DC TIG welding function
- Suitable for use with power generators
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Installation and set-up
- Repair and maintenance
- Chemical and process industry
- Shipyards and offshore industry

Fast and accurate setup premium weld quality

Master 315 is a stylish and practical MMA welding machine, capable of absorbing the knocks and shocks of everyday welding life.

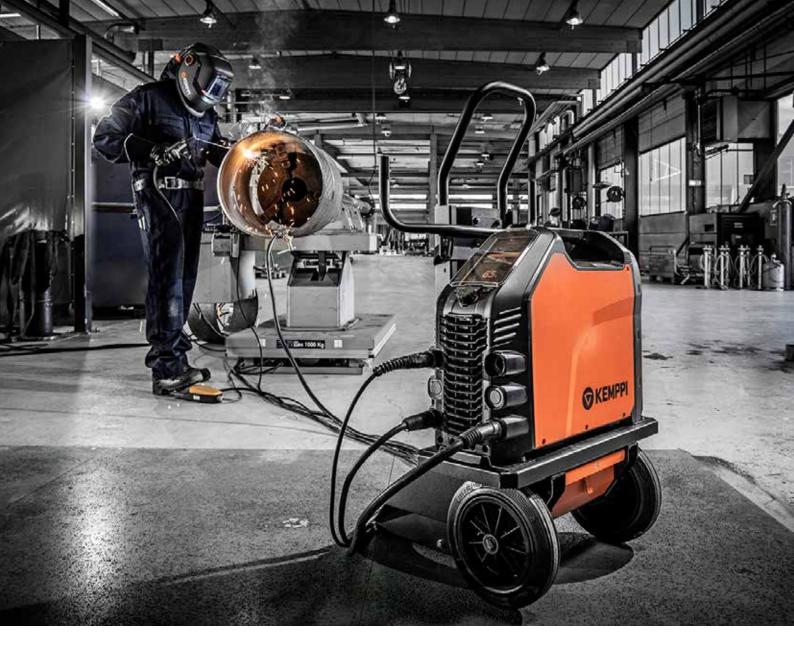
Lightweight and compact, the Master 315 is constructed from tough injection molded plastic, featuring impact bridge protection structures, making it your reliable partner for workshop or site use.

Master 315 guarantees optimal welding performance and fast parameter setting, supported by the innovative Weld Assist menu selection tool.

Weld Assist ensures suitable parameters are set for each application, regardless of your welding experience. Select the electrode type, electrode size and joint type, and Weld Assist selects the perfect setting for you.

MMA welding may be a basic welding process, but Master 315 adds that little bit of extra to the ordinary in a perfect blend for professional welding.





VALUE FEATURES



WELD ASSIST

Take the guesswork out of MMA parameter setting with Weld Assist, which reduces setup time by up to 60 % and ensures suitable parameter setup the first time and every time.



HIGH-QUALITY STICK WELDING

Perfect welds are characterized by a smooth, controlled arc performance. Master 315 has the dynamic performance to keep the arc under control, including cellulosic electrodes.



WIRELESS REMOTE CONTROL

Extend usability and eliminate hazards with the HR45 wireless remote control. You can set the power level simply and safely and select memory channels up to 100 m from your workstation.

MMA WELDING

Superb user experience



PERSONALIZE

Upload your company logo, contact details or favorite image to the Master 315 screen saver. It's simple and fast.



PULSED MMA

For selected applications, Pulsed MMA can lower the overall heat input, improve welding arc control and increase welding speed. Additional benefits of Pulsed MMA include excellent positional and root pass welding properties, cleaner welds and reduced heat deformation.



ARCBREAK TECHNOLOGY

ARCbreak technology provides welding professionals a variable parameter setting to easily make and break the welding arc during MMA welding. With better control of the weld pool and heat input, ARCbreak helps you avoid burn through, improves overall weld quality and increases tack welding speed. ARCbreak can be optimized through the Weld Assist menu for variable electrode types.



CELLULOSIC WELDING PERFORMANCE

Cellulosic welding electrodes require a large voltage reserve for reliable welding. Master 315 has a special welding program and tuned power dynamics, ensuring the unique arc force properties for excellent cellulosic welding performance.



MEMORY CHANNELS

Master 315 includes 99 memory channels for your favorite parameter settings or WPS values. Copy or delete and update as needed. It's fast and simple.



OPTIMAL WELDING PARAMETERS FOR EVERY JOB

Equipped standard with a full-color 7-inch TFT display, Master 315 defines the best user experience and accuracy for weld parameter setting and control. The easy-to-use navigation buttons and multifunction control knob make it easy to find the optimal welding parameters for every job. Either select your own settings manually or allow Weld Assist to guide you through them. Welding machine control and setting does not get any easier.



Suitable for all electrode types, including cellulosic electrodes.



Choose between wired and cordless remote control options HR43 (wired) or HR45 (cordless).



Optimal welding parameters for every job, using the large and clear TFT display, including a personalization screen saver feature. Add your company logo and contact details or a favorite image.

Technical specifications

		Master 315 G	Master 315 G (VRD locked on)	Master 315 GM
Mains connection voltage	3~ 50/60 Hz	380460 V ±10 %	380460 V ±10 %	220230 V ±10 % 380460 V ±10 %
Fuse		16A-C	16A-C	16A-C
Rated maximum output at 40 °C, MMA	30 %			300 A / 32.0 V (400 V) 260 A / 30.4 V (220 V)
	40 %	300 A / 32 V	w300 A / 32 V	280 A / 31.2 V (400 V) 260 A / 30.4 V (220 V)
	60 %	260 A / 30.4 V	260 A / 30.4 V	260 A / 30.4 V (400 V) 230 A / 29.2 V (220 V)
	100 %	220 A / 28.8 V	220 A / 28.8 V	220 A / 28.8 V (400 V) 175 A / 27.0 V (220 V)
Rated maximum output at 40 °C, TIG	40 %	300 A / 22 V	300 A / 22 V	280 A / 21.2 V (400 V) 260 A / 20.4 V (220 V)
	60 %	260 A / 20.4 V	260 A / 20.4 V	260 A / 20.4 V (400 V) 230 A / 19.2 V (220 V)
	100 %	220 A / 18.8 V	220 A / 18.8 V	220 A / 18.8 V (400 V) 175 A / 17.0V (220 V)
Welding range	MMA	10300 A	10300 A	10300 A (400 V) 10260 A (220 V)
	TIG	3300 A	3300 A	3300 A (400 V) 3260 A (220 V)
No-load voltage (reg)		50 Vdc	23 Vdc	50 Vdc
No-load voltage (un-reg)		7095 V	7095 V	7095 V
No-load voltage, VRD		23 Vdc	23 Vdc	23 Vdc
Max welding voltage		6389 Vdc	6389 Vdc	3860 Vdc
Power factor @ 100 %		0.89	0.89	0.89 (400V) 0.95 (220 V)
Efficiency @ 100 %		0.87	0.87	0.87 (400 V) 0.85 (220 V)
Operating temperature range		-20 +40 °C	-20 +40 °C	-20 +40 °C
EMC class		А	A	A
Degree of protection		IP23S	IP23S	IP23S
External dimensions	L x W x H	544 x 205 x 443 mm	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight without accessories		21.4 kg	21.4 kg	22.6 kg
Recommended generator power (min)	Sgen	20 kVA	20 kVA	20 kVA
Stick electrode diameters	ømm	1.67.0 mm	1.67.0 mm	1.67.0 mm
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 AS 60974.1-2006	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1

Ordering information

Equipment	Description	Ordering code
Master 315 G	Power source 300 A, generator use	M315G
Master 315 G	Power source 300 A, generator use, VRD locked on	M315GAU
Master 315 GM	Power source 300 A, generator and multi-voltage use	M315GM
Welding cable	5 m, 35 mm ²	6184301
Welding cable	5 m, 50 mm ²	6184501
Earth return cable	5 m, 35 mm ²	6184311
Earth return cable	5 m, 50 mm ²	6184511
Flexlite TX 223GVD13	Flexlite TX torch with a manual gas valve and a DIX 13 mm connector	TX223GVD134
HR43	Wired remote	HR43
HR45	Wireless remote	HR45
FR43	Wired foot pedal remote	FR43
FR45	Wireless foot pedal remote	FR45
P43MT	4-wheel undercarriage	P43MT
T25MT	2-wheel cart with floor level cylinder loading	T25MT
P45MT	4-wheel cart with an innovative pivoting cylinder plate.	P45MT







Master S 400 / 500

Powerful, efficient, quality, value

- Hot start and arc force adjustment for optimised starts and arc control with alternative electrode types, guaranteeing flawless and stable weld pool control every time.
- Antifreeze cuts off the power and protects the electrode if sticking occurs during welding
- Contact ignition (Lift TIG) in DC TIG
- Arc gouging
- Designed and manufactured in Finland
- 3 year warranty

A master of sites

Master S series MMA power sources are designed for high-performance professional welding. They offer a compact, robust and portable MMA power source with optimum energy efficiency. It is a perfect partner for heavy-duty welding work where the ease of use, reliability and durability are paramount.

- · Powerful and portable MMA power source for professional workshop and site use
- Models available for all electrode types, including cellulosic electrodes
- Efficient output at 400/500 A 60% ED
- Robust structure for heavy-duty site use

The powerful 400 or 500 amp power source provides great welding results with pleasurable welding experience. Mains and generator powered with wide voltage network tolerance. Integrated Voltage Reduction Device (VRD) increases safety at work. All this and more in a compact and lightweight design that makes transportation and site management easy.





VALUE FEATURES



EXTRA UTILITY Professional welding performance, compact, lightweight, industrial MMA (stick) and DC TIG.



REMOTE CONTROL OPTION

When connected with a suitable Kemppi remote control, you can remotely adjust the welding current

MMA WELDING



Master S		S 400	S 500
Connection voltage	3~50/60 Hz	380 – 440 V (-10 %+10 %)	380 – 440 V (-10 %+10 %)
Rated power at max. current	60 % ED	18 kVA	26 kVA
Fuse (delayed)		25 A	35 A
Output at 40 °C MMA	60 % ED	400 A / 36 V	500 A / 40 V
	100 % ED	310 A / 32.4 V	390 A / 35.6 V
Output at 40 °C TIG	60 % ED	400 A / 26 V	500 A / 30 V
	100 % ED	310 A / 22.4 V	390 A / 25.6 V
Max. welding voltage		400 A / 48 V	500 A / 46V
Open circuit voltage		80 – 95 V	80 – 95 V
Stick electrodes		ø 1.66.0 mm	ø 1.67.0 mm
Welding current control		stepless	stepless
Power factor at 100 %		0.89	0.90
Efficiency at 100 %		0.89	0.89
Degree of protection		IP23S	IP23S
Operating temperature range		-20+50 °C	-20+50 °C
EMC class		A	А
External dimensions	$L \times W \times H$	570 x 270 x 370 mm	570 x 270 x 370 mm
Weight (without cables)		20.5 kg	23.5 kg

Ordering information

Master S		
Master S 400		632140001
Master S 500		632150001
Master S 500 offshore	For extreme conditions	632150001C1
Master S 400 AU*		6321400AU
Master S 500 AU*		6321500AU
Welding cable	5 m, 50 mm ²	6184501
	10 m, 50 mm ²	6184502
	5 m, 70 mm ²	6184701
	10 m, 70 mm ²	6184702
Earth return cable	5 m, 50 mm ²	6184511
	10 m, 50 mm ²	6184512
	5 m, 70 mm ²	6184711
	10 m, 70 mm ²	6184712
R10 Remote control	5m	6185409
	10m	618540901
Slide bars		SP007023

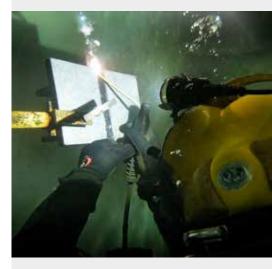
* The AU models are for the Australian and New Zealand markets.



Clear and easy to use display, plus adjustment for Arc dynamics and Hot start values.



Single man lift capability in a powerful, compact package.



On land and sea, Master S 400 and S 500 provide the power to get the job done.



Mobile, heavy duty carbon arc gouging power

- Designed specifically for carbon arc gouging
- Extremely power efficient
- Compact and easy to move
- Panel or remote current adjustment
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Shipyards
- Metal fabrication workshops
- Foundries

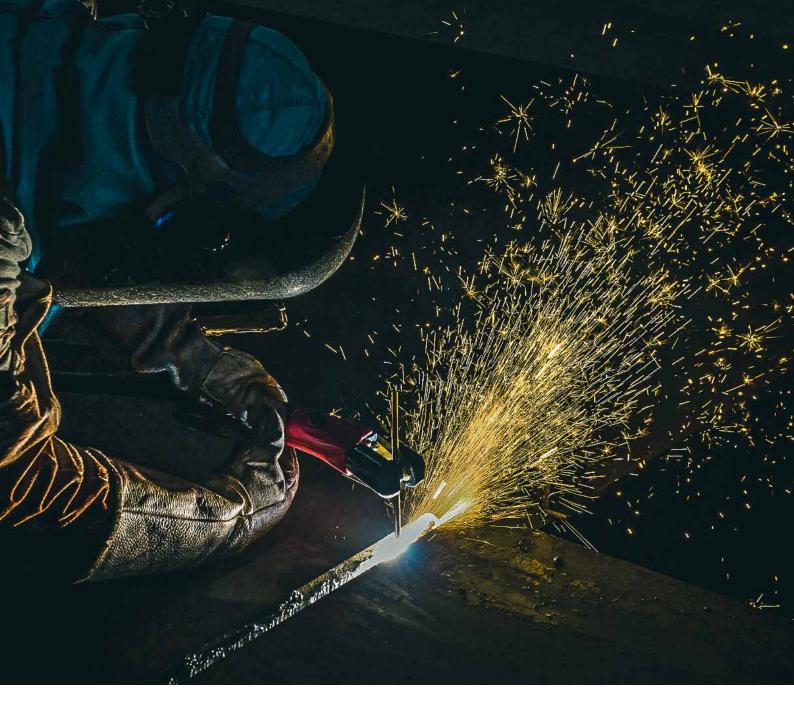
The heavy-duty gouging specialist

KempGouge offers 800 amps of gouging power with 50% duty cycle. The characteristics curve is specifically designed for carbon arc gouging, so gouging properties are optimised and noise levels kept very low. Package includes power source, control panel, and transport unit for easy mobility. KempGouge lets you open roots or faulty welds, prepare welding grooves, cut metals, pierce holes, clean casts and remove excess metal.

KempGouge ARC 800 gives productivity and convenience to gouging work.

When equipped with the optional R10 remote control unit, the gouging current can be adjusted directly from the work site, eliminating the need to move between the work piece and the power source. The carbon arc gouging electrode holder GT4000 is designed for use with the KempGouge and works with round or flat electrodes. The air pressure used for gouging can be adjusted via the control mounted on the holder itself.





VALUE FEATURES



EXTREMELY POWER EFFICIENT Electrically power efficient.



EASY TO MOVE the machine and adjust the gouging current.



FAST AND EFFECTIVE removal of weld defects.

GOUGING

KempGouge ARC 800 is a fast, effective, and safe way to:

- Open root welds
- Remove faulty welds and cracks
- Prepare welding grooves
- Cut metal
- Pierce holes



KempGouge ARC 800 makes easy work of carbon arc gouging tasks.

Technical specifications

KempGouge™ ARC 800		
Connection voltage	3~, 50/60 Hz	400 V, -15+20 %
Rated power at max. current	50 % ED	44 kVA
Output	50 % ED	800 A/44 V
	100% ED	600 A/44 V
Fuse		63 A delayed
Welding range		20 A/20 V800 A/44 V
Connection cable	H07RN-F	4G16 (16 mm)
Open circuit voltage		50 V
Power ratio at 100 % ED		0.9
Efficiency at 100 % ED		0.90
External dimensions	L×W×H	700 x 660 x 1400 mm
Weight with transport unit		115 kg

Ordering information

Power Sources		
KempGouge ARC 800 (includes transport unit)		6284000
Cables		
Connection cable (incl. 63 A plug)	5 m, 4 x 16 mm ²	W000869
Connection cable (incl. 63 A plug)	10 m, 4 x 16 mm ²	W003408
Earth return cable	5 m, 120 mm ²	61841201
Earth return cable	10 m, 120 mm ²	61841202
Gouging electrode holder		
GT 4000 with 2.1 m cable		6285400
Remote control units		
R10 5 m		6185409
R10 10 m		618540901
Remote control extension cable for R10 10 m		6185481



The carbon arc gouging electrode holder GT4000 is designed for use with the KempGouge and works with round or flat electrodes.



KempGouge ARC 800 can be equipped with a R10 remote control unit, that lets you adjust the gouging current directly from the work site.



A mobile, heavy duty carbon arc gouging power source for the removal of many types of metals and for cutting tasks.

ArcValidator



 Up to 80% faster than manual validation process

- Fast and accurate, works with all welding machine makes and models *
- Fully automated for the most sophisticated Kemppi equipment
- Step-by-step process guidance
- Includes PC software and certificate creation
- Integrated wire speed measurement
- Supports IEC 60974-14 standard requirements
- * Measuring accuracy up to 550 A
- Designed and manufactured in Finland



WELDING PROCESS COMPATIBLE

The complete solution for welding equipment validation

Next step solution

Kemppi ArcValidator is an automated and universal solution for validating arc welding equipment accuracy. The ArcValidator solution speeds up the validation process by as much as 80 %.

Systematic and accurate welding equipment validation

ArcValidator provides a streamlined solution, that supportd local quality control through standardised current and voltage validation measures. ArcValidator supports MMA, MIG/MAG as well as TIG welding processes and is universally compatible with almost any standard welding equipment with absolute unit meters.

Efficient, solution-oriented approach

ArcValidation guides and coaches the engineer throughout the validation process, using clear on-screen instructions. All validation data is recorded on the ArcValidator DataStick and later used to prepare the final validation report and the official certificate generated with the ArcValidation PC software.

Each validation has a unique reference number, providing a valuable system asset when working at large-scale sites, with welding machine fleets, or when managing multiple small site customer service visits in a working day.

Controlling quality made accurate and comparable

ArcValidator meets the very latest standards requirements, measuring the necessary components and making sure your welding equipment can meet the necessary standards for accurate setting to stated WPS/Quality process values.

EQUIPMENT VALIDATION



Why is arc equipment validation necessary?

Welding equipment validation is required to make sure that the standardised level of accuracy and quality is maintained. For example in MIG/MAG welding equipment, this is done by measuring the accuracy and consistency of the welding output - current, voltage as well as wire feed speed. Also the repeatability in the setting of these parameters must be confirmed.

ArcValidator is founded on the requirements defined in the IEC 60974-14 standard for validating arc welding equipment. ArcValidator's compliance with the validation standard is ensured through annual calibration and you can have this done by your Kemppi service workshop.

Clear and consistent reporting tools

Reporting tools guarantee that validation data is recorded and presented clearly and accurately, while the generation of certificates should be highly automated. Kemppi ArcValidation software for PC is simple to use, featuring clear and concise layouts, plus a 'help and guidance' section for first time operators.

Automatic welding validation

Automatic validation mode is available with Kemppi's system class welding equipment. ArcValidator automatically controls and operates the validated equipment – a power source or a wire feeder – through the remote control connection during the validation process.

The user can choose either standard validation (normal accuracy) or precision validation (higher level of accuracy) according to European Standard IEC 60974-14.

EN 1090 is the European standard you need to follow in order to get the CE marking required for steel structure manufacturing and construction. The requirements for arc welding equipment accuracy are defined in EN 60974-1.



ArcValidator RC records the complete validation process data for later transfer to the PC software.



ArcValidator load bank is easy to move around and a universal solution for multibranded fleet validation.

-cul	TS Display #2 50.0
VALIDATION RESUL	Mile 50,0 100,0 200,0 30
12 MAX 0,0 100,0 100,0 200,0	50,0 100,0 200,0 200,0 300,0 100,0 200,0 300,0 300,0 200,0 300,0 300,0 500,0 300,0 500,0 500,0
200,0 200,0 300,0 300,0 500,0 500,0	Display #2 mean 50.0 #1 50.0 10
asured #2 MAX	50.0 50.0 100.0 7 50.0 100.0 200.0 7 100.0 200.0 300.0 200.0 200.0 300.0

ArcValidator PC software manages both the 'pre and post' validation process and ensures easy pass certificate creation and accurate customer record keeping.

MAX processes

Make the seemingly impossible, possible

For challenging welding applications and demanding production targets, new MAX arc performance processes offer increased welding travel speed, improved weld pool control and lower heat input, without the need for an additional voltage sensing cable. The new MAX processes join the already successful Wise modified arc processes and collectively make the seemingly impossible, possible.



MAX Speed increases welding travel speed compared to traditional pulse or spray arc processes. MAX Speed produces clean, high-quality weld seams, effectively reducing labor time and welding costs. MAX Speed is designed for steel and stainless steel welding applications in the PA and PB positions.



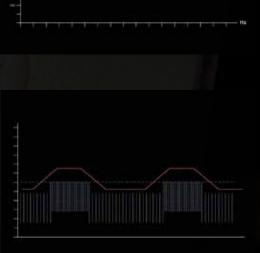
MAX Position helps to manage the gravitational effects on a molten weld pool. Improving control and confidence when working in position, MAX Position is an excellent tool for filling and capping in steel, stainless steel and aluminum applications in the PF position.



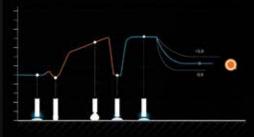
MAX Cool lowers heat input by up to 32%, improving control where excessive temperatures negatively impact weld pool stability and increase joint distortion. MAX Cool is ideal for a variety of applications, including thin sheet fabrication, root welding, gap bridging and joining thin extruded sections in solid Fe, Ss, CuAl8 and CuSi3 filler materials.











See more information about arc performance processes > kemp.cc/special-processes/com



MAX WeldClean

Weld and Clean with one TIG machine

The new MAX WeldClean process is simple and fast to use. Converting your TIG torch to cleaning mode takes just a few moments, so your perfect welds are clean and ready in less time.

You can watch the video of the weld cleaning process with this QR code.



GKENPA

Wise processes

Manage welding skill, productivity and quality

Wise software product family has been developed and tested together with industrial partners, to find the best solutions to problematic welding cases, and has proven successful in production environments. Wise products are welding software solutions, enabling levels of welding performance that otherwise would be impossible to achieve with the standard MIG/MAG welding process. Wise products are the go-to solution for enhanced root closure, constant power management, automated arc length control and precise thin sheet welding.

	Master M		X5 FastMig		
	353	355	358	Auto	Auto Pulse
WiseRoot+					•*
WiseThin+					•*
WisePenetration			•	•	•
WiseFusion		•	•	•	•
WiseSteel			•	•	•

*requires Pulse+ power source and 'V' code suffix interconnection cables set.



Wise<mark>Root</mark>+

WiseRoot+ is a highly efficient and unique tailored arc process for manual and automated root pass welding in ferrous and stainless steel materials. WiseRoot+ process is based on precise voltage measurement and current control. The special voltage sensing cable guarantees actual data from the arc. Only two parameter regulations needed. Wire feed speed and fine tuning. Excellent welding characteristics also with longer cables (up to 30 m). High efficient process » 10% faster than normal MAG welding.

- Best root pass welding on the market
- Produces premium root welds
- Allows wide root gap tolerance
- No need for backing ring or ceramics
- Three times faster than TIG welding
- Very easy to learn and use
- Saves rework costs
- Can decrease joint volume in thick materials, reducing filler materials volume and cost
- Excellent CO₂ welding characteristics

Wise

WiseThin+

WiseThin+ is a tailored cold arc process for manual and automated thin sheet welding. WiseThin+ process is based on precise voltage measurement and current control Mixed gas welding characteristics with pure CO₂. Expands the parameter window and thus reduces the need to use smaller wire diameters. Soft pleasant arc characteristics Excellent welding characteristics for welding plate thicknesses 0.8...3.0 mm. Reduces heat input and thus also deformation. Excellent arc ignition for tack and intermittent welds.

- Excellent CO₂ welding characteristics
- Saves welding costs
- Down hand and all positional welding
- Reduces the amount and size of spatters
- Easy to use
- Produces high quality welds
- Reduced post weld rework
- Higher welding speed than in traditional shot arc welding
- Stable arc for positional welding for thicker plate thicknesses





WisePenetration

WisePenetration is a welding function for synergic and pulsed MIG/ MAG welding. It ensures weld penetration regardless of variation in the contact-tip-to-work distance and keeps the welding power stabilized in all situations.

- Exceptionally stable and intense welding arc
- Enables the welding of deep, narrow groovesEnsured penetration even in case of limited
- visibility or accessibility
- Improved weld quality with less spatter
- Less rework required
- Savings in filler material costs



WiseFusion

WiseFusion creates and maintains an optimal short-circuit characteristic in pulsed MIG/MAG and spray-arc welding applications. Keeping the arc length optimally short for manual and automated welding, WiseFusion ensures consistent weld quality in all positions, and once set, eliminates the need for regular parameters adjustments.

- Automatic arc length regulation for pulsed MIG/ MAG and spray-arc welding
- Excellent weld pool control for out-of position
 welding
- Narrow and energy-dense arc
- Improved weld quality and appearance
- Increased welding speed





WiseSteel is a welding function especially designed to tackle the challenges of globular transfer. It alternates short arc transfer with spray transfer, which reduces spatter by up to 30%, and produces high-quality welds characterized by a regular fish-scale pattern. In the spray arc mode it increases travel speed up to 30%.

- Easy and efficient MIG welding of carbon steels
- Easier weld pool control in the PF position
- Precise heat input control on the weld pool sides
- Higher travel speed increases productivity
- Less distortion with high-energy-density arc
- Reduced droplet size enables welding in vertical and overhead positions
- Savings in grinding and straightening costs

Universal WPS

For all welding equipment brands



Get the jump on EN 1090 with Kemppi

Benefits

- The most comprehensive solution on the market, covering workshop as well as on-site work for both MIG/MAG and MMA welding.
- All six packages can be used with all welding machine brands.
- MIG/MAG package offers support for solid, flux-cored and metal-cored wires, and it contains 84 qualified and tested MIG/MAG WPSs.
- MIG/MAG package for tube welding contains 28 WPSs for structural tubes and pipes.
- MMA contains 28 WPSs and includes practical information for welding of truss connections.
- All packages are valid also when impact-strength requirements apply.
 For more information on filler material classification, visit www.kemppi.com/ wps.

Kemppi Universal WPS packages

From 1 July 2014, all structural steel and aluminium products within EU must be CE marked inline with EN1090/2, as stated in the Construction Products Regulation (CPR). This EU standards requirement supports overall welded product quality objectives and safety, and Kemppi provide a number of solutions that help support your work based functions compliance and supporting documentation.

A comprehensive solution for workshop and on-site work and all welding equipment brands

To meet the requirements of the EN 1090-2 standard, we offer universal WPS (welding procedure specifications) packages for workshop and project-site use. These WPSs apply to both MIG/MAG and MMA welding. Kemppi is the first welding machine manufacturer in the world to offer Universal WPS package sets that support the constantly changing environments of workshops and construction sites, where there is a strong need for clear and simple instructions.

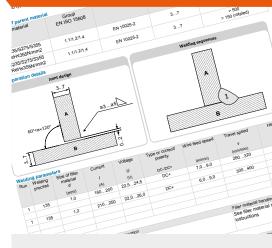
Kemppi Universal WPSs are compatible with all brands of welding machines

Kemppi WPSs for both MIG/MAG and MMA welding are compatible with all welding machine brands. Having a versatile fleet of welding machines is not a problem; Kemppi WPSs can be used with all of them. The universal welding procedure specifications comply in full with EN ISO 15612 and can be used for steel structures in execution classes EXC1 and EXC2 according to EN 1090-2.

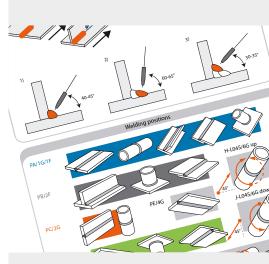
Just one WPS package needed per site

You won't have to buy a separate licence for each welding machine. Our WPSs are valid in workshops and sites running under the same technical and quality control.

WELDING PROCEDURE SPECIFICATIONS



Clear and easy-to-read welding instructions



Every WPS sheet has detailed illustrations of welding positions and angles described on the backside



You can save time and money when you purchase and access a ready-made WPS package

UNIVERSAL WPSS FOR MIG/MAG WELDING IN WORKSHOPS

This comprehensive package contains 84 MIG/MAG WPSs that are compatible with all MIG/MAG welding machines. They cover some of the most used solid, metal cored and flux cored wires.

UNIVERSAL WPSS FOR MIG/MAG TUBE WELDING

This new package with 28 WPSs is developed specifically for MIG/MAG butt welding of structural tubes and pipes. They cover some of the most used solid and flux cored wires. As a bonus, the package contains eight WPSs for Kemppi WiseRoot+ welding process.

UNIVERSAL WPSS FOR MMA WELDING ON WORK SITES

Kemppi's universal WPS package for MMA welding is based on customer needs. It contains all necessary welding procedure specifications, compatible with all MMA welding machines.

UNIVERSAL WPSS FOR STAINLESS STEELS

The package developed for austenitic stainless steels contains 21 WPSs for MIG/MAG and MMA welding.

UNIVERSAL WPSS FOR TUBE WELDING

The package developed for stick (MMA) tube welding contains 8 WPSs in total. These WPSs are suitable for welding structural tubes and pipes in steel structures.

UNIVERSAL WPSS FOR PIPE FILLET WELDS

The MIG/MAG package for pipe fillet welds supports solid flux-cored wires and contains 6 WPSs. The package also includes WPSs for 30 to 90-degree pipe fillet welds.

KEMPPI WPS SERVICE SITE FOR REGISTRATION, ADMINISTRATION AND UPDATES

You can register to Kemppi's WPS online service with a registration key, which will be available after the WPS package has been purchased. From the online service, you can download and print WPSs and WPQRs. The WPSs are available in multiple languages.

WHERE YOU CAN BUY

You can find more information at www.kemppi.com

Ordering codes

Package type	Ordering code
Universal WPS package for MIG/MAG	6800003
Universal WPS package for MMA	6800002
Universal WPS package for MIG/MAG tube welding	6800005
Universal WPS package for stainless steel	6800007
Universal WPS package for stick (MMA) tube welding	6800008
Universal WPS package for pipe to plate fillet welding	6800009

For more information, please visit our WPS Service Site at http://www.kemppi.com/wps

You can also contact our experts directly at weldingservices@kemppi.com



Insight Creates Value

Benefits

- Suitable for any size and type of organization that performs welding
- Support for EN ISO, ASME, AWS, AS/ NZS and JIS standards
- Effortless access to dashboard via web
 browser
- Easy management of your welding fleet and other devices, connected or non-connected
- Keep up with validations and yearly maintenance tasks with email reminders
- Easy management of WPS, WPQR and pWPS documents
- Fast welder qualification prolongation with expiry notifications
- 100% traceability and verified WPS compliance for each weld
- Accurate heat input calculation
- Real-time quality control regardless of your location
- Digital WPS documents are always upto-date and available on the go
- Cloud service is ready to use without any software installations
- Compatible with any welding machine brand
- For manual and robotic welding

Universal solution for managing welding production

Welding quality control. Management of WPS documents and qualification certificates. Managing your welding fleet. Monitoring of arc-on time. Heat input calculation. Traceability of individual welds. You name it, WeldEye does it.

The WeldEye welding management software has been developed to make daily welding-related tasks easier and ensure top-notch welding quality with automated processes. Its modular structure is based on several useful functions that serve various industries. Different combinations of the WeldEye modules make sure that the solution matches the scale, characteristics, and needs of your welding production.

WeldEye can be integrated with any welding machine brand. Just connect the Digital Connectivity Module (DCM) to the equipment (additinal ARC Adapters may be needed) and pair it with the WeldEye mobile app, and all welding data will flow automatically and wirelessly to the app in real time. Data synchronization to the WeldEye cloud service happens either via mobile network or Wi-Fi connection.

Discover more at **www.weldeye.com**

WELDING MANAGEMENT SOFTWARE



WeldEye ArcVision offers real-time and accurate data on your daily welding work. It tracks and records arc-on time and welding parameters for better insight into welding production. Raw data is collected digitally from connected welding stations and uploaded wirelessly to WeldEye ArcVision.



Welding Procedures simplifies and speeds up the management of WPS, WPQR, and pWPS documents. It fits any size and type of company with welding operations and supports most common international welding standards. When creating your own welding procedure specifications, be sure to also check out the integrated drawing tool for weld joint sketching.



Personnel and Qualifications provides efficient tools for managing personnel information and qualification certificates. It includes predefined certificate templates that are automatically updated whenever international welding standards change. Prolonging the qualifications is fast and easy, and you will also get expiry notifications by email well in advance.



Quality Control verifies welding quality compliance with welding procedure specifications. By collecting welding parameters and other identifiers from the workstations, it provides 100% traceability for each weld, workpiece, and project. Any deviations will be reported immediately, which enables real-time quality control and ultimately reduces overhead costs. Various useful functions, such as digital work orders, keep you updated on welding progress.



WeldEye Fleet Management makes managing all welding devices and other equipment, regardless of the manufacturer simple and easy. Fleet management keeps an eye on your devices, their validation and maintenance dates, sends email reminders about the upcoming validation or maintenance dates. It also stores validation certificates and maintenance reports so everything can be found from one single system. Fleet management can be used with connected or non-connected machines.

Free WeldEye trials available

Test free of charge with no obligation.

- 3-month trial for WeldEye ArcVision
- 14-day trial for WeldEye for Welding Procedure and Qualification Management

Start free trial at kemp.cc/weldeye-trial





The Digital Connectivity Module (DCM) is natively compatible with Kemppi's FastMig (including X5 FastMig) and new MasterTig product families, and with any other welding equipment model or brand by using the WeldEye adapters. X8 MIG Welder features native connectivity with WeldEye, which means no additional devices are required.



By using the WeldEye mobile application, welders can browse their company's WPS library, receive digital work orders, report work progress, and get feedback on their welds – including heat input values.



The WeldEye dashboard gives you an overview of what is happening in welding production. As a cloud service, WeldEye does not require any software installations and is always up to date. You can easily login via web browser from any device, and monitor welding progress wherever you are.



WeldEye ArcVision

Gain insight into arc-on time and welding

parameters

WeldEye ArcVision collects data automatically from all connected welding stations without additional actions from machine users:

- Arc-on time per hour, day, week, or month
- Welding parameters (A; V)
- Filler wire usage (kg)
- Energy consumption (kWh)

Clear visualizations make production analysis straightforward:

- Station-specific data with latest welds
- Arc-on time comparison views
- Real-time use of welding machines on workshop layout
- Machine-specific information, e.g. setup, software versions
- Main view customization options
 with widgets

Simple solution for monitoring welding productivity

WeldEye ArcVision is an integrated Industry 4.0 solution that tracks and records arc-on time and welding parameters for better insight into welding production. Raw data is collected digitally from connected welding stations and uploaded wirelessly* to WeldEye ArcVision. The data is then visualized into clear tables and graphs that can be filtered based on different needs and viewed conveniently from your laptop's web browser.



Activate your free three-month trial license of WeldEye ArcVision with no obligation. The trial license also includes WeldEye's Welding Procedures module, allowing you to test the digital WPS (dWPS) feature with X5 FastMig.

Read more on weldeye.com

*X5 Wire Feeder APC or Master M 358 models can be connected to WeldEye ArcVision without additional hardware.



Accessories

Wire feeder consumable kits	115
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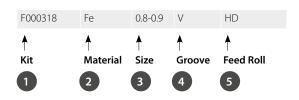


Wire feeder consumable kits

Kemppi wire feeder with original consumables guarantees trouble-free operation in all your demanding application. With high quality consumables you gain excellent stability and exact start and stop accuracy of welding wire.

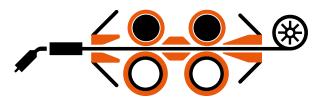
Kemppi wire feeder consumable kits include consumables that need periodic replacement to keep the wire feeder running and suitable for various welding jobs.

For more information on suitability of consumables, please visit Kemppi Configurator: configurator.kemppi.com





* This is an example of a typical consumable kit. The number of feed rolls depends on the wire feeder type.



Typical wire feed mechanism

4	Groove	type		
-	U	U Groove	U	
	V	Plain V Groove	V	
	VK	Knurled V Groove	V≡	
	т	Trapezoid groove		

1	
2	
4	7

Material of the wire							
Fe	Steel	МС	Metal-cored wire				
AI	Aluminium	Cu	Copper				
FC	Flux-cored wire	Ss	Stainless steel				



d Roll					
	Standard, plastic feed roll				
	Heavy duty, metal feed roll				



s

ize of the wire (mm)					
	1	ø 0.6			
	1	ø 0.8-0.9			
	1	ø 1.0			
	1	ø 1.2			
	1	ø 1.4			
	1	ø 1.6			
	1	ø 2.0			
	1	ø 2.4			



For more information on suitability of consumables, please visit Kemppi Configurator at https://configurator.kemppi.com/

Wire feeder consumable kits

Kempact RA 181A, 251 R, 251 A

F000241	Al	1.0	U	-
F000242	Al	1.2	U	-
F000333	Cu	0,6	V	-
F000236	Cu	0.8-0.9	V	-
F000237	Cu	1.0	V	-
F000238	Cu	1.2	V	-
F000333	Fe	0,6	V	-
F000236	Fe	0.8-0.9	V	-
F000237	Fe	1.0	V	-
F000238	Fe	1.2	V	-
F000239	MC/FC	1.0	VK	-
F000240	MC/FC	1.2	VK	-
F000333	Ss	0.6	V	-
F000236	Ss	0.8-0.9	V	-
F000237	Ss	1.0	V	-
F000238	Ss	1.2	V	-

Kempact RA 253R, 253A, 253RMW, 253AMV, 323R, 323A, 323RMV, 323AMV

F000234	Al	1.0	U	-
F000235	Al	1.2	U	-
F000330	Fe	0.8-0.9	V	-
F000331	Fe	1.0	V	-
F000332	Fe	1.2	V	-
F000329	Fe, Cu	0.6	V	-
F000229	Fe, Cu	0.8-0.9	V	-
F000230	Fe, Cu	1.0	V	-
F000231	Fe, Cu	1.2	V	-
F000330	MC/FC	0.8-0.9	V	-
F000331	MC/FC	1.0	V	-
F000332	MC/FC	1.2	V	-
F000232	MC/FC	1.0	VK	-
F000233	MC/FC	1.2	VK	-
F000329	Ss	0.6	V	-

F000229 Ss 0.8-0.9 V - F000230 Ss 1.0 V - F000231 Ss 1.2 V -					
	F000229	Ss	0.8-0.9	V	-
E000231 Ss 12 V -	F000230	Ss	1.0	V	-
1000231 33 112 1	F000231	Ss	1.2	V	-

SuperSnake GTX

-				
F000507	FE	1.0	V	-
F000508	FE	1.2	V	-
F000509	FE	1.6	V	-
F000510	FE	1.0	V	HD
F000511	FE	1.2	V	HD
F000512	FE	1.6	V	HD
F000513	SS	1.0	V	-
F000514	SS	1.2	V	-
F000515	SS	1.4	V	-
F000516	SS	1.6	V	-
F000517	SS	1.0	V	HD
F000518	SS	1.2	V	HD
F000519	SS	1.6	V	HD
F000520	MC/FC	1.2	VK	-
F000521	MC/FC	1.4-1.6	VK	-
F000522	MC/FC	1.2	VK	HD
F000523	MC/FC	1.4-1.6	VK	HD
F000524	AL	1.2	U	-
F000525	AL	1.4	U	-
F000526	AL	1.6	U	-

SuperSnake GTX04HD

F000367	FE	0.8	V	-
F000368	FE	1.0	V	-
F000369	FE	1.2	V	-
F000370	FE	1.4	V	-
F000371	FE	1.6	V	-
F000372	FE	0.8	V	HD
F000373	FE	1.0	V	HD
F000374	FE	1.2	V	HD
F000375	FE	1.6	V	HD
F000387	MC/FC	1.0	VK	-

F000388	MC/FC	1.2	VK	-
F000389	MC/FC	1.4-1.6	VK	-
F000390	MC/FC	1.0	VK	HD
F000391	MC/FC	1.2	VK	HD
F000392	MC/FC	1.4-1.6	VK	HD
F000394	AL	1.2	U	-
F000395	AL	1.4	U	-
F000396	AL	1.6	U	-

X3 FastMig

	5			
F000202	SS, CU	0.6	V	-
F000203	SS, CU	0.8-0.9	V	-
F000204	SS, CU	1.0	V	-
F000205	SS, CU	1.2	V	-
F000206	SS, CU	1.4	V	-
F000207	SS, CU	1.6	V	-
F000208	SS, CU	2.0	V	-
F000209	SS, CU	2.4	V	-
F000210	FE	0.8-0.9	V	HD
F000211	FE	1.0	V	HD
F000212	FE	1.2	V	HD
F000213	FE	1.4	V	HD
F000214	MC/FC	1.0	VK	-
F000215	MC/FC	1.2	VK	-
F000216	MC/FC	1.4-1.6	VK	-
F000217	MC/FC	2.0	VK	-
F000218	MC/FC	2.4	VK	-
F000219	MC/FC	1.0	VK	HD
F000220	MC/FC	1.2	VK	HD
F000221	MC/FC	1.4-1.6	VK	HD
F000222	MC/FC	2.0	VK	HD
F000223	AL	1.0	U	-
F000224	AL	1.2	U	-
F000225	AL	1.6	U	-
F000226	AL	1.0	U	-
F000227	AL	1.2	U	-
F000228	AL	1.6	U	HD
F000318	SS	0.8-0.9	V	HD



U = U Groove V = Plain V Groove VK = Knurled V Groove T = Trapezoid Groove - = Standard (contains plastic feed roll)

HD = Heavy Duty kit (contains metal feed rolls)

MC/FC = Metal/Flux Cored

For more information on suitability of consumables, please visit Kemppi Configurator at https://configurator.kemppi.com/

F000318	Fe	0.8-0.9	V	HD
↑	↑	↑	↑	↑
Package	Material	Size	Groove	Feed Roll

F000319	SS	1.0	V	HD	
F000320	SS	1.2	V	HD	
F000321	SS	1.6	V	HD	
F000322	FE	0.8-0.9	V	-	
F000323	FE	1.0	V	-	
F000324	FE	1.2	V	-	
F000325	FE	1.4	V	-	
F000326	FE	1.6	V	-	
F000327	FE	2.0	V	-	
F000328	FE	2.4	V	-	
F000365	AL	1.4	U	-	

MinarcMig Auto

W001692	FE, MC/FC, SS, AL, CU	0.8-1.0	VK	HD
W000749	FE, MC/FC, SS, AL, CU		V	HD
SP000651		0.6- 1.0	-	-

X5 FastMig, X5 FastMig Pulse

F000455 Ss (FE, CU) 0.8-0.9 V - F000456 Ss (FE, CU) Ss (FE, CU) V - F000457 Ss (FE, CU) 1.2 V - F000458 Ss (FE, CU) 1.2 V HD F000459 Ss (FE) 1.0 V HD F000460 Ss (FE) 1.2 V HD F000460 Ss (FE) 1.2 V HD F000461 Al 1.0 U - F000462 Al 1.2 U - F000463 FE (MC/FC) 0.8-0.9 V - F000463 FE (MC/FC) 1.0 V - F000488 FE (MC/FC) 1.2 V - F000489 FE (MC/FC) 1.2 V - F000490 FE (MC/FC) 1.6 V - F000491 FE (MC/FC) 1.0 V HD F000492 FE (MC/FC) 1.0 </th <th></th> <th></th> <th></th> <th></th> <th></th>					
F000457 Ss (FE, CU) 1.2 V - F000457 Ss (FE, CU) 1.2 V - F000458 Ss (FE) 0.8-0.9 V HD F000459 Ss (FE) 1.0 V HD F000460 Ss (FE) 1.2 V HD F000461 Al 1.0 U - F000462 Al 1.2 U - F000462 Al 1.2 U - F000463 FE (MC/FC) 0.8-0.9 V - F000488 FE (MC/FC) 1.0 V - F000489 FE (MC/FC) 1.2 V - F000490 FE (MC/FC) 1.6 V - F000491 FE (MC/FC) 1.6 V HD F000492 FE (MC/FC) 1.0 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.0 V HD F000495 FE (MC/FC) 1.6 V HD	F000455	Ss (FE, CU)	0.8-0.9	V	-
F000458 Ss (FE) 0.8-0.9 V HD F000459 Ss (FE) 1.0 V HD F000460 Ss (FE) 1.2 V HD F000460 Ss (FE) 1.2 V HD F000461 Al 1.0 U - F000462 Al 1.2 U - F000488 FE (MC/FC) 0.8-0.9 V - F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000490 FE (MC/FC) 1.6 V - F000491 FE (MC/FC) 0.8-0.9 V HD F000492 FE (MC/FC) 1.6 V - F000493 FE (MC/FC) 1.0 V HD F000493 FE (MC/FC) 1.2 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6	F000456	Ss (FE, CU)	Ss (FE, CU)	V	-
F000459 Ss (FE) 1.0 V HD F000460 Ss (FE) 1.2 V HD F000461 AI 1.0 U - F000462 AI 1.2 U - F000462 AI 1.2 U - F000488 FE (MC/FC) 0.8-0.9 V - F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000457	Ss (FE, CU)	1.2	V	-
F000460 Ss (FE) 1.2 V HD F000461 Al 1.0 U - F000462 Al 1.2 U - F000462 Al 1.2 U - F000488 FE (MC/FC) 0.8-0.9 V - F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000458	Ss (FE)	0.8-0.9	V	HD
F000461 AI 1.0 U - F000462 AI 1.2 U - F000488 FE (MC/FC) 0.8-0.9 V - F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.2 V - F000492 FE (MC/FC) 1.6 V - F000493 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000493 FE (MC/FC) 1.2 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000459	Ss (FE)	1.0	V	HD
F000462 AI 1.2 U - F000488 FE (MC/FC) 0.8-0.9 V - F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000460	Ss (FE)	1.2	V	HD
F000488 FE (MC/FC) 0.8-0.9 V - F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000493 FE (MC/FC) 1.6 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000461	Al	1.0	U	-
F000489 FE (MC/FC) 1.0 V - F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000493 FE (MC/FC) 1.2 V HD F000494 FE (MC/FC) 1.2 V HD	F000462	Al	1.2	U	-
F000490 FE (MC/FC) 1.2 V - F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.2 V HD	F000488	FE (MC/FC)	0.8-0.9	V	-
F000491 FE (MC/FC) 1.6 V - F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000489	FE (MC/FC)	1.0	V	-
F000492 FE (MC/FC) 0.8-0.9 V HD F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000490	FE (MC/FC)	1.2	V	-
F000493 FE (MC/FC) 1.0 V HD F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000491	FE (MC/FC)	1.6	V	-
F000494 FE (MC/FC) 1.2 V HD F000495 FE (MC/FC) 1.6 V HD	F000492	FE (MC/FC)	0.8-0.9	V	HD
F000495 FE (MC/FC) 1.6 V HD	F000493	FE (MC/FC)	1.0	V	HD
	F000494	FE (MC/FC)	1.2	V	HD
F000496 Ss (FE, CU) 1.4 V -	F000495	FE (MC/FC)	1.6	V	HD
	F000496	Ss (FE, CU)	1.4	V	-

F000497	Ss (FE, CU)	1.6	V	-
F000498	Ss (FE)	1.6	V	HD
F000499	MC/FC	1.0	VK	-
F000500	MC/FC	1.2	VK	-
F000501	MC/FC	1.4-1.6	VK	-
F000502	MC/FC	1.0	VK	HD
F000503	MC/FC	1.2	VK	HD
F000504	MC/FC	1.4-1.6	VK	HD
F000505	MC/FC	2.0	VK	HD
F000506	Al	1.6	U	-

Master M 205, 323

F000527	FE (MC/FC)	0.8-0.9	V	-
F000528	FE (MC/FC)	1.0	V	-
F000529	FE (MC/FC)	1.2	V	-
F000530	FE (MC/FC)	0.8-0.9	V	HD
F000531	FE (MC/FC)	1.0	V	HD
F000532	FE (MC/FC)	1.2	V	HD
F000533	SS, CU (FE)	0.8-0.9	V	-
F000534	SS, CU (FE)	1.0	V	-
F000535	SS, CU (FE)	1.2	V	-
F000536	MC/FC	1.0	VK	-
F000537	MC/FC	1.2	VK	-
F000538	MC/FC	1.4-1.6	VK	-
F000539	MC/FC	1.0	VK	HD
F000540	MC/FC	1.2	VK	HD
F000541	MC/FC	1.4-1.6	VK	HD
F000542	AL	1.0	U	-
F000543	AL	1.2	U	-

– Master M 353, 355, 358

F000455	Ss (FE, Cu)	0.8-0.9	V	-
F000456	Ss (FE, Cu)	1.0	V	-
F000457	Ss (FE, Cu)	1.2	V	-
F000458	Ss (FE)	0.8-0.9	V	HD
F000459	Ss (FE)	1.0	V	HD
F000460	Ss (FE)	1.2	V	HD
F000461	Al	1.0	U	-

F000462	Al	1.2	U	-
 F000488	FE (MC/FC)	0.8-0.9	V	-
F000489	FE (MC/FC)	1.0	V	-
F000490	FE (MC/FC)	1.2	V	-
F000492	FE (MC/FC)	0.8-0.9	V	HD
F000493	FE (MC/FC)	1.0	V	HD
F000494	FE (MC/FC)	1.2	V	HD
F000494	FE (MC/FC)	1.2	V	HD
F000499	MC/FE	1.0	VK	-
F000500	MC/FE	1.2	VK	-
F000502	MC/FE	1.0	VK	HD
F000503	MC/FE	1.2	VK	HD

Remote controls



Increase welding quality, work efficiency, comfort and safety with appropriate, easy to use remote controls. Gun remotes, handheld and pedal control units reduce the need for movement between workplace and power source, increasing work efficiency and reducing fatigue.

Remote controls	R10	R10	HR40	HR43	HR45	HR53	HR55
Length (m)	5	10	5	5	Wireless	5	5
Order code	6185409	618540901	HR40	HR43	HR45	HR53	HR55
Minarc 220	•	•					
MinarcTig	•	•					
KempGouge ARC 800	•	•					
Master S	•	•					
Master M			•	•			•*
Minarc T 223 ACDC	•	•					
MasterTig				•	•		
X3 FastMig						•	
X5 FastMig			•	•			•
Master 315				•	•		

*Only Master M 350 serie **HR53 deliveries start Q4 2024



FR41

R11F

FR43

FR45

Remote controls	R11F	FR41	FR43	FR45
Length (m)	5	5	5	Wireless
Order code	6185407	FR41	FR43	FR45
MasterTig			•	•
MinarcTig	•			
Minarc T 223 ACDC		•		

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Ancillary products



Earth clamps/Conne	Order code	
Kemppi 200, 200A	2535 mm, cable shoe connection ø 6 mm	9871531
Kemppi 300, 300A	5070 mm, cable shoe connection ø 6 mm, copper braid between the connector jaws	9871540
Kemppi 500, 500A	7095 mm, cable shoe connection ø 8 mm, copper braid between the connector jaws	9871541
Kemppi G- 600, 600A	35120 mm, cable connection with hex screw, brass frame, screw-type	9871560







/200, 300 A	321/16–25	9871021
/250, 400 A	421/16–25	9871031
/300, 500 A	500/35-50	9871041
/400, 600 A	855/50–70	9871051
A	285/10–25	9871060
A	485/35–70	9871070
A	535/50–70	9871080
	250, 400 A 300, 500 A 400, 600 A A	421/16-25 300, 500 A 500/35-50 400, 600 A 855/50-70 A 285/10-25 A 485/35-70

All have a copper alloy frame and cable connection with a hex screw



Cable connectors		Order code	Order code
Current durability A	Cable mm ²	Male	Female
200	1025	9771650	9771626
250	35	9771671	9771628
315	50	9771670	9771627
400	70	9771680	9771629
500	95		9771630
600	95	9771681	
Branch connector (1 male and 2 female connections)	70/90		9771637
Adapter Euro-Dix	70/95	SP801140	

Ancillary products

	Ordering code	X5 FastMig	X3 FastMig	Master M 353,355,358	Master M 205,323
Wire Feeder Rotating Plate	X8702010000	•			
X5 Rotating Plate	SP801116	•			
X5 Double Wire Feeder Rotating Plate	X5702070000	•			
X5 Wire Feeder Counterbalance Arm	X5702060000	•			
X5 Wire Feeder Hanger For Boom	X5702040000	•			
X5 Accessory Tray	X5701040000	•			
Stand for X5 Power Source	X5701050000	•			
Wire Feeder HD300 Hanger for Boom	X5702041000	•	•		
Double Wire Feeder Hanger for Boom	X5702050000	•			
X5 Wire Feeder 200 Protection Frame	X5702080000	•			
X5 Wire Feeder Protection Sliders	X5702090000	•			
X5 Wire Feeder HD300 Protection Sliders with gun support	X5702091000	•	•		
X5 Wire Feeder gun support for wire feeder trolley	X5702092000	•			
Filter for Power source, X3	SP027772		•		
Filter for Power source, X5	SP016870	•	•		
Filter for Power source, MSM 353/355/358	SP023312			•	
Filter for Power source, MSM 205/323	SP023492				•



WIRE FEEDER ROTATING PLATE



DOUBLE WIRE FEEDER ROTATING PLATE



ACCESSORY TRAY



X5 WIRE FEEDER 200 PROTECTION FRAME



X5 DOUBLE WIRE FEEDER HANGER FOR BOOM



X5 WIRE FEEDER PROTECTION SLIDERS



X5 WIRE FEEDER HD300

HANGER FOR BOOM

COUNTER BALANCE

ARM

X5 WIRE FEEDER HD300 PROTECTION SLIDERS WITH GUN SUPPORT



WIRE FEEDER HANGER FOR BOOM



STAND FOR X5 POWER SOURCE



X5 WIRE FEEDER GUN SUPPORT FOR WIRE FEEDER TROLLEY



X5 WIRE FEEDER HANGER FOR BOOM

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FILTER FOR POWER SOURCE



Euro adapter for MinarcMig and MinarcMig Evo	
Euro adapter kit	W008366
Wire liner, 0.6–0.8 mm for Euro adapter	SP008578
Red wire liner, 0.9–1.0 mm for Euro adapter	SP008856

Gun holders	
GH 10 Gun Holder	6256010
GH 20 Gun Holder	6256020
GH 30 Gun Holder	6256030



EURO ADAPTER FOR MINARCMIG AND MINARCMIG EVO



Gun holders are primarily intended to be attached to welding machines, but they can also be attached to transport units and welding tables.

2-wheel transport units



5 ACDC

4-wheel transport units



P45MT



X5 Gas Cylinder Cart



X3T4

5 ACDC

5 DC 5 DC



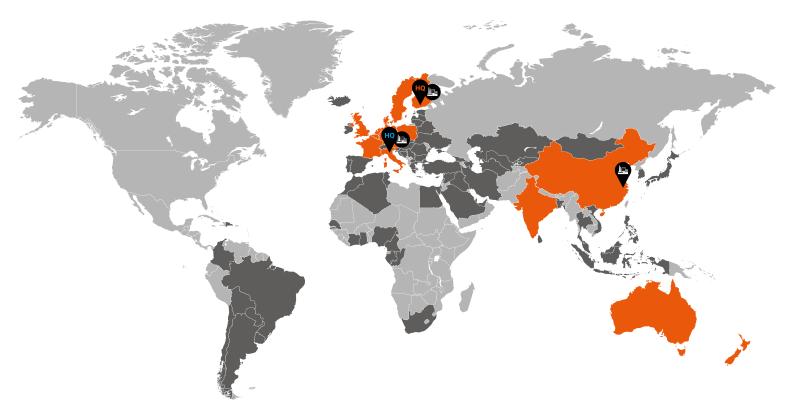


P43MT	AX Trolley		rTig 23	rTig 32	rTig 42	r M 353	r M 355	r M 358	ır 315	rTig 53	FastMig	FastMig
	Order code	Weight, kg	Maste	MasterTig	Master	Master	Master	Master	Master	MasterTig	X5 Fas	X3 Fas
P45MT	P45MT	30,5	•	•	•	•	•	•	•			
P43MT	P43MT	13,5	•	•	•	•	•	•	•			
X5 Gas Cylinder Cart	X5701020000									•	•	•*
X3T4 4-wheel Trolley	X3T4										•	•
AX Trolley	X5701060000										•	

* Support bar SP027771 is required with X3 FastMig



	Order code	Weight kg	X5 Wire Feeder 300	X5 Wire Feeder 300HD	X3HD300
X5 Wire Feeder Trolley	X5702020000	9,5	•	•	•
X5 Wire Feeder 2-wheel Trolley	X5702010000	9,7	•	•	•



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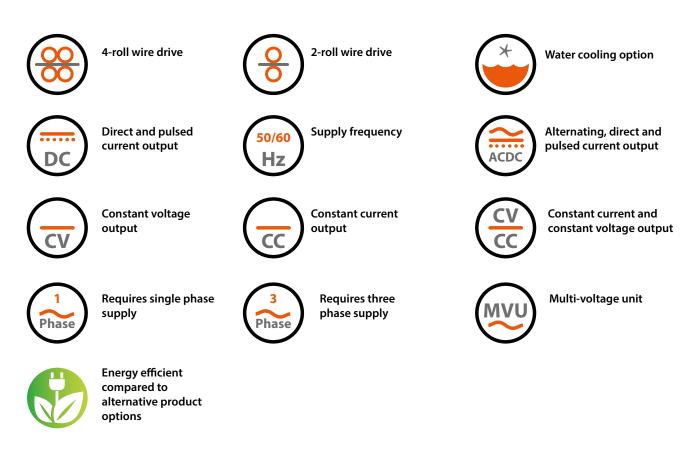
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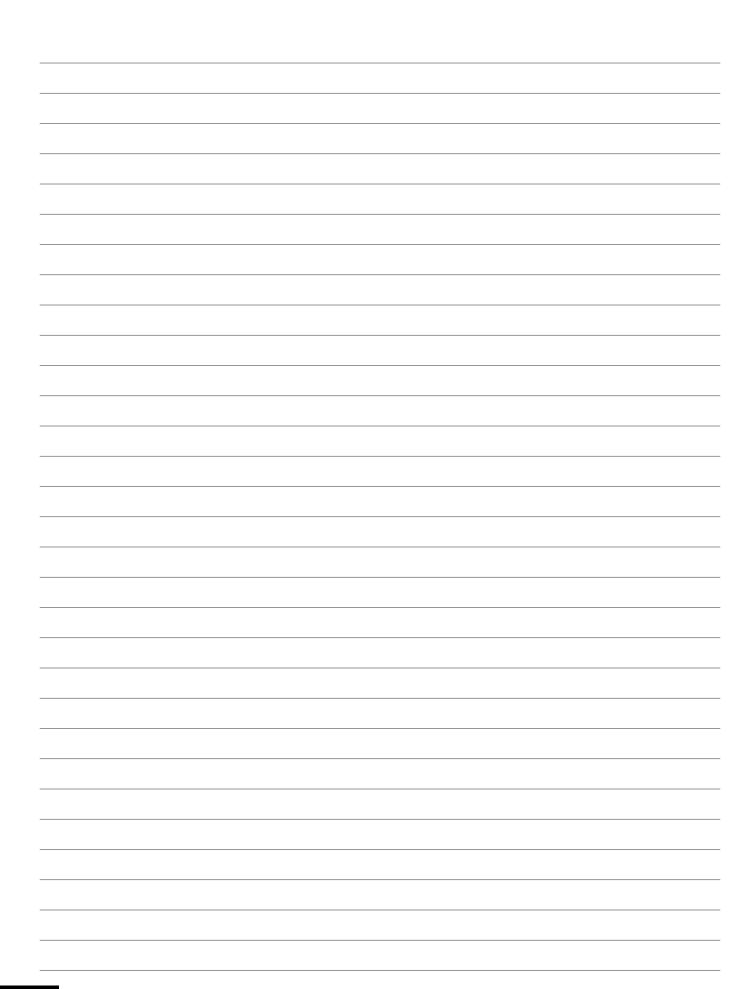
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26	Special symbols
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Special symbols



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Designed for welders

Forerunner in arc welding. Kemppi is the design leader in the arc welding industry. We are committed to boosting the quality and productivity of welding by continuous development of the welding arc and by working for a greener and more equal world. Kemppi supplies sustainable products, digital solutions, and services for professionals from industrial welding companies to single contractors. The usability and reliability of our products is our guiding principle. We operate with a highly skilled partner network covering over 70 countries to make its expertise locally available. Headquartered in Lahti, Finland, Kemppi employs over 650 professionals in 16 countries and has a revenue of 209 MEUR in 2023.

Kemppi - Designed for welders

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