

# Kemppi Master 2500 and 3500 MLS™ MMA Welding Machines

Superior  
Productivity  
and Quality



 **KEMPPI**  
The Joy of Welding

# Kemppi Master MLS 2500 and 3500 – Superior productivity and quality

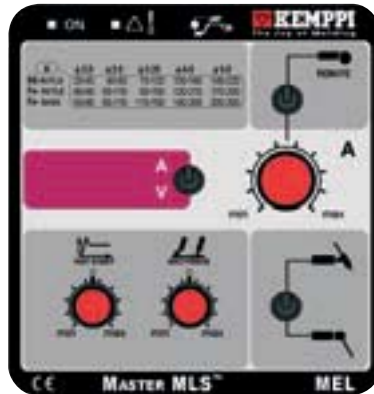


## **KEMPPi MLS™ (MULTI LOGIC SYSTEM)**

The Multi Logic System (MLS™) is Kemppi's answer to the growing need for high-quality welding user interfaces. With MLS™, you can adapt your welding equipment to the most demanding welding conditions.

## INNOVATIVE CONTROL PANEL

The easy-to-use MLS™ control panel allow you to input current welding functions into the characteristics of the welding equipment. Each panel feature has been chosen according to the needs of welding professionals and customer companies worldwide.



- Modern digital technology guides both power source operations and operating panels.
- Versatile Set Up functions ensure that the control panel supports your welding needs without jeopardising usability.
- Works with other Kemppi MLS™ power sources.

## ONE STEP AHEAD

MLS™ allows you to meet future welding needs without having to replace your Kemppi welding machine. This means that the panel functions can be upgraded with new software.





## CONVENIENT AND SAFE

The Master MLS™ MMA welding machines represent Kemppi's strong track record in innovative welding technology.

- Microprocessor-controlled IGBT DC power sources: 250 and 350 A model
- Protective casing for outdoor use
- Easy-to-access controls
- Interchangeable control panels to follow welding values and instructions
- Wide voltage range (340-490 V) for use with power generators
- Compliance with key international safety norms
- MLS™ (Multi Logic System)
- Over voltage protection



## MASTER PERFORMANCE

### Kemppi ICS™ (Isolated Cooling System)

Welders often work in extreme conditions and their equipment is constantly being subjected to hard mechanical stress. In response to this challenge, Kemppi has developed the Isolated Cooling System ICS™ to improve the reliability of Kemppi welding equipment and to minimise maintenance.



With ICS™ you can maintain low component temperatures by directing the cooling air through those power components that need cooling and by preventing the cooling air from reaching the electronic circuit cards. ICS™ switches the cooling fan on only if heat is generated in the power components. The end result is less dirt, less maintenance.

## THE PERFECT WELD

Kemppi's new MMA welding machines lead the way in performance-enhancing features that target arc and weld pool control.

Easy-to-select user functions are available on the MLS™ panel.

- Hot Start ensures a stable arc start by providing the electrode a current pulse. To prevent burning through, the ignition pulse can also be adjusted when welding thin root surfaces.
- The Arc Force enables effective arc adjustment according to electrode type or application – ideal for cellulose-coated electrodes.
- The Antifreeze prevents the electrode from sticking to the work piece – especially if the electrode coating is damaged.
- The Electronic Arc Control delivers precise current when arc length varies.

These functions vary according to user or application and require minimal adjustment during weld.

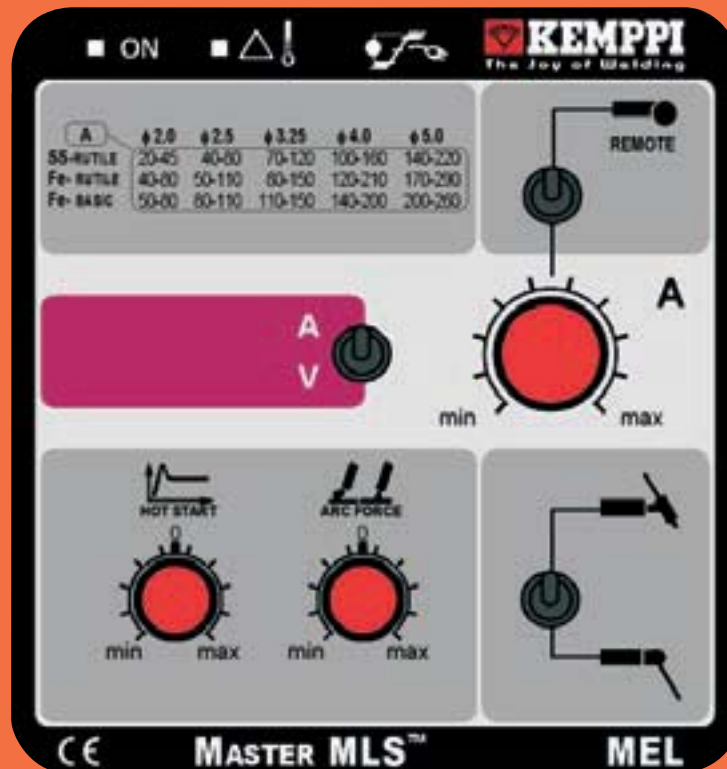
*Greater adjustability, better productivity!*



## ACCESSORIES

With TTM V torch, you can use the power source for simple TIG welding based on the Lift Arc method. Here the arc is ignited by touching the work piece with the TIG electrode. This torch model also includes a gas valve.





## MEL

The MEL panel supports basic MMA welding.

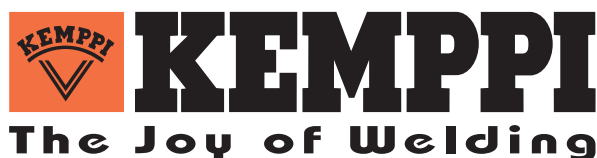
- Separate indicator lights for power connection, overheating and power source voltage.
- Select whether to control the current from the remote control or from the potentiometer.
- Clear digital display for welding current or arc voltage – including set values and values used.
- Hot Start and Arc Force controls.
- MMA/TIG selection

## Order Information

<b>Power sources</b>		Earth cable 25 mm <sup>2</sup> , 5 m	6184211
Master 2500MLS	6104250	Earth cable 35 mm <sup>2</sup> , 5 m	6184311
Master 3500MLS	6104350	Earth cable 35 mm <sup>2</sup> , 10 m	6184312
<b>Welding cables</b>		Earth cable 50 mm <sup>2</sup> , 5 m	6184511
Welding cable 16 mm <sup>2</sup> , 5 m	6184005	Earth cable 50 mm <sup>2</sup> , 10 m	6184512
Welding cable 25 mm <sup>2</sup> , 5 m	6184201	<b>Remote control units</b>	
Welding cable 35 mm <sup>2</sup> , 5 m	6184301	R10 remote control unit	6185409
Welding cable 35 mm <sup>2</sup> , 10 m	6184302	<b>Remote control cables</b>	
Welding cable 50 mm <sup>2</sup> , 5 m	6184501	Remote control cable, 10 m	6185481
Welding cable 50 mm <sup>2</sup> , 10 m	6184502	<b>Accessories:</b>	
<b>Earth cables</b>		Transport unit T200	6185258
Earth cable 16 mm <sup>2</sup> , 5 m	6184015	TIG Torch TTC 220 GV	627022304



Technical data	MASTER MLS™ 2500	MLS™ 3500
Mains voltage		
	3~50/60 Hz	380 V -10%...415 V +6% (460 V -6% +6%)
		380 V -10%...415 V +6% (460 V -6% +6%)
Rated power		
	40% ED MMA	250 A
	60% ED MMA	205 A
	100% ED MMA	160 A
Connection cable/fuse		
	4 x 1.5 S - 5 m/10 A delayed	4 x 2.5 S - 5 m/16 A delayed
Welding current		
	MMA	10 A/20.5 V...250 A/30.0 V
		10 A/20.5 V...350 A/34.0 V
Max. welding voltage		
		36.0 V/250 A
		45.0 V/350 A
Electrode sizes to be welded		
		Ø1.5...5.0 mm
		Ø1.5...6.0 mm
Welding current control		
		stepless
		stepless
Open circuit voltage		
		80 V
		80 V
Efficiency		
		86% (250 A/30.0 V)
		86% (350 A/34.0 V)
Power factor		
		0.95 (250 A/30.0 V)
		0.95 (350 A/34.0 V)
Open circuit power		
		approx. 10 W
		approx. 10 W
Storage temperature range		
		-40...+60°C
		-40...+60°C
Operation temperature range		
		-20...+60 °C
		-20...+60°C
Temperature class		
		H (180°C)/B (130 °C)
		H (180°C)/B (130 °C)
Degree of protection		
		IP 23C
		IP 23C
External dimensions (mm)		
	L x W x H	500 x 180 x 390
		500 x 180 x 390
Weight		
		20 kg
		21 kg
"S" marking, "CE" marking		



**Kemppi Oy**  
P.O. Box 13  
FIN-15801 LAHTI  
FINLAND  
Tel. +358 3 899 11  
Telefax +358 3 899 428  
www.kemppi.com

**Kemppi (U.K) Ltd.**  
4-6 Sergeants Way  
Elms Industrial Estate  
BEDFORD, MK 41 0EH  
ENGLAND  
Tel. +44 1234 213 581  
Telefax +44 1234 215 128  
www.kemppi.com

**Kemppi Welding Machines  
Australia Pty Ltd**  
P.O. Box 404 (2/58 Lancaster Street)  
INGLEBURN NSW 2565  
AUSTRALIA  
Tel. +61 2 9605 9500  
Telefax +61 2 9605 5999  
www.kemppi.com

