



X8 MIG Welder

THE FUTURE OF WELDING IS HERE

"The X8 MIG Welder is a first-class equipment for demanding, high-quality aluminum welding from the point of view of both arc performance and usability."

– Kimmo Multaniemi, Foreman Boat Production, Buster Boats

Kemppi K8 Welding equipment



THE MOST ADVANCED MULTI-PROCESS WELDING EQUIPMENT IN THE MARKET

NOW AVAILABLE IN FINLAND, GERMANY AND THE NETHERLANDS

If you are looking for an advanced multi-process, multi-voltage welding solution for demanding industrial applications, look no further. The **X8 MIG Welder** covers it all, from synergic and pulsed MIG/MAG and stick (MMA) welding to MIG brazing, cladding, and gouging. The intelligent equipment provides you with extremely precise control of the arc, high-duty welding performance up to 600 A, and modern connectivity through integration with [WeldEye welding management software](#). Supreme usability based on actual user needs is engineered in every aspect of the power source, wire feeder, welding guns, user interface, and other components.

Developed, designed and manufactured in Finland, the X8 MIG Welder introduces the digital WPS (dWPS) function, which improves quality control and renders the printed WPS unnecessary. With an upgradeable power source, a multi-voltage power supply option, and the wide range of [Kemppi application software](#) available, the X8 MIG Welder adapts easily to any welding environment. The equipment meets even the most extreme expectations of industrial welding and suits the needs of oil and gas, process and power generation industries especially well.

KEY BENEFITS



WISE PROCESSES

Optimized arc characteristics for any welding application



FASTER SETUP CONFIGURATION

Compared to standard MIG welding equipment



CORRECT WELDING PARAMETERS

Ensured by digital WPS (dWPS)

KEY APPLICATIONS



OIL RIGS



PROCESS PIPELINES



PRESSURE VESSELS AND
BOILERS

BENEFITS



- Best arc characteristics for high speed and aluminum ([WiseFusion](#)), low heat input ([WiseThin+](#)), deep penetration ([WisePenetration+](#)), narrow gap ([RGT](#)), pipe root ([WiseRoot+](#)) and low spatter welding ([WiseSteel](#))
- Precisely controlled, upgradeable welding current up to 600 A
- Digital WPS feature allows the welder to quickly and easily access the WPSs
- Innovatively designed wire feeder ensures safe and ergonomic loading of filler wire spool
- Well-balanced welding guns with an ergonomic handle design make welding more comfortable and productive
- Wire feeder and welding gun lighting enable working in dimly lit conditions
- Tool-free coolant filling with an integrated cooling unit
- Includes a fleet management service free of charge
- Full compatibility with [WeldEye for Welding Procedure and Qualification Management](#)



EXTREME PERFORMANCE

Never underestimate the performance of the X8 MIG Welder. In addition to excellent standard welding performance, Kemppi's [Wise special processes and functions](#) ensure optimal arc characteristics for whatever you are welding. For example, WiseSteel reduces spatter by 30% and enables a 30% increase in travel speed in steel welding, while Reduced Gap Technology (RGT) allows the reduction of joint volume to bring 25% savings in filler materials and 38% savings in arc time with material thickness of 25 mm.



SUPREME USABILITY

High-quality welding requires careful preparation. When comparing the X8 MIG Welder with standard MIG welding equipment, its usability aspects in terms of innovative and user-friendly wire feeder, wireless user interface for power source and digital WPS speed up the setup configuration easily by 30%. When you can speed up the setup configuration process, you will have more time to focus on the welding itself.



ALWAYS THE RIGHT PARAMETERS

Printed WPSs give all the necessary guidance for welding, but it's up to the welder to set the right parameters and weld accordingly. By utilizing Control Pad – the X8 MIG Welder's wireless user interface – to select the digital WPS (dWPS) via WeldEye, the power source is automatically set up according to the limits presented in the WPS. Faster setup and 100% certainty over WPS-compliant welding – what could be better?

WHAT'S IN THE SYSTEM EQUIPMENT



X8 Power Source 500

Welding redefined with this digital power source and ground-breaking connectivity. X8 Power Source 500 provides 500 A with 60% duty cycle. X8 Power Source 500 has excellent tolerance of supply voltage fluctuations and is suitable for generator use. Control Pad and X8 Cooler always included with the power source.



Control Pad

Wireless user interface for X8 Power Source. Always included with the power source. Designed for welders, the Control Pad allows easy adjustment of welding parameters and the use of digital WPS (dWPS). Water, dust and shockproof.



X8 Cooler

Quick and easy to assemble cooling unit integrated with X8 Power Source. Always included in X8 Power Source 500 and 500 MV, optional for X8 Power Source 400. Tool-free coolant filling and easy filter replacement without any hassle. X8 Cooler can also be mounted to the power source afterwards.



X8 Wire Feeder

Ergonomically designed X8 Wire Feeder suitable for all applications. Fast gun connection and disconnection, cabinet lights and reliable wire feeding. Easy to use, maintain and assemble.



Wire feeder rotating plate

A rotating plate with $\pm 90^\circ$ rotation angle. Seven locking positions, including locking into center position. Always included with X8 Power Source.



X8 MIG Gun 500-w

Water-cooled welding gun that is easily connected to the X8 Wire Feeder. Perfect fit for the welder's hand. Includes a detachable pistol grip handle and a work light for dimly lit conditions. Available in 3.5 and 5 meters. Wire diameter 0.8–1.6 mm.


Interconnection cable 2 m, water-cooled

95 mm² thick water-cooled interconnection cable. Especially suitable for setups where the wire feeder is on top of the power source.


Wheel set

Wheel set for the X8 Power Source. Always delivered with the power source.


Consumables

High quality consumables for the wire feeder and welding guns. In order to find the right consumables to match your needs, please use the Consumable Kit Selector via My Kemppi.


My Fleet

Free-of-charge cloud service for X8 MIG Welder owners. My Fleet provides information on the equipment usage and software, and includes the manufacturer's validation certificate for the first year.


Earth return cable 5 m, 70 mm²

APPLICATION SOFTWARE AND WELDING PROGRAMS


WiseSteel

A welding function especially designed to tackle the challenges of globular transfer. WiseSteel alternates short arc transfer with spray transfer, which produces sound welds characterized by a regular fish-scale pattern.


WiseRoot+

Optimized short arc process for productive root pass welding with FastMig X. Excellent weld quality through control of arc voltage and timing of filler metal droplet transfer. Gives higher speed than Stick (MMA), TIG or MIG/MAG short arc welding.


WiseFusion

Ensures excellent weld quality, efficiency and ease of use. Keeps the welding arc focused and guarantees the optimal arc length in any welding position in pulse and synergic MIG/MAG welding. Also available for automated welding.

**WisePenetration+**

A welding function for synergic and pulsed MIG/MAG welding that ensures weld penetration regardless of variation in the contact-tip-to-work distance. Keeps the welding power stabilized in all situations.

**WiseThin+**

Optimized short arc process for sheet metal and position welding. Spatterless arc by precise digital control. Process is suitable for welding sheet metals and thicker plates in position welding, even in case of wider caps and gap variations.

**Reduced Gap Technology (RGT)**

Solution for reliable and efficient narrow gap welding with no need for special equipment or accessories for material thicknesses of up to 30 mm. RGT can save you 25% on filler materials and 38% on arc time by lowering the groove angle from 45° to 20° with 25 mm thick plates.

**Welding programs**

A wide selection of welding programs for various welding applications. In order to find the right welding programs to match your needs, please contact a Kemppi representative.

ALTERNATIVE EQUIPMENT AND SOFTWARE



X8 Power Source 400

Welding redefined with this digital power source and ground-breaking connectivity. X8 Power Source 400 provides 400 A with 60% duty cycle. X8 Power Source 400 has excellent tolerance of supply voltage fluctuations and is suitable for generator use. Can be ordered with or without X8 Cooler. Control Pad always included with the power source.



X8 Power Source 500 MV

Welding redefined with this digital multi-voltage power source and groundbreaking connectivity. X8 Power Source 500 MV provides 500 A with 60% duty cycle. X8 Power Source 500 MV is suitable for the most common electrical network voltages. Control Pad and X8 Cooler always included with the power source.



X8 MIG Gun 400-w

Water-cooled welding gun that is easily connected to the X8 Wire Feeder. Perfect fit for the welder's hand. Includes a detachable pistol grip handle and a work light for dimly lit conditions. Available in 3.5 and 5 meters. Wire diameter 0.8–1.6 mm.



X8 MIG Gun 400-g

Gas-cooled welding gun with threaded gas nozzle and fast-changeable rotating neck. Ergonomically designed to fit the welder's hand. Includes an easy-to-connect pistol grip handle and a work light. Available in 3.5 and 5 meters. Wire diameter 0.8–1.6 mm.



X8 MIG Gun 300-g

Gas-cooled welding gun with threaded gas nozzle and fast-changeable rotating neck. Ergonomically designed to fit the welder's hand. Includes an easy-to-connect pistol grip handle and a work light. Available in 3.5 and 5 meters. Wire diameter 0.8–1.6 mm.



X8 MIG Gun 200-g

Gas-cooled welding gun with threaded gas nozzle and fast-changeable rotating neck. Ergonomically designed to fit the welder's hand. Includes an easy-to-connect pistol grip handle and a work light. Available in 3.5 and 5 meters. Wire diameter 0.8–1.2 mm.

**Interconnection cable, water-cooled**

Water-cooled interconnection cable.
Available 70 mm² and 95 mm² thick and 2 m (only 95 mm²) 5 m, 10 m, 20 m and 30 m long.

**Gas Cylinder Cart**

Additional transportation unit for a gas cylinder. Suitable for use with the X8 MIG Welder.

**WeldEye for Welding Procedure and Qualification Management**

Software for managing welding procedures and personnel qualifications. Support for AWS, ASME, EN and ISO standards. Includes fast and easy-to-use drawing tool for weld joint sketching. Enables the digital WPS (dWPS) function with Kemppi X8 MIG Welder.

**Interconnection cable, gas-cooled**

Gas-cooled interconnection cable.
Available 70 mm² and 95 mm² thick and 2 m (only 95 mm²), 5 m, 10 m, 20 m and 30 m long.

TECHNICAL SPECIFICATIONS

X8 Power Source 500

Product code	X8100501000 (X8100501010 including Work pack and Wisefusion)
Connection voltage 3~ 50/60 Hz	380 - 460 V ± 10 %
Fuse, 380 - 460 V	32 A
Open circuit power (MMA) (without cooler and wire feeder, fans OFF)	44 - 53 W
Open circuit power (MMA) (without cooler and wire feeder, fans ON)	107 - 111 W
Open circuit power (MMA) (with cooler, without wire feeder, fans ON)	132 - 137 W
Output 60% ED	500 A
Output 100% ED	400 A
Welding current and voltage range, MIG @ 380 V	10A/10V - 500A/55V
Welding current and voltage range, MMA @ 380 V	10A/10V - 500A/60V
Recommended generator power (min)	35 kVA
Open circuit voltage MMA	50 V
Operating temperature range	-20...+40 °C
External dimensions LxWxH	921 x 348 x 795 mm
Weight (no accessories)	95 kg

Control Pad

Product code	X8400110001 (spare part)
Battery type	Li-ion
Wireless communication type	2.4 GHz Bluetooth
Typical battery operation time	15-24 h
Typical battery charging time	5 h
Typical wireless communication range	15 m
Wired communication type	USB
Display type	TFT LCD
Display size	5.7"
Operating temperature range	-20...+40 °C
External dimensions LxWxH	200 x 130 x 33 mm
Weight (no accessories)	0.89 kg
Degree of protection	IP54

X8 Cooler

Product code	X8600000000
Rated cooling power at 1 l/min	1.4 kW
Rated cooling power at 1.6 l/min	1.9 kW
Recommended coolant	MPG 4456 (Kemppi mixture)
Operating temperature range	-10...+40 °C
Weight (no accessories)	15.5 kg
Degree of protection	IP23S
Tank volume	4 l

X8 Cooler

EMC class	A
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X8 Wire Feeder

Product code	X8200000002 (X8200000001 with cabinet heater)
Wire feed mechanism	4-roll, twin-motor
Welding current 40 % ED, I2	600 A
Welding current 60 % ED, I2	530 A
Welding current 100 % ED, I2	440 A
Gun connection	Kemppi
Filler wires, Ss	0.6 - 2.4 mm
Filler wires, Al	0.8 - 2.4 mm
Filler wires, Fe	0.6 - 2.4 mm
Filler wires, MC/FC	0.8 - 2.4 mm
Wire feed speed	0.5 - 25 m/min
Wireless communication type	2.4 GHz Bluetooth
Operating temperature range	-20...+40 °C
External dimensions LxWxH	640 x 220 x 400 mm
Weight (no accessories)	11.2 kg
Degree of protection	IP23S
Wire spool weight, max.	20 kg
Wire spool diameter, max.	300 mm
EMC class	A

Wire feeder rotating plate

Product code	X8702010000
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X8 MIG Gun 500-w

Product code	X8 MIG Gun 500-w 3,5 m - X8300503500 X8 MIG Gun 500-w 5,0 m - X8300505000
Gun connection	Kemppi
Cooling	Liquid
Filler wires, Ss	0.8/0.9/1.0/1.2/1.6
Filler wires, Al	0.8/0.9/1.0/1.2
Filler wires, Fe	0.8/0.9/1.0/1.2/1.6
Filler wires, Fe-MC/FC	0.9/1.0/1.2/1.6
Filler wires, Ss-MC/FC	0.9/1.0/1.2/1.6
Load capacity @ 100 % (Mixed gas)	500
Neck angles	50
Changeable neck	No
Rotating neck	No
Pistol grip handle	Yes
Operating temperature range	-20...+40 °C
Standards	IEC 60974-7

Interconnection cable 2 m, water-cooled

Product code	X8800950200
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Wheel set

Product code	X8701010000
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