# X3 MIG Welder

# Tough and reliable

Made in Finland

ØKENPPI



And you know.

# X3 MIG Welder

# Powerful tool for serious welders

X3 MIG Welder is a trustworthy partner for a serious welder. It is a hard-boiled inverter-based MIG/MAG welding machine by the Finnish manufacturer of quality welding equipment, Kemppi – the number one pioneer in energyefficient welding inverter technology in the world.

**X3 MIG Welder** is a welding system consisting of a power source that is available in two power options: 400 and 500 A, a wire feeder for 300 mm wire spools, and Kemppi's MMT welding gun with a Euro connection. Different cable lengths and wheel sets are available as an option.

The machine connects to any 380-440-volt 3-phase mains supply. It can be used for gas-cooled MIG/ MAG welding, and It accepts a wide range of filler wire diameters from 0.8 to 1.6 mm, and with cored wires up to 2.0 mm. The power source also supports carbon arc gouging\* in both 400 and 500 amperage models. The MIG/MAG process has been carefully tuned at Kemppi welding lab to give the welding arc an outstanding stability. This makes the arc easy to manage and minimizes the amount of spatter.

The arc stability and weld quality are easily achieved also with inexpensive  $CO_2$  shielding gas. With less spatter, the time needed for post-weld grinding is reduced, and the welders can focus entirely on productive welding.

\* Not available in Australia and New Zealand

# **KEY BENEFITS**



### **EXCELLENT PERFORMANCE**

Delivers up to 500 amperes at 60 % duty cycle. Easy arc control, also with  $CO_2$  shielding gas. Adds costefficiency to welding production.



## **SIMPLE TO USE**

User interface is designed for quick and easy use. Welders can concentrate on creating quality welds.



## **EASY TO MOVE**

Ergonomically positioned handles and light weight. Optional wheel sets available. No valuable production time wasted on hardware transfer.

# **KEY FEATURES**



#### X3 POWER SOURCE

**Excellent arc stability** thanks to carefully tuned MIG/MAG welding process and the special functions that you can use to fine-tune the start and the end of the weld.

Large power reserves and high duty cycles enable efficient use of carbon arc gouging\* with both 400 and 500 amperage models.

**Arc dynamics are simply set** at the press of a button for either  $Argon/CO_2$  gas or pure  $CO_2$ , ensuring you get the best welding characteristics for the shielding gas used.

**IGBT inverter technology** adds reliability and reduces energy costs, improving profitability.

**Two optional wheel sets** available for further facilitate the transfer of the machine.

A 110-volt auxiliary voltage supply is available for CO<sub>2</sub> shielding gas heater.



#### **PRODUCTIVITY FUNCTIONS**

**Crater fill** function reduces the voltage level at the end of the weld and ensures the best arc control right to the finish. The end of the weld is nice and clean, which makes it easy to start the next weld without wasting welder's time in grinding.

**Burn back** function prevents filler wire from sticking to the work piece at the end of weld, making it easier to continue welding.

Hot stop function makes tack welding easier and faster.

**Soft start** ignition stabilizes the arc quickly and minimizes the spatter.

Hard ignition option is available for experienced welders, who appreciate more vigorous start and want to get to action immediately.

**Creep start** function prevents disturbances at the start of the weld by slowing down the wire feed speed just before the arc ignites.



#### X3 WIRE FEEDER

X3 Wire Feeder is not afraid of rough handling. The fully enclosed and impact resistant dual-skin cabinet offers protection for the wire spool and the wire feed mechanism.

**Easy movement** to work location and adjustment of voltage and wire feed speed remotely from the work place.

**Undisturbed wire feed** is ensured by the strong, 4-roll DuraTorque wire feed mechanism.

**EURO gun connection** and a selection of different length Kemppi MMT gas-cooled welding guns available.

# **KEY APPLICATIONS**



STEEL STRUCTURES



MECHANICAL ENGINEERING



SHIPBUILDING

## **TECHNICAL DATA**

X3 Power Source		400	500
Mains connection voltage 3~ 50/60 Hz		380 – 440 V (-10+10 %)	380 - 440 V (-10+10 %)
Open circuit voltage	Uav	52 – 57 V	57 – 62 V
Fuse		25 A	32 A
Output	60 % ED	400 A / 34 V	500 A / 39.0 V
	100 % ED	310 A / 29 V	390 A / 33.5 V
Welding current and voltage range		25 A/15 V - 400 A/38V	25 A/15 V - 500 A/43 V
Operating temperature range		-20+40 °C	-20+40 °C
EMC class		А	A
Degree of protection		IP 23S	IP 23S
External dimensions L x W x H		629 x 230 x 414 mm	629 x 230 x 414 mm
Standards		IEC 60974-1 EC 60974-10	IEC 60974-1 EC 60974-10

X3 Wire Feeder 300		
Gun connection		Euro
Wire feed mechanism		4-roll
Filler wires	Fe	0.61.6 mm
	MC/FC	0.82.0 mm
Wire feed speed		025 m/min
Wire spool weight (max)		20 kg
Wire spool diameter (max)		300 mm
Operating temperature range		-20+40 ℃
Degree of protection		IP 23S
External dimensions $L \times W \times H$		590 x 240 x 445 mm
Standards		IEC 60974-5 IEC 60974-10



Using the P 20 transport unit and the X3 Wire Feeder mounting kit you can move the welding set and the gas cylinder conveniently as a whole.

## ORDERING INFORMATION

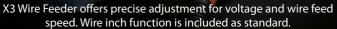
Power sources	
X3 Power Source 400	X31004000
X3 Power Source 400 AU	X31004000AU
X3 Power Source 500	X31005000
Wire feeder	
X3 Wire Feeder 300	X31003000
Transport units	
P 20 transport unit	6185261
Accessories	
X3 Wire Feeder mounting plate	X37000003
X3 Wheel Set	X37000001
X3 Four Wheel Set	X37000002
MIG guns	
MMT 42, 3 m	6254213MMT
MMT 42, 4.5 m	6254214MMT

Interconnection cable 50-1,8-G 6260508   Interconnection cable 70-1,8-G 6260501   Interconnection cable 50-5-G 6260501   Interconnection cable 70-5-G 6260501   Interconnection cable 70-5-G 6260513   Interconnection cable 70-10-G 6260514   Interconnection cable 50-15-G 6260515   Interconnection cable 70-10-G 6260516   Interconnection cable 70-15-G 6260533   Interconnection cable 70-30-G 6260533   Interconnection cable 70-30-G 6310710   Extension cable 70-15-G 6310710   Extension cable 70-15-G 6310515   Extension cable 50-10-G 6310510   Extension cable 50-10-G 6310515   Extension cable 50-15-G 6310515   Earth return cable 50mm2 5m 6184511	Cables	
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When working in tough conditions at a construction site, shipyard or a metal fabrication workshop, or doing maintenance welding on a pipeline site in extreme temperatures, you need a companion that you can fully trust on.

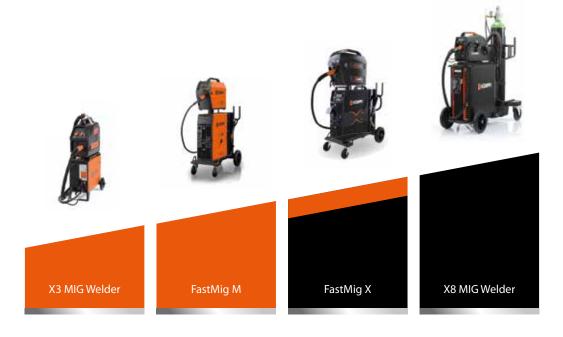






X3 Power Source has a large back lit LCD display that clearly presents the preset wire feed speed and welding voltage parameters.

# Kemppi Industrial MIG Series



**Kemppi** is the pioneering company within the welding industry. It is our role to develop solutions that make you win business. Headquartered in Lahti, Finland, Kemppi employs over 600 welding experts in 13 countries and has a revenue of more than 110 MEUR. Our offering includes welding solutions - intelligent equipment, welding management software and expert services - for both demanding industrial applications and ready-to-weld needs. Local expertise is available via our global partner network covering over 60 countries.

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