

# X8 MIG Welder

THE MOST ADVANCED MULTI-PROCESS WELDING  
EQUIPMENT ON THE MARKET





## X8 MIG Welder



### THE MOST ADVANCED MULTI-PROCESS WELDING EQUIPMENT ON 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.

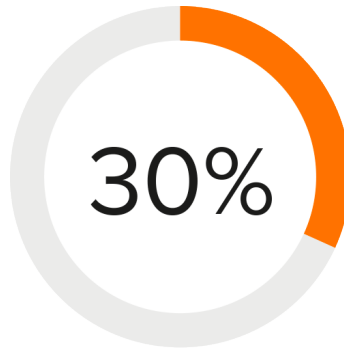


## KEY BENEFITS



### 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)

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## BENEFITS

- Best arc characteristics for high performance austenitic stainless steels, aluminums and advanced high-strength steels
- 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 a detachable handle make welding more comfortable
- 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
- Native connectivity to WeldEye software modules [Welding Procedure and Qualification Management](#), [Welding Quality Management](#) and [Welding Production Analysis](#)



## PRODUCT OPTIONS



### X8 Power Source 400

Provides 400 A with 60% duty cycle. Can be ordered with or without X8 Cooler. Control Pad and Wire Feeder Rotating Plate always included with the power source.



### X8 Power Source 400 MV

Provides 400 A with 60% duty cycle. The multi-voltage power source is suitable for the most common electrical network voltages. Control Pad and Wire Feeder Rotating Plate always included with the power source. X8 Cooler not included.



### X8 Power Source 500

Provides 500 A with 60% duty cycle. Control Pad, X8 Cooler, and Wire Feeder Rotating Plate always included with the power source.



### X8 Power Source 500 MV

Provides 500 A with 60% duty cycle. The multi-voltage power source is suitable for the most common electrical network voltages. Control Pad, X8 Cooler, and Wire Feeder Rotating Plate always included with the power source.



### X8 Power Source 600

Provides 600 A with 40% duty cycle. Control Pad, X8 Cooler, and Wire Feeder Rotating Plate always included with the power source.



### X8 Power Source 600 MV

Provides 600 A with 40% duty cycle. The multi-voltage power source is suitable for the most common electrical network voltages. Requires a 63 A plug. Control Pad, X8 Cooler, and Wire Feeder Rotating Plate always included with the power source.



### X8 Wire Feeder

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



### Flexlite GX - X8 MIG Welder

X8 MIG Welder is designed to be used together with Kemppi's Flexlite GX series 8 MIG welding guns with a Kemppi connector. User comfort, welding efficiency, and extended consumable parts life.



### WiseFusion

A welding function that ensures consistent weld quality in all positions by automatically regulating arc length. Creates and maintains an optimal short-circuit characteristic in pulsed MIG/MAG and spray-arc welding.





### 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.



### 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.



### WiseRoot+

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



### WiseThin+

Optimized short arc process suitable for welding sheet metals and thicker plates in position welding, even in case of wider gaps and gap variations. Produces a spatterless arc with precise digital control.



## FEATURES



### Extreme performance

Kemppi's Wise special processes and functions ensure optimal arc characteristics for whatever you are welding. The system's precise arc voltage measurement from the tip of the welding torch enhances the optimization of arc properties for challenging applications.



### Supreme usability

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%.



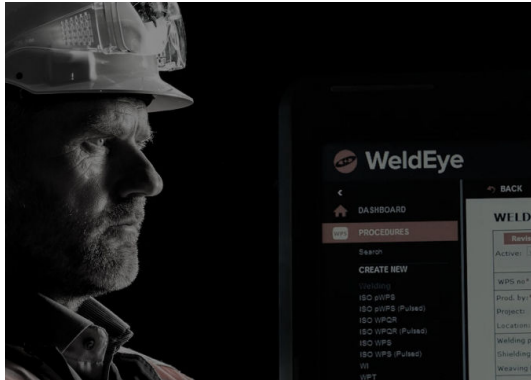
### My Fleet

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. Log in to My Fleet if you already have a customer account for the service.



### WiseSteel

The WiseSteel welding function tackles challenges related to globular transfer. This is achieved by alternating short arc transfer with spray transfer, which reduces spatter by up to 30%, increases travel speed, and produces high-quality welds characterized by regular fish-scale pattern.



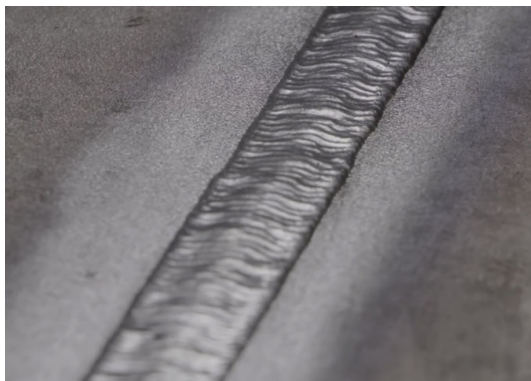
### Redefine welding management

The X8 MIG Welder features native connectivity to WeldEye software which enables the utilization of the equipment's digital WPS function. In addition, the Control Pad acts as a reading device that collects fabrication information for verifying WPS compliance and analyzing welding productivity.



### X8 Power Sources

The X8 Power Sources have excellent tolerance of supply voltage fluctuations and can be used with generators. The multi-voltage versions are suitable for the most common electrical network voltages.



### Intelligent narrow gap welding

Reducing the groove angle can add significantly to the efficiency and productivity of welding of heavy metal structures. Reduced Gap Technology (RGT) allows reliable and efficient narrow gap welding with no need for special equipment or accessories for material thicknesses of up to 30 mm.



## ACCESSORIES



### Flexlite GX

Flexlite GX product series contains welding guns to be used in MIG/MAG welding processes. All Flexlite GX welding guns enjoy the Flexlite features for user comfort, welding efficiency and extended consumable parts life.



### 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.



### 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 Kempfi.



### GX 208GMN

200 A, Gas-cooled, Multi-neck, 3.5m or 5m, KEMPPi connector



### GX 308GMN

300 A, Gas-cooled, Multi-neck, 3.5m or 5m, KEMPPi connector



### GX 408GMN

400 A, Gas-cooled, Multi-neck, 3.5m or 5m, KEMPPi connector



### GX 428W

420 A, Water-cooled, Normal neck or N250, 3.5m, 5m, or 8m, KEMPPi connector



### GX 528W

520 A, Water-cooled, Normal neck or N250, 3.5m or 5m, KEMPPi connector



### GX 608W

600 A, Water-cooled, 5m, KEMPP connector



### GH 20 Gun Holder

GH 20 Gun Holder increases usability around the workshop. The gun holder can be mounted on a welding machine, transport unit, or welding table.



### X8 SuperSnake

A new generation subfeeder that combines the benefits of the original SuperSnake subfeeder with the X8 MIG Welder's modern technology. Extends regular reach with up to 25 meters. Compatible with X8 Wire Feeders and X8 MIG Guns.



### X8 Wheel Set

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



### X8 Gas Cylinder Cart

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



### Wire Feeder Rotating Plate

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



### Double Wire Feeder Rotating Plate

A rotating plate with  $\pm 90^\circ$  rotation angle for two wire feeders. Seven locking positions, including locking into center position.



### Wire Feeder Counterbalance Arm

Counterbalance arm with stepless counterbalance adjustment and large adjustable working area.



### Wire Feeder Hanger for Boom

A wire feeder hanger with gas spring assisted opening and closing to make the work space more versatile. Two different angles for the wire feeder. Easy and ergonomic wire spool replacement.





### Cable Rack

An elongated handle for storing interconnection cables and the X8 SuperSnake subfeeder.



### Interconnection Cable, gas-cooled

Gas-cooled interconnection cable. Available 70 mm<sup>2</sup> and 95 mm<sup>2</sup> thick and 2 m (only 95 mm<sup>2</sup>), 5 m, 10 m, 20 m and 30 m long.



### Interconnection Cable, water-cooled

Water-cooled interconnection cable. Available 70 mm<sup>2</sup> and 95 mm<sup>2</sup> thick and 2 m (only 95 mm<sup>2</sup>) 5 m, 10 m, 20 m and 30 m long.



### Earth Return Cable

Earth return cable, available 50 mm<sup>2</sup> and 70 mm<sup>2</sup> thick and 5 m long.



### Boom WP 6000

Articulated boom "WP 6000" holds one wire feeder and creates a semicircular working area of 6 meters in radius. The boom folds in the middle and rotates 180 degrees, making it possible to reach the areas close to the wall, unlike with telescopic booms. The maximum load is 50 kg.

For suspension, a suitable Kemppi wire feeder hanger must be used: X8 Wire Feeder: X8702040000, WFX 300: 6185100, MFX 63: 6185285, MXF 65: W001694.

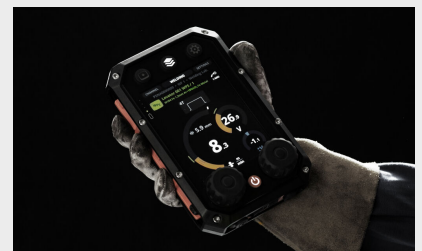


# TECHNICAL SPECIFICATIONS

## POWER SOURCES

### X8 Power Source 400

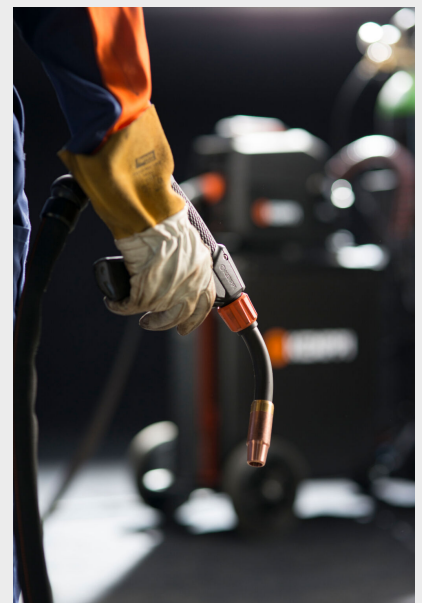
Product code	X8100400001 - X8 Power Source 400, CUSTOM (Work Pack + WiseFusion) X8100401000 - X8 Power Source 400, cooler X8100401001 - X8 Power Source 400, cooler, CUSTOM (Work Pack + WiseFusion)
Connection voltage 3~ 50/60 Hz	380 - 460 V ±10 %
Fuse	32 A
Open circuit power (MMA) (without cooler and 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	400 A
Output 100% ED	320 A
Welding current and voltage range, MIG @ 380 V	20A/14V - 400A/50V
Welding current and voltage range, MMA @ 380 V	15A/20V - 400A/58V
Recommended generator power (min)	25 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





## X8 Power Source 400 MV

Product code	X8100400101 - X8 Power Source 400 MV, CUSTOM (Work Pack + WiseFusion)
Connection voltage 3~ 50/60 Hz	220 - 230 V $\pm 10$ % 380 - 460 V $\pm 10$ %
Fuse	32 A
Fuse, 380 - 460 V	63 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)	99 - 111 W
Output 60% ED	400 A
Output 100% ED	320 A
Welding current and voltage range, MIG @ 220 V	20 A/14 V - 400 A/50 V
Welding current and voltage range, MIG @ 380 V	20 A/14 V - 400 A/50 V
Welding current and voltage range, MMA @ 220 V	15 A/20 V - 400 A/58 V
Welding current and voltage range, MMA @ 380 V	15 A/20 V - 400 A/58 V
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





## X8 Power Source 500

Product code	X8100501000 - X8 Power Source 500, cooler X8100501001 - X8 Power Source 500, cooler, CUSTOM (Work Pack + WiseFusion)
Connection voltage 3~ 50/60 Hz	380 - 460 V $\pm$ 10 %
Fuse	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	20A/14V - 500A/55V
Welding current and voltage range, MMA @ 380 V	15A/20V - 500A/57V
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





## X8 Power Source 500 MV

Product code	X8100501100 - X8 Power Source 500 MV, cooler X8100501101 - X8 Power Source 500 MV, cooler, CUSTOM (Work Pack + WiseFusion)
Connection voltage 3~ 50/60 Hz	220 - 230 V $\pm 10$ % 380 - 460 V $\pm 10$ %
Fuse	32 A
Fuse, 380 - 460 V	63 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)	99 - 111 W
Open circuit power (MMA) (with cooler, without wire feeder, fans ON)	121 - 137 W
Output 60% ED	500 A
Output 100% ED	400 A
Welding current and voltage range, MIG @ 220 V	20A/14V - 500A/55V
Welding current and voltage range, MIG @ 380 V	20A/14V - 500A/55V
Welding current and voltage range, MMA @ 220 V	15A/20V - 500A/57V
Welding current and voltage range, MMA @ 380 V	15A/20V - 500A/57V
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





## X8 Power Source 600

Product code	X8100601000 (Incl. X8 Control Pad and X8 Cooler) Power upgrade 600 for X8 Power Source - X8560000
Connection voltage 3~ 50/60 Hz	380 - 460 V $\pm$ 10 % 380 - 460 V $\pm$ 10 %
Fuse	35 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 40% ED	600 A
Output 60% ED	530 A
Output 100% ED	440 A
Welding current and voltage range, MIG @ 380 V	10A/10V - 600A/57V
Welding current and voltage range, MMA @ 380 V	10A/10V - 600A/58,5V
Recommended generator power (min)	40 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



## X8 Power Source 600 MV

Product code	X8100601100 (Incl. X8 Control Pad and X8 Cooler) Power upgrade 600 for X8 Power Source - X8560000
Connection voltage 3~ 50/60 Hz	220 - 230 V $\pm 10$ % 380 - 460 V $\pm 10$ %
Fuse, 380 - 460 V	35 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)	99 - 111 W
Open circuit power (MMA) (with cooler, without wire feeder, fans ON)	121 - 137 W
Output 40% ED	600 A
Output 60% ED	530 A
Output 100% ED	440 A
Welding current and voltage range, MIG @ 220 V	10A/10V - 600A/47V
Welding current and voltage range, MIG @ 380 V	10A/10V - 600A/57V
Welding current and voltage range, MMA @ 220 V	10A/10V - 600A/47V
Welding current and voltage range, MMA @ 380 V	10A/10V - 600A/58.5V
Recommended generator power (min)	40 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
Fuse, 220 - 230 V	63 A



## WIRE FEEDERS

### 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

## TORCHES

### Flexlite GX - X8 MIG Welder

Product code	Please refer to technical specifications.
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## SOFTWARE

### WiseFusion

Product code	X5500001 (Product code for X5 FastMig) X8500000 (Product code for X8 MIG Welder) MSM40000 (Product code for Master M)
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### WiseSteel

Product code	X5500000 (Product code for X5 FastMig) X8500001 (Product code for X8 MIG Welder) MSM60000 (Product code for Master M)
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## WisePenetration+

Product code	X5500002 (Product code for X5 FastMig) X8500002 (Product code for X8 MIG Welder) MSM50000 (Product code for Master M)
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## WiseRoot+

Product code	X8500003 (Product code for X8 MIG Welder) X5500003 (Product code for X5 FastMig)
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## WiseThin+

Product code	X8500004 (Product code for X8 MIG Welder) X5500004 (Product code for X5 FastMig)
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## ACCESSORIES

### Control Pad

Product code	X8400110001 (Spare part)
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
Battery type	Li-ion

### 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
EMC class	A



## GX 208GMN

Product code	GX208GMN35 (3.5m), GX208GMN5 (5m)
Changeable neck	Yes
Rotating neck	Yes
Pistol grip handle	Yes
Type of cooling	Gas
Remote control	Yes
Welding process	MIG/MAG
Contact tip	M10x1
Wire diameters (mm)	0.8–1.2
Type of connection	Kemppi
LED option	Yes
Load capacity, Ar + CO2 (60%)	200 A

## GX 308GMN

Product code	GX308GMN35 (3.5m), GX308GMN5 (5m)
Changeable neck	Yes
Rotating neck	Yes
Pistol grip handle	Yes
Type of cooling	Gas
Remote control	Yes
Welding process	MIG/MAG
Contact tip	M10x1
Wire diameters (mm)	0.8–1.2
Type of connection	Kemppi
LED option	Yes
Load capacity, Ar + CO2 (60%)	300 A

## GX 408GMN

Product code	GX408GMN35 (3.5m), GX408GMN5 (5m)
Changeable neck	Yes
Rotating neck	Yes
Pistol grip handle	Yes
Type of cooling	Gas
Remote control	Yes
Welding process	MIG/MAG
Contact tip	M10x1
Wire diameters (mm)	0.8–1.6
Type of connection	Kemppi
LED option	Yes
Load capacity, Ar + CO2 (60%)	400 A





## GX 428W

Product code	GX428W35 (3.5m), GX428W5 (5m), GX428WS8* (8m) *WS model 8m delivered without a wire liner
Load capacity, Ar + CO2 (100%)	420 A (3.5m and 5m models) 300 A (8m WS model)
Changeable neck	No
Rotating neck	No
Pistol grip handle	Yes
Type of cooling	Water
Remote control	Yes
Welding process	MIG/MAG
Contact tip	M10x1
Wire diameters (mm)	0.8–1.6 (3.5m and 5m models) 1.2–1.6 (8m WS model)
Type of connection	Kemppi
LED option	Yes (3.5m and 5m models) No (8m WS model)

## GX 528W

Product code	GX528W35 (3.5m), GX528W5 (5m)
Load capacity, Ar + CO2 (100%)	520 A
Changeable neck	No
Rotating neck	No
Pistol grip handle	Yes
Type of cooling	Water
Remote control	Yes
Welding process	MIG/MAG
Contact tip	M10x1
Wire diameters (mm)	0.8–1.6
Type of connection	Kemppi
LED option	Yes

## GX 608W

Product code	GX608W5 (5m)
Load capacity, Ar + CO2 (35%)	600 A (40%)
Changeable neck	No
Rotating neck	No
Pistol grip handle	Yes
Type of cooling	Water
Remote control	Yes
Welding process	MIG/MAG
Contact tip	M10x1
Type of connection	Kemppi
LED option	Yes



## GH 20 Gun Holder

Product code	6256020
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## X8 SuperSnake - subfeeder

Product code	See technical specifications
Description	subfeeder
Output 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 x142 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 <sup>2</sup>
Supply voltage	50 V DC
Protection class	IP 23S
Ordering code 10m	X8900501000 - Fe X8900501001 - Ss/Al
Ordering code 15m	X8900501500 - Fe X8900501501 - Ss/Al
Ordering code 20m	X8900502000 - Fe X8900502001 - Ss/Al
Ordering code 25m	X8900502500 - Fe X8900502501 - Ss/Al
Consumables	The wire feed mechanism consumable kit must be ordered separately according to the filler wire material.

## X8 Wheel Set

Product code	X8701010000
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## X8 Gas Cylinder Cart

Product code	X8701020000
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## Wire Feeder Rotating Plate

Product code	X8702010000
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## Double Wire Feeder Rotating Plate

Product code	X8702020000
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## Earth Return Cable

Product code	6184511 - Earth return cable 50mm2 5m
	6184711 - Earth return cable 70mm2 5m

## Boom WP 6000

Product code	6264026
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[WWW.KEMPPI.COM](http://WWW.KEMPPI.COM)

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**Kemppi** is the design leader of 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 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 close to 800 professionals in 16 countries and has a revenue of 178 MEUR.

