# **MASTER M** Extend welding experience

**OKEMPPI** 

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# **Master M** Extend welding experience

**Designed and manufactured in Finland,** Master M is a premium compact MIG/MAG welding machine series that elevates industrial welding performance and usability. Digital arc control, fast setup techniques and excellent power-to-weight ratio set new standards for weld quality and work efficiency.

Choose from three class leading models (353, 355 or

**358)** featuring alternative Manual, Auto and Auto Pulse (355 and 358 models) specifications. Weld with gas-cooled guns, or select the optional Master M cooling system for an integrated liquid cooled package, that maximizes use of the 350A 40% ED welding power.

**Experience new levels of productivity and welding control** by switching on to MAX arc performance processes (optional with Master M 355 and 358 models).

Include MAX arc performance processes as a part of

your delivery package or as a part of a future upgrade.

#### Switch on LED work lights for safety and

**convenience.** The integrated self-charging LED work light system is a standard feature on all Master M models. This useful light source operates with or without mains power, which improves safety and increases productivity in low light conditions.

**Ideal for workshop or site use**, Master M is manufactured from injection-molded reinforced plastics, capable to absorb the knocks and impacts of everyday welding life.

### **KEY BENEFITS**



ELEVATE PRODUCTIVITY

MAX and Wise arc performance processes elevate productivity, increase welding speed, improve weld pool control and reduce heat input.



SET FASTER

Up to 60% faster than setting parameters manually, Weld Assist is the guidance tool for fast parameter setting. Simply select your joint type, welding position and material thickness and you're ready to weld.



#### WORK LONGER

Compact and multi-process Master M delivers 350A MIG/MAG welding power @ 40% ED at 40 °C.

## **Extend standards for quality welding**



#### Master M 353

#### Manual and Auto MIG/MAG processes, plus DC TIG and MMA

- Color LCD display
- Work pack welding software
- programs incl. Fe, Ss, Al, CuSi, CuAl materials
- Weld Assist parameter setting
- LED work lights
- 6 memory channels
- Powerlog
- · Wire inch and gas test buttons
- Kinetic spool brake
- Cabinet lighting
- Auto calibration
- USB port
- Safe-to-lift
- PIN lock
- Cycle timer

#### Master M 355

#### Manual, Auto and Auto Pulse MIG/MAG processes, plus DC TIG and MMA

- Color LCD display
- Work pack welding software programs incl. Fe, Ss, Al, CuSi, CuAl materials
- Weld Assist parameter setting
- WiseFusion arc performance process
- LED work lights
- 6 memory channels
- Powerlog
- · Gas guard and gas regulation valve
- · Wire inch and gas test buttons
- Kinetic spool brake
- Cabinet lighting
- Auto calibration
- USB port
- Safe-to-lift
- PIN lock
- Cycle timer

Master M cooler

Gas flow rotameter

transport carts

 Cabinet heater Air filter

GXR10 Gun remote control

SuperSnake GTX subfeeder

• Alternative 2 and 4 wheel

Industry 4.0 compatible with WeldEye

Digital Connectivity Module (DCM)

MAX Cool, MAX Position, MAX Speed

arc performance processes

#### OPTIONS

- Master M cooler
- Digital WPS
- GXR10 Gun remote control
- SuperSnake GTX subfeeder
- Alternative 2 and 4 wheel transport carts
- Material specific software packages
- Industry 4.0 native connectivity including WeldEye ArcVision and digital WPS (dWPS)
- Cabinet heater
- Air filter
- MAX and Wise arc performance processes

- Master M cooler
- GXR10 Gun remote control
- SuperSnake GTX subfeeder
- Gas flow rotameter
- · Alternative 2 and 4 wheel transport carts
- Cabinet heater
- Air filter

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Master M 358

• TFT full color display

• LED work lights

Powerlog

• 100 memory channels

Kinetic spool brake

Cabinet lighting

Auto calibration

Safe-to-lift

Manual, Auto and Auto Pulse MIG/MAG

Work pack welding software programs

incl. Fe, Ss, Al, CuSi, CuAl materials

Weld Assist menu parameter setting

• WiseFusion arc performance process

· Gas guard and gas flow rotameter

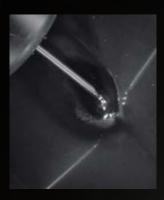
• Wire inch and gas test buttons

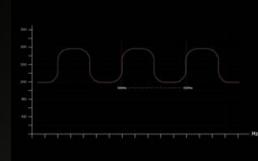
processes, plus DC TIG and MMA

Integrated digital connectivity

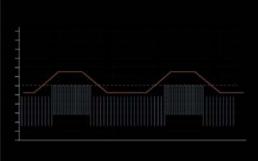
# Make the seemingly impossible, possible

For challenging welding applications and demanding production targets, new MAX arc performance processes offer increased welding travel speed, improved weld pool control and lower heat input, without the need for an additional measurement cable. The new MAX processes join the already successful Wise modified arc processes and collectively make the seemingly impossible, possible.

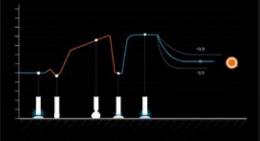












## MAX

MAX Speed increases welding travel speed by up to 70%\* compared to traditional pulse or spray arc processes. MAX Speed produces clean, high-quality weld seams, effectively reducing labor time and welding costs. MAX Speed is designed for steel and stainless steel welding applications in the PA and PB positions.



MAX Position helps to manage the gravitational effects on a molten weld pool. Improving control and confidence when working in position, MAX Position is excellent when filling and capping in steel, stainless steel and aluminum applications in the PF position.



MAX Cool lowers heat input by up to 32%, improving control where excessive temperatures negatively impact weld pool stability and increase joint distortion. MAX Cool is ideal for a variety of applications, including thin sheet fabrication, root welding, gap bridging and joining thin extruded sections in solid Fe, Ss, CuAl<sub>a</sub> and CuSi<sub>a</sub> filler materials.

See more information about arc performance processes

> kemp.cc/special-processes/com

## **Extend possibilities**



#### WORK PACK SOFTWARE

Standard welding software includes 0.8mm, 0.9mm, 1.0mm, 1.2mm diameter filler wires, Fe, Fe metal, Fe rutile, Ss rutile, Ss, AlMg5, AlSi5, CuSi3, CuAl8. Master M 355 and 358 models accept optional welding software.



#### MASTER M COOLER

Keeps your welding gun cool and the arc conditions smooth and stable. The cooler tank is easy to clean and has integrated LED lighting, so you can monitor the cooling liquid level and make routine maintenance easy.



#### WELD ASSIST

Weld Assist is a guidance tool for faster setup. Simply select the joint type, welding position and material thickness and you're ready to weld. An excellent instructive and educational tool, Weld Assist parameters can also be adjusted manually for individual preference.



#### SUPERSNAKE GTX

Extend the reach of your welding gun with the compact SuperSnake GTX subfeeder which includes digital metering, a safety lock ON/OFF switch and a strong protective frame.



#### WORK LIGHTS

Improve work efficiency and safety with or without mains power connected. LED lighting is also included in the wire feed cabinet.

**V**KEND



#### SAFE-TO-LIFT DESIGN

When using suitable lifting equipment Master M can be lifted by the handle, ensuring safe lifting and easy movement on site.



#### POWERLOG

Powerlog trigger logic allows three alternative power levels during welding. Use a standard gun trigger to select the power level required for the job.



GKEMPP

#### GAS GUARD

Prevents welding if the shielding gas supply is interrupted or is not connected. Gas guard is a standard feature on 355 and 358 models.

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#### AUTOMATIC CALIBRATION

Auto cable calibration measures the welding circuit resistance and calibrates the digital meters, ensuring that the arc voltage value displayed matches accurately the voltage of the welding arc. Critical for accurate WPS compliance.



Transfer and analyse your welding data using Kemppi welding management support tools. Master M 358 includes a FREE 3 months' trial licence for WeldEye ArcVision. Digital WPS (dWPS) is optional feature for Master M 358.

## **SuperSnake GTX** Distance and access solution

**Extending the reach of standard Euro-connected MIG welding guns,** SuperSnake GTX provides a simple and effective distance wire feeding solution for a variety of filler wires.

KENDA

SuperSnake GTX easily reaches the welding targets not accessible with basic welding equipment.

**Excellent for customers welding in large site environments**, where equipment movement, reach and access present significant challenges.

For the recommended SuperSnake model, and guidance for your welding application and selected welding process, first check the Master M user manual.

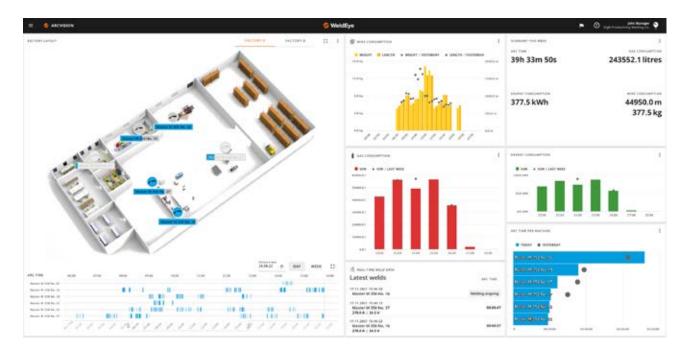
More information about SuperSnake subfeeder:

> kemp.cc/ supersnake/com









Even a simple solution for monitoring welding productivity can bring significant benefits for most companies and improve workflow planning.

## WeldEye ArcVision

Gain insight into arc-on time and welding parameters

**WeldEye ArcVision** is an integrated Industry 4.0 solution that tracks and records arc-on time and welding parameters for better insight into welding production. Raw data is collected digitally from connected welding stations and uploaded wirelessly\* to WeldEye ArcVision. The data is then visualized into clear tables and graphs that can be filtered based on different needs and viewed conveniently from your laptop's web browser.



Activate your free three-month trial license of WeldEye ArcVision with no obligation. The trial license also includes WeldEye's Welding Procedures module, allowing you to test the digital WPS (dWPS) feature with Master M.

\*Master M 358



More about WeldEye: > weldeye.com

#### Do you know how your welding machines are being used?

WeldEye ArcVision collects data automatically from all connected welding stations without additional actions from machine users:

- arc-on time per hour, day, week, or month
- welding parameters (A; V)
- filler wire usage (kg)
- energy consumption (kWh)

Clear visualizations make production analysis straightforward:

- welding station specific data with latest welds
- arc-on time comparison views
- real-time use of welding machines on workshop layout
- machine specific information, e.g. setup, software versions
- main view customization options with widgets

## **Technical specifications**

FEATURE		MASTER M G	MASTER M GM
Mains connection voltage 3~ 50/60 Hz		380 - 460 V ± 10 %	380 - 460 V ±10 % 220 - 230 V ±10 %
	40% [380 - 460 V] 40% [220 -230 V]	350 A (MMA 330 A)	350 A (MMA 330 A) 300 A (MMA 280 A)
	60% [380 - 460 V] 60% [220 -230 V]	280 A	280 A 240 A
Output at +40 °C	100% [380 - 460 V] 100% [220 -230 V]	220 A	220 A 190 A
	MIG [380 - 460 V] MIG [220 -230 V]	15 A/10 V - 350 A/ 45 V	15 A/10 V - 350 A/ 45 V 15 A/10 V - 300 A/ 40 V
	MMA [380 - 460 V] MMA [220 -230 V]	15 A/10 V - 330 A/ 45 V	15 A/10 V - 330 A/ 45 V 15 A/10 V - 280 A/ 40 V
Welding current and voltage range	TIG [380 - 460 V] TIG [220 -230 V]	15 A/1 V - 350 A/ 45 V	15 A/1 V - 350 A/ 45 V 15 A/1 V - 300 A/ 40 V
Gun connection		Euro	Euro
Wire feed mechanism		4-roll, single-motor	4-roll, single-motor
Diameter of feed rolls		32 mm	32 mm
	Fe	0.8 - 1.2 mm	0.8 - 1.2 mm
	Ss	0.8 - 1.2 mm	0.8 - 1.2 mm
	Mc/Fc	0.8 - 1.2 mm	0.8 - 1.2 mm
Filler wires	Al	0.8 - 1.2 mm	0.8 - 1.2 mm
Wire feed speed		0.5 - 25 m/min	0.5 - 25 m/min
Wire spool weight (max)		20 kg	20 kg
Wire spool diameter (max)		300 mm	300 mm
Shielding gas pressure (max)		0.5 MPa	0.5 MPa
Operating temperature range		-20+40 °C	-20+40 °C
Storage temperature range		-40+60 °C	-40+60 °C
EMC class		А	А
Degree of protection		IP23S	IP23S
External dimensions LxWxH		602 x 298 x 447 mm	602 x 298 x 447 mm
Weight without accessories		27 kg	27 kg
Recommended generator power (min)	400V	20 KVA	20 kVA
Standards		IEC 60974-1, -10	IEC 60974-1, -10

FEATURE	MASTER M COOLER	MASTER M COOLER MV
Cooling power at 1 l/min	1.0 kW	1.0 kW
Recommended coolant	MGP 4456 (Kemppi mixture)	MGP 4456 (Kemppi mixture)
Tank volume	3	3
Operating temperature range with recommended coolant	-20+40 °C	-20+40 °C
Storage temperature range	-40+60 °C	-40+60 °C
EMC class	A	A
Degree of protection (when mounted)	IP23S	IP23S
External dimensions LxWxH	635 x 305 x 292	635 x 305 x 292
Weight without accessories	14,9 kg	14,9 kg
Standards	IEC 60974-2, -10	IEC 60974-2, -10

## **Product codes**

MODEL DESCRIPTION	ITEM CODE
Master M 353 G	MSM353G
Master M 353 GM	MSM353GM
Master M 355 G	MSM355G
Master M 355 GM	MSM355GM
Master M 358 G	MSM358G
Master M 358 GM	MSM358GM
Master M COOLER	MSMC1KW
Master M COOLER MULTI VOLTAGE	MSMC1KWM
T35A TWO WHEEL TRAVEL CART NO CYLINDER	T35A
T25MT TWO WHEEL CART INTERMEDIATE CYLINDER	T25MT
P45MT FOUR WHEEL CART LARGE CYLINDER	P45MT
P43MT FOUR WHEEL CART NO CYCLINDER	P43MT
CABINET HEATER KIT	SP021614
ROTA METER GAS FLOW REGUALTION KIT	SP801136
SUPERSNAKE KIT	SP023803
Master M POWER SOURCE FILTER KIT	SP023312
MMA EURO CONNECTOR 500A	SP801140
HR40 TWO KNOB WIRED HAND REMOTE CONTROL	HR40
GXR10 GUN REMOTE CONTROL	GXR10
MSM MAX Speed	MSM80000
MSM MAX Cool	MSM70000
MSM MAX Position	MSM90000
MSM WiseFusion	MSM40000
MSM WisePenetration	MSM50000
MSM WiseSteel	MSM60000
Note: Power source packages include Gas Hose and Earth Return Lead	

#### Manual

Master M userdoc

#### > kemp.cc/masterm/manuals



#### **Product codes**

Master M product codes

> kemp.cc/masterm/ product-codes



#### 3 years warranty

Finalize your warranty registration kemp.cc/warranty/com



## Designed for welders

#### Forerunner in arc welding.

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.

Kemppi - Designed for welders

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