

X8 MIG Welder

The future of welding is here



Energy efficient



- Best arc characteristics for high speed and aluminum (WiseFusion), narrow gap (RGT), root pass (WiseRoot+), thin sheet (WiseThin+) and low spatter welding in globular transfer mode (WiseSteel)
- Precisely controlled, upgradeable welding current up to 600 A
- Digital WPS feature allows the welder to quickly and easily access the WPSs
- Includes a fleet management service free of charge
- Native connectivity to WeldEye software modules Welding Procedure and Qualification Management, Welding Quality Management and Welding Production Analysis

Applications

- Oil rigs
- Process pipelines
- Pressure vessels and boilers

The most advanced multi-process welding equipment in the market

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 native connectivity 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 and meets even the most extreme expectations of industrial welding.

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?



X8 Wire Feeder

Innovatively designed wire feeder ensures safe and ergonomic loading of filler wire spool. Wire feeder and welding gun lighting enable working in dimly lit conditions.



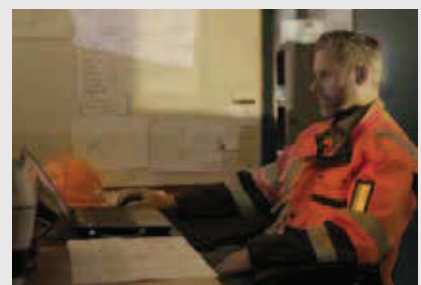
By utilizing Control Pad – the X8 MIG Welder's wireless user interface – to select the digital WPS (dWPS) via WeldEye, the power source is automatically set up according to the limits presented in the WPS.



Well-balanced welding guns with an ergonomic handle design make welding more comfortable and productive.



An integrated cooling unit enables tool-free coolant filling.



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

Technical specifications

X8 MIG Welder		400 A	400 A MV	500 A
Mains connection cable	H07RN-F	6 mm ²	16 mm ²	6 mm ²
Mains connection voltage 3~ 50/60 Hz		-	220 - 230 V ±10 %	-
Mains connection voltage 3~ 50/60 Hz		380 - 460 V ±10 %	380 - 460 V ±10 %	380 - 460 V ±10 %
Rated power	60 % ED	19 kVA	19 kVA	26 kVA
	100 % ED	14 kVA	14 kVA	18 kVA
Open circuit voltage (MMA)	U _{av}	50 V	50 V	50 V
Fuse	220 - 230 V	-	63 A	-
	380 - 460 V	32 A	32 A	32 A
Output	60 % ED	400 A	400 A	500 A
	100 % ED	320 A	320 A	400 A
Welding current and voltage range	MIG @ 220 V	-	20 A/14 V - 400 A/50 V	-
	MIG @ 380 V	20A/14V - 400A/50V	20 A/14 V - 400 A/50 V	20A/14V - 500A/55V
Welding current and voltage range	MMA @ 220 V	-	15 A/20 V - 400 A/58 V	-
	MMA @ 380 V	15A/20V - 400A/58V	15 A/20 V - 400 A/58 V	15A/20V - 500A/57V
Welding voltage (max)		58 V	58 V	57 V
Power factor at max current	P.F.	0.80 - 0.88	0.80 - 0.88	0.82 - 0.90
Efficiency at max current	η	89 - 91 %	89 - 90 %	89 - 91 %
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 LxWxH		921x348x795 mm	921 x 348 x 795 mm	921x348x795 mm
Weight without accessories		95 kg	95 kg	95 kg
Recommended generator power (min)	S _{gen}	25 kVA	25 kVA	35 kVA
Wireless communication type		2.4 GHz WiFi & Bluetooth	2.4 GHz WiFi & Bluetooth	2.4 GHz WiFi & Bluetooth
Wired communication type		Ethernet & USB	Ethernet & USB	Ethernet & USB
Standards		IEC 60974-1, -10	IEC 60974-1, -10	IEC 60974-1, -10

X8 Cooler	
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)
Coolant pressure (max)	0.4 MPa
Tank volume	4 l
Operating temperature range *	-10...+40 °C
Storage temperature range	-40...+60 °C
EMC class	A
Degree of protection **	IP23S
Weight without accessories	15.5 kg
Standards	IEC 60974-2, -10
* With recommended coolant	
** When mounted	

Control Pad	
Operating temperature range	-20...+40 °C
Storage temperature range	-40...+60 °C
Degree of protection	IP54
External dimensions LxWxH	200 x 130 x 33 mm
Weight without accessories	0.89 kg
Typical battery operation time	15 - 24 h
Battery type	Li-ion
Rated battery voltage	7.2 V
Rated battery capacity	6.2 Ah
Typical battery charging time	5 h
Wireless communication type	2.4 GHz Bluetooth
Typical wireless communication range	15 m
Wired communication type	USB
Display type	TFT LCD
Display size	5.7 "
Standards	IEC 60950-1, EN 62368-1; EN 300 328 v2.1.1; EN 300 330 v2.1.1; EN 301 489-1 v2.1.1; EN 301 489-3 v2.1.0; EN 301 489-17 v3.1.1

Technical specifications

X8 MIG Welder		500 A MV	600 A	600 A MV
Mains connection cable	H07RN-F	16 mm ²	6 mm ²	16 mm ²
Mains connection voltage 3~ 50/60 Hz		220 - 230 V ±10 %		220 - 230 V ±10 %
Mains connection voltage 3~ 50/60 Hz		380 - 460 V ±10 %	380 - 460 V ±10 %	380 - 460 V ±10 %
Rated power	60 % ED	26 kVA	27 kVA	27 kVA
	100 % ED	18 kVA	21 kVA	21 kVA
Open circuit voltage (MMA)	U _{av}	50 V	50 V	50 V
Fuse	220 - 230 V	63 A	-	63 A
	380 - 460 V	32 A	35 A	35 A
Output	60 % ED	500 A	530 A	530 A
	100 % ED	400 A	440 A	440 A
Welding current and voltage range	MIG @ 220 V	20A/14V - 500A/55V	-	20A/14V - 600A/46V
	MIG @ 380 V	20A/14V - 500A/55V	20A/14V - 600A/55V	20A/14V - 600A/55V
Welding current and voltage range	MMA @ 220 V	15A/20V - 500A/57V	-	15A/20V - 600A/46V
	MMA @ 380 V	15A/20V - 500A/57V	15A/20V - 600A/55V	15A/20V - 600A/55V
Welding voltage (max)		57 V	55 V	55 V
Power factor at max current	PF.	0.82 - 0.90	0.88 - 0.90	0.90
Efficiency at max current	η	89 - 91 %	88 - 91 %	88 - 90 %
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 LxWxH		921x348x795 mm	921x348x795 mm	921x348x795 mm
Weight without accessories		95 kg	95 kg	95 kg
Recommended generator power (min) S _{gen}		35 kVA	40 kVA	40 kVA
Wireless communication type		2.4 GHz WiFi & Bluetooth	2.4 GHz WiFi & Bluetooth	2.4 GHz WiFi & Bluetooth
Wired communication type		Ethernet & USB	Ethernet & USB	Ethernet & USB
Standards		IEC 60974-1, -10	IEC 60974-1, -10	IEC 60974-1, -10

X8 Wire Feeder				
Welding current, I ₂	40 % ED	600 A	Wire feed speed	0.5 - 25 m/min
	60 % ED	530 A	Wire spool weight (max)	20 kg
	100 % ED	440 A	Wire spool diameter (max)	300 mm
Gun connection		Kemppi	Shielding gas pressure (max) p _{max}	0.5 MPa
Wire feed mechanism		4-roll, twin-motor	Operating temperature range	-20...+40 °C
Diameter of feed rolls		32 mm	Storage temperature range	-40...+60 °C
Filler wires	Fe	0.6 - 2.4 mm	EMC class	A
	Ss	0.6 - 2.4 mm	Degree of protection	IP23S
	MC/FC	0.8 - 2.4 mm	External dimensions LxWxH	640 x 220 x 400 mm
	Al	0.8 - 2.4 mm	Weight without accessories	11.2 kg
			Wireless communication type	2.4 GHz Bluetooth
			Standards	IEC 60974-5, 10



Ordering information

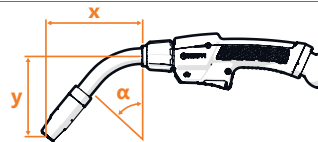
X8 Power Source (includes Control Pad, X8 Wheel Set and X8 Wire Feeder Rotating Plate)		
X8 Power Source without software		
X8 Power Source 400		X8100400000
X8 Power Source 400 with cooler		X8100401000
X8 Power Source 500 with cooler		X8100501000
X8 Power Source 500 MV with cooler		X8100501100
X8 Power Source 600 with cooler		X8100601000
X8 Power Source 600 MV with cooler		X8100601100
X8 Power Source with welding programs and processes		
X8 Power Source 400, CUSTOM		X8100400001
X8 Power Source 400 with cooler, CUSTOM		X8100401001
X8 Power Source 400 MV, CUSTOM		X8100400101
X8 Power Source 500 with cooler, CUSTOM		X8100501001
X8 Power Source 500 MV with cooler, CUSTOM		X8100501101
X8 Power Source 500 with cooler and Software Pack 1 **		X8100501010
X8 Power Source 600 with cooler and Software Pack 1 **		X8100601010
** Software Pack 1 includes X8 Work Pack and WiseFusion.		
X8 Wire Feeder		
X8 Wire Feeder *		X8200000002
X8 Wire Feeder with cabinet heater		X8200000001
* Contains GH 20 Gun holder		
X8 Power upgrade		
Power upgrade 500 for X8 Power Source		X8550000
Power upgrade 600 for X8 Power Source		X8560000
Software products		
WiseFusion		X8500000
WiseSteel		X8500001
WisePenetration+		X8500002
WiseRoot+		X8500003
WiseThin+		X8500004
X8 Work Pack		X8520000
Welding programs and packages are available in DataStore via Mobile Maintenance app.		
WeldEye WP & PQ cloud package		68000010
X8 accessories and spare parts		
X8 Cooler		X8600000000
X8 Wheel Set		X8701010000
X8 Gas Cylinder Cart		X8701020000
X8 Wire Feeder Rotating Plate		X8702010000
X8 Double Wire Feeder Rotating Plate *		X8702020000
X8 Wire Feeder Counterbalance Arm		X8702030000
X8 Wire Feeder Hanger For Boom		X8702040000
X8 Cable Rack **		X8701030000
X8 Accessory Tray		X8701040000
Control Pad		X8400110001
Wire Drum Kit	5 m	W012757
Wire Drum Kit	10 m	W012758
Wire Drum Kit	20 m	W012759
Wire Drum Kit	27 m	W012760

* – X8 Double Wire Feeder Rotating Plate is not compatible with X8 Wire Feeder Counterbalance Arm.

** – X8 Cable Rack is not compatible with X8 Gas Cylinder Cart.

Ordering information

Guns			
X8 MIG Gun 200-g	3.5 m	x=101 mm, Y=86 mm	X8301203500
X8 MIG Gun 200-g	5.0 m	x=101 mm, Y=86 mm	X8301205000
X8 MIG Gun 300-g	3.5 m	x=117 mm, Y=97 mm	X8301303500
X8 MIG Gun 300-g	5.0 m	x=117 mm, Y=97 mm	X8301305000
X8 MIG Gun 400-g	3.5 m	x=132 mm, Y=110 mm	X8301403500
X8 MIG Gun 400-g	5.0 m	x=132 mm, Y=110 mm	X8301405000
X8 MIG Gun 420-w	3.5 m	x=132 mm, Y=104 mm	X8300423500
X8 MIG Gun 420-w	5.0 m	x=132 mm, Y=104 mm	X8300425000
X8 MIG Gun 520-w	3.5 m	x=145 mm, Y=111 mm	X8300523500
X8 MIG Gun 520-w	5.0 m	x=145 mm, Y=111 mm	X8300525000
X8 MIG Gun 420-w	3.5 m	x=232 mm, Y=104 mm	X8300423501
X8 MIG Gun 420-w	5.0 m	x=232 mm, Y=104 mm	X8300425001
X8 MIG Gun WS 420-w	8.0 m	x=132 mm, Y=104 mm	X8300428000
X8 MIG Gun 520-w	3.5 m	x=245 mm, Y=111 mm	X8300523501
X8 MIG Gun 520-w	5.0 m	x=245 mm, Y=111 mm	X8300525001
X8 MIG Gun 600-w	5.0 m	x=152 mm, Y=104 mm	X8300605000
X8 Mounting Ring Tool			SP012703



Cables		
Earth return cable	5 m, 70 mm ²	6184711
Earth return cable	10 m, 70 mm ²	6184712
Interconnection cables, gas-cooled		
Interconnection Cable 70-g	5 m	X8801700500
Interconnection Cable 70-g	10 m	X8801701000
Interconnection Cable 70-g	20 m	X8801702000
Interconnection Cable 70-g	30 m	X8801703000
Interconnection Cable 95-g	2 m	X8801950200
Interconnection Cable 95-g	5 m	X8801950500
Interconnection Cable 95-g	10 m	X8801951000
Interconnection Cable 95-g	20 m	X8801952000
Interconnection Cable 95-g	30 m	X8801953000
Interconnection cables, water-cooled		
Interconnection Cable 70-w	5 m	X8800700500
Interconnection Cable 70-w	10 m	X8800701000
Interconnection Cable 70-w	20 m	X8800702000
Interconnection Cable 70-w	30 m	X8800703000
Interconnection Cable 95-w	2 m	X8800950200
Interconnection Cable 95-w	5 m	X8800950500
Interconnection Cable 95-w	10 m	X8800951000
Interconnection Cable 95-w	20 m	X8800952000
Interconnection Cable 95-w	30 m	X8800953000
Remote controls		
X8 Gun Remote Control (for X8 MIG Guns)		X841000000

For the ordering codes of consumables for the guns and wire feeder, see Kemppi Consumable Kit Selector.

X8 SuperSnake

Next-level productivity within your reach



- Suitable for Fe/Ss/Al/FCW/MCW filler wires
- 10-, 15-, 20-, 25-meter water-cooled models
- Parameter adjustment with the X8 Control Pad or X8 Gun Remote Control
- Supports all Kemppi Wise special processes
- Strong protective frame included as standard

Applications

- Heavy and medium-heavy metal fabrication workshops
- Installation and site work

Extreme extension

The X8 SuperSnake combines the outstanding benefits of the original SuperSnake sub-feeder with the X8 MIG Welder's modern technology and precise arc control. Available in water-cooled models that extend your regular reach with up to 25 meters, the X8 SuperSnake guarantees reliable distance wire feed, durable use and effortless maintenance.

The lightweight sub-feeder is easy to carry to wherever it is needed. Not only does this improve occupational safety by removing the need to carry heavy wire feeders, but it also improves productivity. By connecting the X8 Control Pad to the sub-feeder, the welder has access to a comprehensive user interface to make all the necessary parameter adjustments at a distance from the welding system.

The X8 SuperSnake is compatible with X8 Wire Feeders and X8 MIG Guns. The connection is established with Kemppi Gun Connectors that are known for their excellent mechanical and electrical properties and precise arc voltage measurement. New technology enables support for Kemppi's Wise special processes and ensures optimal arc characteristics in any welding application.

Technical specifications

X8 SuperSnake		
Output 40°C 60% ED		310 A
Wire feed mechanism		GT02X, 2-roll
Wire feed speed		0-25 m/min
Feeder body dimensions L x W x H		777 x 142 x 142 mm
Wire recommendations, 15 m		Fe/Ss 1.0-1.6 mm
		Al 1.2-1.6 mm
		FeMc/FeFc 1.2-1.6 mm
Cable diameter		50 mm ²
Supply voltage		50 V DC
Protection class		IP 23S

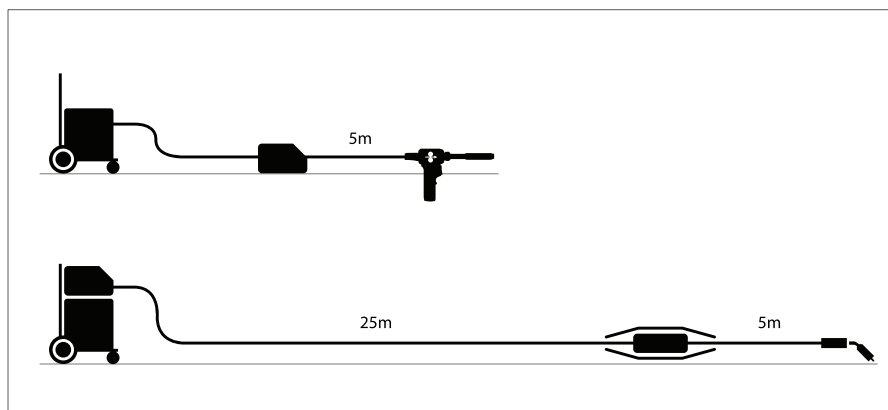
Ordering information

X8 SuperSnake water-cooled		
GT02XW 10 m Fe		X8900501000
GT02XW 10 m Ss/Al		X8900501001
GT02XW 15 m Fe		X8900501500
GT02XW 15 m Ss/Al		X8900501501
GT02XW 20 m Fe		X8900502000
GT02XW 20 m Ss/Al		X8900502001
GT02XW 25 m Fe		X8900502500
GT02XW 25 m Ss/Al		X8900502501

Wire liners for X8 SuperSnake

Steel spirals Fe/FeMc/FeFc	Filler wire ø, mm	Order number, 10 m	Order number, 15 m	Order number, 20 m	Order number, 25 m
	1.0...1.6	W015509	W015511	W015513	W015515
DL liners Al / Ss	Filler wire ø, mm	Order number, 10 m	Order number, 15 m	Order number, 20 m	Order number, 25 m
DL Chili 5.9/1.5	1.0...1.6	W015510	W015512	W015514	W015516

Spare part Steel spirals and DL Chili liners are equipped with connectors. Both ends are locked in position in cable package set/subfeeder.



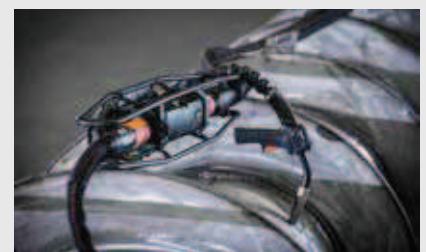
The X8 SuperSnake features a two-roll version of the X8 Wire Feeder's powerful wire feed mechanism with firm locking. The consumables are interchangeable, and color-coded to ensure that you always use the correct combination.



Parameter adjustments are easy to make on the X8 Control Pad's clear and large display.



The lightweight sub-feeder is an ergonomic option for carrying heavy and large wire feeders, or welding with heavy push-pull welding guns that increase strain on the welder's wrist.



The protective frame and base plate are included as standard for maximum protection in even the toughest workshop conditions.