

Product catalogue

2012–2013



The Joy of Welding Around the World

Kemppi business operates globally. The company headquarters and main production units are located in Finland. Kemppi sales organisations are established in Finland, Sweden, Norway, Denmark, Germany, France, United Kingdom, Netherlands, Poland, Russia, Australia, India and China. Kemppi also has representatives in more than 70 countries, responsible for country based product distribution, sales and customer service.

For a full list of Kemppi sales companies, distributors and dealers, visit www.kemppi.com



A people business

Kemppi has introduced many new innovations to the market, pioneering the development of both welding devices and productive welding solutions and services. Today, the company still relies on the same basic values that have guided its operations for over 60 years. Entrepreneurship, innovation, honesty and respect for the individual are fundamental principles.

Kemppi investment in research and product development place primary importance on the usability, technical quality and productivity of its products and comprehensive customer service.



Design solutions

Finnish industrial design carries integrity, efficiency, confidence and quality. Kemppi people are reliable, dedicated and responsible.

Developing performance

Kemppi welding products ensure productive satisfaction. Our research teams are curious and open-minded to seek alternative solutions that further develop our customers' performance.

Producing quality

Kemppi production facilities are modern and efficient. Products are manufactured utilizing quality materials and testing processes to ensure productivity from the first to the last weld.

Customer satisfaction

Kemppi business starts and finishes with our customers. Satisfaction here is what really matters.



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Special symbols



4-roll wire drive



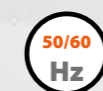
2-roll wire drive



Water cooling option



Direct and pulsed current output



Supply frequency



Alternating, direct and pulsed current output



Constant voltage output



Constant current output



Constant current and constant voltage output



Requires single phase supply



Requires three phase supply



Multi-voltage unit



Energy efficient compared to alternative product options



MIG/MAG welding

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Because welding applications vary, we design products to meet specific needs. So if you're looking for a lightweight compact machine or modular welding equipment for heavy industry, you can be sure to select the right machine for the task.

Designed for welders with an eye for quality, Kemppi MIG/MAG equipment keeps the technology on the inside and simple, intuitive control and performance outside. Real world welding satisfaction.

MinarcMig Evo 170/200

An adaptive tool for the mobile welder



Energy efficient

Why buy

- Precise weld quality and arc ignition
- 200 A / 170 A of MIG/MAG welding power from a 16 A supply
- Choose either Automatic or Manual model
- Use with Fe, Fe FCW, Ss, Al, CuSi filler wires, 1 kg and 5 kg spools
- Just set the plate thickness and weld with 200 A model
- Large graphical display guides user
- Designed for use with long supply cables of 100m+
- A 3-meter gun, cable set and carrying strap included
- Suitable for mains network or generator use
- Kemppi 2+ warranty for parts and labour

Easier welding than ever

MinarcMig Evo machines pack huge MIG/MAG welding capacity and quality into their portable, compact size. Choose from either 200 A or 170 A models, delivering their welding power at 35 % duty cycle from a 16 A, 1-phase mains supply. MinarcMig Evo delivers premium results wherever your work takes you.

MinarcMig Evo 200 offers Automatic and Manual mode set-up for precise welding quality and arc ignition, monitored and controlled by Kemppi's adaptive arc regulation system. MinarcMig Evo 170 offers manual setting only, with separate controls for voltage and wire feed speed. Each model features a large graphical interface guiding the user during set-up and with MinarcMig Evo 200 you can simply set the plate thickness and weld, including materials selection for ferrous, stainless steel, aluminum and CuSi brazing filler wires, satisfying a wide variety of industrial applications.

PFC power source technology offers the ultimate energy economy with a power factor of 0.99. MinarcMig Evo can also be used efficiently with extra long power supply cables of more than 100 meters long, allowing for optimum welding utility in site welding environments.

Technical specifications

MinarcMig Evo		170	200
Connection voltage	1~, 50/60 Hz	230 V (± 15 %)	230 V (± 15 %)
Connection voltage (AU)	1~, 50/60 Hz	240 V (± 15 %)	240 V (± 15 %)
Rated power at max. current	35 % ED	170 A/4.8 kVA	200 A/6.2 kVA
Supply current	35 % ED I _{1max}	20,3 A	26.2 A
	100 % ED I _{1eff}	10,1 A	13.2 A
Connection cable	H07RN-F	3G1.5 (1.5 mm ² , 3 m)	3G1.5(1.5 mm ² , 3 m)
Fuse	type C	16 A	16 A
Output 40 °C	35% ED	170 A/24 V	200 A/24 V
	100% ED	100 A/20 V	120 A/20 V
Welding range		20 A/15 V – 170 A/ 24 V	20 A/15 V – 200 A/ 26 V
No-load voltage		74 V	74 V
Idle power		12 W fan off, 21 W fan on	12 W fan off, 26 W fan on
Voltage steps		0.1 V	0.1 V
Power factor at max. current		0.99	0.99
Efficiency at 100 % ED		80 %	82 %
Filler wires ø	Fe solid wire	0.6...1.0 mm	0.6...1.0 mm
	Fe cored wire	0.8...1.0 mm	0.8...1.0 mm
	Ss		0.8...1.0 mm
	Al		1.0 mm
	CuSi		0.8...1.0 mm
Wire feed speed adjustment range		1...12 m/min	1...13 m/min
Wire spool	max. ø	200 mm / 5 kg	200 mm / 5 kg
Shielding gases		CO ₂ , Ar + CO ₂ mixed	CO ₂ , Ar, Ar + CO ₂ mixed
External dimensions	L x W x H	450 x 227 x 368 mm	450 x 227 x 368 mm
Weight (incl. gun and cables 3.0 kg)		13 kg	13 kg
Temperature class		F (155 °C)	F (155 °C)
EMC class		A	A
Degree of protection		IP23S	IP23S
Operating temperature range		-20...+40 °C	-20...+40 °C
Storage temperature range		-40...+60 °C	-40...+60 °C
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10, IEC 61000-3-12			

Ordering information

MinarcMig Evo (incl. gun, cables, gas hose and shoulder strap)		
MinarcMig Evo 170	61008170	
MinarcMig Evo 170 AU	61008170AU	
MinarcMig Evo 170 (Denmark)	61008170DK	
MinarcMig Evo 200	61008200	
MinarcMig Evo 200 AU	61008200AU	
MinarcMig Evo 200 (Denmark)	61008200DK	
Welding gun MMG22	3 m	6250220
Earth return cable and clamp	3 m	6184003
Shielding gas hose	4.5 m	W001077
Shoulder strap		9592163

Applications

- Thin sheet metal fabrication workshops
- Installation and set-up
- Repair and maintenance



Quality welding, wherever work takes you.



MinarcMig Evo suits a variety of welding fabrication tasks.



MinarcMig Evo 170 and 200 models include LCD control panels. MinarcMig Evo 200 also includes material type, plate thickness and weld shape selection.

Kempact RA

Switch on the new standard



Energy efficient



Why buy

- Modern, energy efficient power source
- Excellent welding performance with mixed or CO₂ shielding gas
- Precise, clean arc ignition
- Maximum output at 35 % duty cycle
- Large, clear LCD display
- WireLine™ service indicator
- GasMate™ chassis design featuring floor level cylinder loading
- Brights™ cabinet lighting
- HotSpot™ heat treatment function
- 2T/4T gun switch latching
- Spot and cycle arc timer
- Parts storage trays
- 3.5 m FE welding gun
- Kemppi 2+ warranty

New standards in compact MIG/MAG class

Designed for the modern welding workshop, Kempact RA expresses stylish and purposeful design through high build quality and functional user benefits, making weld tasks productive, accurate and efficient.

Kempact RA is built on Kemppi's latest power source platform, ensuring optimal welding performance and excellent power cost efficiency. Eleven model options include 180, 250 and 320 ampere power sources, including a choice of either Regular (R) or Adaptive (A) control panel interface, which serve the wide ranging needs of metal fabrication workshops. Delivery specification includes welding gun and earth return lead pack.

New technology features include reduced energy costs of more than 10 % when compared to conventional step controlled power sources, Brights™ cabinet lighting for easy wire loading in low light conditions, WireLine™ service alert function that signals routine wire-path maintenance needs, plus the integrated GasMate™ chassis design, making gas cylinder loading and machine movement easy and safe. Whichever model you select, Kempact RA ensures you get the most from every welding task.

Design features:

1. Tough Plexiglas cover and lens plate provide added protection and style.
2. Choose either Regular (R models) or Adaptive (A models) control panel interface.
3. 2-roll (181 and 251 models) or 4-roll (253 and 323 models) wire drive systems.
4. Inverted gun connection improves wire feeding and gun life.
5. Brights™ wire cabinet lighting for low light conditions.
6. WireLine™ service symbol alerts drive system maintenance needs.
7. Integrated storage trays for wire drive and gun parts.
8. GasMate™ chassis design makes cylinder loading and machine movement easy and safe.
9. Strong pressed steel and moulded plastic construction.
10. Easy change welding polarity terminals.
11. Particle filter option for dusty fabrication shops.



Kempact RA is accurate and efficient; designed for use with a variety of filler materials.



The large and clear LCD control panels make parameter setting and reference easy. Parts trays provide convenient storage and access.



GasMate chassis design makes gas cylinder collection, storage and movement easy. Gas cylinders are floor level loaded and secured with a strong fabric webbing system.



Kempact Adaptive (A) models include special features, including power setting by plate thickness control, filler materials selection and memory channels.



2012

Kempact RA

Technical specifications

Kempact	181A		251R, 251A	
Connection voltage	1~, 50/60 Hz	230V (±15 %)	1~, 50/60 Hz	240V (±15 %)
Rated power at max. current	50 % ED I1 max (180 A)	5 kVA	30 % ED I1 max (250 A)	8.5 kVA
Supply current	50 % ED I1 max (180 A)	22 A	30 % ED I1 max (250 A)	36 A
	100 % ED I1 eff (140 A)	16 A	100 % ED I1 eff (150 A)	17 A
Connection cable	H07RN-F	3G1.5 (1.5 mm ² , 5 m)	H07RN-F	3G2.5 (2.5 mm ² , 5 m)
Fuse	Type C	16 A	Type C	20 A
Welding range	10 V / 20 A – 26 V / 180 A		10 V / 20 A – 29 V / 250 A	
Power factor at max.	180 A / 23 V	0.99	250 A / 26.5 V	0.99
Efficiency at 100% ED	140 A / 21 V	0.82	150 A / 21.5 V	0.82
Wire feed speed adjustment range	1.0-14.0 m/min		1.0-18.0m/min	
Voltage adjustment range	8.0-26.0V		8.0-29.0V	
External dimensions	L x W x H	623 x 579 x 1070 mm	L x W x H	623 x 579 x 1070 mm
Weight (without gun and cables)	44 kg		44 kg	
EMC class	A		A	
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10, IEC 61000-3-12				

Kempact	253R, 253A		323R, 323A	
Connection voltage	3~, 50/60 Hz	400V (±15 %)	3~, 50/60 Hz	400V (±15 %)
Rated power at max. current	40 % ED I1 max (250 A)	8.5 kVA	35 % ED I1 max (320 A)	12 kVA
Supply current	40 % ED I1 max (250 A)	11.9 A	35 % ED I1 max (320 A)	17.2 A
	100 % ED I1 eff (150 A)	6.1 A	100 % ED I1 eff (190 A)	8.2 A
Connection cable	H07RN-F	4G1.5 (1.5 mm ² , 5 m)	H07RN-F	4G1.5 (1.5 mm ² , 5 m)
Fuse	Type C	10A	Type C	10A
Welding range	10 V / 20 A – 31 V / 250 A		10 V / 20 A – 32.5 V / 320 A	
Power factor at max.	250 A / 26.5 V	0.93	320 A / 30 V	0.94
Efficiency at 100% ED	150 A / 21.5 V	0.88	190 A / 23.5 V	0.86
Wire feed speed adjustment range	1.0-18.0m/min		1.0-20.0m/min	
Voltage adjustment range	8.0-31.0V		8.0-32.5V	
External dimensions	L x W x H	623 x 579 x 1070 mm	L x W x H	623 x 579 x 1070 mm
Weight (without gun and cables)	44 kg		44 kg	
EMC class	A		A	
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10				



Kempact 181/251 models include the GT02, two roll wire drive unit.



Kempact 253/323 models include the Dura-Torque four roll wire drive unit.



HotSpot™ feature makes metal shrinking and component heating simple and convenient.

Kempact RA

Technical specifications

Kempact	253 RMV/AMV		323 RMV/AMV	
Connection voltage	3~, 50/60 Hz	230 V -15%...400 V +15%	3~, 50/60Hz	230 V -15%...400 V +15%
Rated power at max. current	40% ED I1 max (250 A)(230V)	9 kVA	35% ED I1 max (320A)(230V)	13.5 kVA
	40% ED I1 max (250A)(400V)	8.5 kVA	35% ED I1 max (320A)(400V)	12.5 kVA
Supply current	40% ED I1 max (250A)(230V)	22.2 A	35% ED I1 max (320A)(230V)	33.3 A
	40% ED I1 max (250A)(400V)	12.3 A	35% ED I1 max (320A)(400V)	17.8 A
	100% ED I1 eff (150A)(230V)	10.8 A	100% ED I1 eff (190A)(230V)	14.8 A
	100% ED I1 eff (150A)(400V)	6.2 A	100% ED I1 eff (190A)(400V)	8.3 A
Connection cable	H07RN-F	4G1.5 (1.5 mm ² , 5 m)	H07RN-F	4G1.5 (1.5 mm ² , 5 m)
Fuse	Type C (230V)	16 A	Type C (230V)	16 A
	Type C (400V)	10 A	Type C (400V)	10 A
Welding range	10V/20A - 31V/250A		10V/20A - 32.5V/320A	
Power factor at max.	250A/26.5V (230V)	0.94	320A/30V (230V)	0.94
	250A/26.5V (400V)	0.93	320A/30V (400V)	0.94
Efficiency at 100% ED	150A/21.5V (230V)	0.79	190A/23.5V (230V)	0.80
	150A/21.5V (400V)	0.82	190A/23.5V (400V)	0.83
Wire feed speed adjustment range	1.0-18.0m/min		1.0-20.0m/min	
Voltage adjustment range	8.0-31.0V		8.0-32.5V	
External dimensions	L x W x H	623 x 579 x 1070 mm	L x W x H	623 x 579 x 1070 mm
Weight (without gun and cables)	44 kg		44 kg	
EMC class	A		A	
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10				

Ordering information

Kempact RA	
Kempact 181A, FE20 3.5m	P2201
Kempact 181A, FE20 5m	P2202
Kempact 251R, FE25 3.5m	P2203
Kempact 251R, FE25 5m	P2204
Kempact 251A, FE25 3.5m	P2205
Kempact 251A, FE25 5m	P2206
Kempact 253R, FE27 3.5m	P2207
Kempact 253R, FE27 5m	P2208
Kempact 253A, FE32 3.5m	P2209
Kempact 253A, FE32 5m	P2210
Kempact 323R, FE32 3.5m	P2211
Kempact 323R, FE32 5m	P2212

Kempact RA	
Kempact 323A, FE32 3.5m	P2213
Kempact 323A, FE32 5m	P2214
Kempact 253RMV, FE27 5m	P2215
Kempact 253RMV, FE27 3.5m	P2216
Kempact 253AMV, FE27 5m	P2217
Kempact 253AMV, FE27 3.5m	P2218
Kempact 323RMV, FE32 3.5m	P2219
Kempact 323RMV, FE32 5m	P2220
Kempact 323AMV, FE32 3.5m	P2221
Kempact 323AMV, FE32 5m	P2222
Holder	9592106
Carbon electrode	4192160

FastMig KM/KMS



Why buy

- Precise electronic control
- Quality welding performance
- Practical, modular design
- Low energy consumption
- Distance wire feeding options
- Practical and versatile functions
- Wise™ process solutions

Applications

- Metal fabrication workshops
- Shipyards and offshore industry
- Chemical and process industry
- Steel structure workshops



Energy efficient

Combine choice, power, quality and economy

FastMig KM and KMS MIG/MAG machines pack huge duty cycle performance into compact lean dimensions and weight, increasing productivity and work site mobility. Precise arc performance suits environments where quality matters, and 10 % more power efficiency over conventional designs will please every user.

FastMig KM key features:

FastMig KM range is the modern alternative to traditional stepswitch designs. New control technology ensures excellent arc ignition and welding performance, so you spend more time welding and less time cleaning weld spatter.

Choose from 300/400/500 amp power source models, plus two robust, impact resistant, plastic cased wire feeders for 200 mm and 300 mm wire spools. Electronic control means you can tune and adjust the weld settings from the wire feed unit, even during welding. Choose from our wide range of interconnecting cable sets and you'll have the reach, control and distance you need.

FastMig KMS key features:

Power efficient 300/400/500 amp KMS models combine with three MXF wire feed units suiting different work site conditions and 200 mm and 300 mm wire spools. A choice of basic or synergic control panels offer large, clear meter displays and logical, useful functions that make welding easy in any situation. Synergic SFW control panels simplify weld process control including selections for Fe, St/St, Al, CuSi, CuAl8 filler wires in a range of diameters.

FastMig KMS is compatible with several Wise process products, including WiseRoot and WisePenetration, ensuring KMS users have the option to easily tackle those specialist tasks when needed.



Wire feed units for different applications. MXF 65/MXF 67 for 300 mm wire spools. MXF 63 for 200 mm wire spools.



KM and KMS models give precise, clean welding performance. KMS models also support optional root pass welding process.



Combine FastMig KMS with SuperSnake for the ultimate distance and access welding solution, extending the reach of standard welding guns up to 25 m from the wire feed unit.



The modular design of KM/KMS models ensures you choose the specification that best suits your needs.

FastMig KM/KMS

Technical specifications

FastMig		KM/KMS 300	KM/KMS 400	KM/KMS 500	KM/KMS 400 MVU	
Connection voltage	3~, 50/60 Hz	400 V (-15...+20 %)	400 V (-15...+20 %)	400 V (-15...+20 %)	400 V (-15...+20%)	230 V (±10%)
Rated power at max. current		12.9 kVA/ 13.9 kVA	18.5 kVA/ 19.5 kVA	25.9 kVA/ 26.1 kVA	19 kVA	20 kVA
Connection cable	H07RN-F	4G6 (5 m)	4G6 (5 m)	4G6 (5 m)	4G10 (5 m)	4G10 (5 m)
Fuse, delayed		25 A	35 A	35 A	35 A/50 A	35 A/63 A
Output 40 °C	60 % ED	-	-	500 A/39 V		
	80 % ED	-	400 A/34 V	-	400 A/34 -36V	400 A/36 V
	100 % ED	300 A/29 V	380 A/33 V	430 A/35.5 V	380 A/35 V	380 A/33-35 V
Open circuit voltage	MMA	50V	50V	50V	50V	50V
	MIG	65V	65V	65V	65V	65V
Power ratio at max. current		87 %	87 %	87 %	87 %	87 %
Welding range	MIG	20A/12V-300A/32V	20A/12V-400A/36V	20A/12V-500A/40V	20A/12V- 400A/36V	20A/12V - 500A/40V
	MMA	10A/20V-300A/32V	10A/20V-400A/36V	10A/20V-500A/40V	10A/20V- 400A/36V	10A/20V - 500A/40V
External dimension (mm)	L x W x H	590 x 230 x 430	590 x 230 x 430	590 x 230 x 430	590 x 230 x 580	590 x 230 x 580
Weight		34 kg	35 kg	36 kg	49 kg	49 kg

FastMig wire feeders		MF 29	MF 33	MXF 63	MXF 65	MXF 67
Operating voltage		24 V DC	24 V DC	50 V DC	50 V DC	50 V DC
Rated power		100 W	100 W	100 W	100 W	100 W
Output 40 °C	60 % ED	520 A	520 A	520 A	520 A	520 A
	100 % ED	440 A	440 A	440 A	440 A	440 A
Wire feed mechanism		4 roll	4 roll	4 roll	4 roll	4 roll
Wire feed speed		0...25 m/min	0...25 m/min	0...25 m/min	0...25 m/min	0...25 m/min
Wire spool, maximum	ø	200 mm	300 mm	200 mm	300 mm	300 mm
Filler wires ø (mm)	Fe, Ss	0.6...1.6	0.6...1.6	0.6...1.6	0.6...1.6	0.6...1.6
	Cored wire	0.8...1.6	0.8...1.6	0.8...1.6	0.8...2.0	0.8...2.0
	Al	1.0...1.6	1.0...1.6	1.0...1.6	1.0...2.4	1.0...2.4
External dimensions (mm)	L x W x H	510 x 200 x 310	510 x 200 x 310	510 x 200 x 310	620 x 210 x 445	625 x 243 x 476
Weight		9.4 kg	13.6 kg	9.4 kg	11.1 kg	14 kg

FastCool 10		
Operating voltage		24 V DC
Rated power		50 W
Cooling power		1.0 kW
Maximum pressure		450 kPa
Recommended cooling liquid		20...40 % ethanol/water
Tank volume		3 l
External dimensions	L x W x H	570 x 230 x 280 mm
Weight		11 kg

FastMig KM/KMS

Ordering information

Power Sources		
FastMig KM 300		6033000
FastMig KM 400		6034000
FastMig KM 500		6035000
FastMig KM 400 MVU		603400003
FastMig KMS 300		6053000
FastMig KMS 400		6054000
FastMig KMS 500		6055000
FastMig KMS 400 MVU		605400003
Control panels		
SF 51		6085100
SF 52		6085200W
SF 53		6085300W
SF 54		6085400
WiseRoot™ feature		6265011
Wire Feeders		
MF 29		6063200
MF 33		6063300
MXF 63		6152300
MXF 65		6152100
MXF 67		6152200
FastCool 10		6068100
Transport units		
PM 500		6185291
PM 501 (with PSL 55)		6185292
PM 502		6185293
P 500 (MF 29, MF 33, MXF 63)		6185265
P 501 (MXF 65, MXF 67)		6185269
T 10*		6185231
T 120*		6185252
Remote control units		
R10, 5 m		6185409
R10, 10 m		618540901
R20, 5 m		6185419
RMT 10 (PMT)		6185475
R30 DataRemote 5 m		6185420
R30 DataRemote 10 m		618542001
Remote control cable, 10 mm		6185481
Accessories		
KWF 200 hanging frame		6185285
KWF 200 protection sliders		6185286
KWF 300 protection sliders		6185287
KV 200 mounting plate		6185249

MXF 63 hanging frame (incl. KPS mounting set)		6185285
MF 65 hanging kit		W001694
MXF 63 protection sliders (incl. KPS mounting set)		6185286
KWF Sync 300		6263300
GG200/300 gas guard		6237406
MXFSuperSnake synchronisation kit		W004030
Gun holder GH30		6256030
KV 401 SWING BOOM ARM (PM 500)		6185248
MIG welding guns		
MMT 35 3 m		6253513MMT
MMT 35 4.5 m		6253514MMT
MMT 42 3 m		6254213MMT
MMT 42 4.5 m		6254214MMT
MMT 42W 3 m		6254203MMT
MMT 42W 4.5 m		6254204MMT
MMT 52W 3 m		6255203MMT
MMT 52W 4.5 m		6255204MMT
PMT 35 3 m		6253513
PMT 35 4.5 m		6253514
PMT 42 3 m		6254213
PMT 42 4.5 m		6254214
PMT 50 3 m		6255013
PMT 50 4.5 m		6255014
PMT 30W 3 m		6253043
PMT 30W 4.5 m		6253044
PMT 42W 3 m		6254203
PMT 42W 4.5 m		6254204
PMT 52W 3 m		6255203
PMT 52W 4.5 m		6255204
Earth return cables		
5 m, 50 mm ²		6184511
5 m, 70 mm ²		6184711
Cable for MMA welding		
5 m, 50 mm ²		6184501
5 m, 70 mm ²		6184701

Interconnection cables		
KM 70-1.8-WH		6260411
KM 70-1.8-GH		6260413
KM 70-10-GH		6260417
KM 70-10-WH		6260418
KM 70-20-GH		6260450
KM 70-20-WH		6260451
KM 70-30-GH		6260454
KM 70-30-WH		6260455
KWF 70-1.8-GH		6260401
KMS 70-1.8-WH		6260410
PROMIG 2/3 70-10-GH		6260326
PROMIG 2/3 70-10-WH		6260334
PROMIG 2/3 70-20-GH		6260327
PROMIG 2/3 70-20-WH		6260337
PROMIG 2/3 70-30-GH		6260330
PROMIG 2/3 70-30-WH		6260340

Other lengths if requested.

*FastMig requires a mounting kit, order number W002085.



SF51/SF54 control panel



SF52/SF53 control panel

FastMig Pulse 350/450

Modular design, digital precision and quality



Why buy

- Basic, 1-MIG, pulsed, double-pulsed, and MIG/MAG processes
- High quality welding performance
- Wise arc solution compatible
- Menu language choice
- Power cost efficient
- Security code lock

Applications

- Shipyards and offshore
- Metal fabrication workshops
- Chemical and process industry
- Automotive manufacture
- Production welding

It's your welding mission

FastMig Pulse puts you in control. We don't just mean in welding terms, although FastMig Pulse is particularly impressive here. FastMig Pulse sets new standards for customer choice. The software architecture allows standard or tailored packages to suit your specific welding environment, so the commercial benefits are yours. Whatever your welding mission, FastMig Pulse will deliver the technical and commercial solution that's right for you.

Build the pulsed MIG/MAG machine you need. Air or water cooled packages combine with innovative distance wire feeding and remote control options to deliver outstanding welding performance.

Kemppi's Wise software products offer additional choice and solutions that match welding business in the real world, so you can be sure to cover your welding requirements now and far into the future.

Key features

Clear, simple control panel. Power and arc length control, memory channels and lock, safety isolation, inductance, gas test, wire inch, 2T/4T, hot start, crater fill and MMA and MatchLog options.

DuraTorque 4x4 wire drive mechanism ensures consistent wire speed and quality welds.

Three-core control cable makes distance cable sets lightweight and easy to maintain.

Tough, dual-skin wire feed case options made from impact resistant plastic. MXF63 and MXF67 casings offer long service life protection.

Select, manage and refine weld process with P65 control panel. Process and materials menu, specialist welding functions, menu language selection, security lock, user channels.

Increase welding performance and gun consumable life with optional FastCool units.

Wise solution products keep you ahead of the game.

Welding software choice

WORK PACK - MATERIALS PACK - PROJECT PACK. FastMig Pulse offers a variety of welding software choices. Choose either the standard materials package 'Work Pack', offering a basic selection of steel, stainless steel and aluminum welding curves in 1.0 mm and 1.2 mm filler wire sizes, or material specific packages for aluminum, steel or stainless steel applications. Integrated package options are also available including WiseFusion, the 'Auto arc length regulation solution' for improved weld quality and welding speed in all positions.

Project Pack offers the ultimate flexibility, suiting customers with very specific project requirements. With Project Pack you can select your own welding software profile from the DataStore, which is Kemppi's online webstore.

Should your needs change, you can easily upgrade your machine software profile as needed.

Welding software

Work Pack	15 welding programs
Aluminium Pack	12 welding programs
Steel Pack	12 welding programs
Stainless Steel Pack	12 welding programs
Work Pack + WiseFusion	15 welding programs
Aluminium Pack + WiseFusion	12 welding programs
Steel Pack + WiseFusion	12 welding programs
Stainless Steel Pack + WiseFusion	12 welding programs

For full package details and software options visit Kemppi DataStore at <http://datastore.kemppi.com>



FastMig Pulse leads its class, offering premium welding quality and modular construction. Plus welding software and menu language choice.



Upgrade your equipment anytime with alternative welding software, available through Kemppi DataStore at <http://datastore.kemppi.com>



Kemppi Wise and SuperSnake product ranges offer unique solutions to difficult welding issues. Please see pages 26-27, 84-85 for further details.

FastMig Pulse 350/450

Technical specifications

FastMig Pulse		350	450
Mains voltage	3~, 50/60 Hz	400 V (-15...+20 %)	400 V (-15...+20 %)
Rated power	60 % ED		22.1 kVA
	80 % ED	16.0 kVA	
	100 % ED	15.3 kVA	16.0 kVA
Connection cable / fuse delayed		4G6 (5m) / 25 A	4G6 (5m) / 35 A
Output 40 °C	60 % ED		450 A
	80 % ED	350 A	
	100 % ED	330 A	350 A
Welding current and voltage range	MMA	10...350 A	10...450 A
	MIG	8...50 V	8...50 V
Max. welding voltage MMA		49 V	53 V
Open circuit voltage MMA		50 V	50 V
Open circuit voltage MIG/MAG/Pulse		80 V	80 V
Open circuit power		100 W	100 W
Efficiency		88 %	88 %
Power factor		0.85	0.9
Storage temperature range		-40...+60 °C	-40...+60 °C
Operating temperature range		-20...+40 °C	-20...+40 °C
Protection class		IP 23 S	IP 23 S
External dimensions	L x W x H	590 x 230 x 430 mm	590 x 230 x 430 mm
Weight		36 kg	36 kg
Voltage supply for auxiliary devices		50 V DC	50 V DC
X14, X15		fuse 6.3 A, delayed	fuse 6.3 A, delayed
Voltage supply for cooling unit		DC 24 V, 50 VA	DC 24 V, 50 VA



DuraTorque 4x4 wire drive mechanism



Menu selection in 9 language options



Process control panels for either 200 mm or 300 mm wire spool cabinets

FastMig Pulse 350/450

Ordering information

Power sources		Interconnection cables
FastMig Pulse 350 power source	6150400	Cable, 1.8 m
FastMig Pulse 450 power source	6150500	Cable, 5 m
		Cable, 10 m
		Cable, 15 m
		Cable, 20 m
		Cable, 30 m
Wire feeders		Interconnection water cooled cables
MXF63 wire feeder, 200 mm	Work Pack profile	Cable, 1.8 m
MXF65 wire feeder, 300 mm	Work Pack profile	Cable, 5 m
MXF67 wire feeder, 300 mm	Work Pack profile	Cable, 10 m
MXF63 wire feeder, 200 mm	Project Pack profile	Cable, 15 m
MXF65 wire feeder, 300 mm	Project Pack profile	Cable, 20 m
MXF67 wire feeder, 300 mm	Project Pack profile	Cable, 30 m
Gun holder GH 30		Other lengths available
		Return current cable 5 m, 70 mm ²
Control panels		6184711
Arc Wizard P65 setup panel	Included with power source	SP155300
PF63 wire feeder control panel		6155200
PF65 wire feeder control panel		6155100
Coolers		
FastCool 10 cooling unit		6068100
SuperSnakes		
The Kemppi SuperSnake GT02S range includes 10, 15, 20, and 25 m models, air- and water-cooled.		
Sub feeder synchronisation unit FastMig MXF Sync		W004030
Remotes		
R30 DataRemote, 5m		6185420
R30 DataRemote, 10m		618542001
Transport units		
P 501 wire feed transport unit		6185269
PM 500 power source transport unit		6185291
Welding software options		
MMA welding process		9991016
WiseRoot welding function		6265011
WiseThin welding function		9991013
WiseFusion welding function		9991014
WisePenetration welding function		9991000
MatchLog		9991017
DataGun software installation device		6265023



Wire feed units for different applications.
MXF 65/MXF 67 for 300mm wire spools.
MXF 63 for 200mm wire spools.

Kempact MIG 2530, Kempact Pulse 3000

Combine the economy of cost, size, weight, and performance



Why buy

- Basic MIG/MAG model
- Synergic pulsed model
- 4-roll wire drive system
- Electronic power regulation
- Maximum output at 40 % duty cycle
- Light weight: 22 kg

Applications

- Thin sheet metal fabrication workshops
- Car repair
- Agriculture
- Shipyards and offshore industry
- Installation and set-up
- Repair and maintenance

Plenty of welding power per kilogram

Kempact 2530 is 70 % lighter in weight than traditional step regulated machines. Electronic control of voltage and wire speed allows arc tuning during the weld process, so you can quickly establish the desired weld settings. Includes gun trigger latching and wire inch function.

Kempact Pulse 3000 features synergic, pulsed and double-pulsed welding. Standard programs suit a variety of materials including Fe, FeMc, FeFc, St/St, Alu, CuSi3, CuAl8 fillers wires. Simply select the filler wire type, size and plate thickness and weld. For those regular welding jobs there's even a 100 channel memory function.

When the heat is on, keep your gun cool with KempactCool 10. Optional fit for Kempact Pulse 3000 only.

Technical specifications

Kempact		MIG 2530	Pulse 3000	Pulse 3000 MVU
Connection voltage	3~, 50/60 Hz	380 – 440V ±10%	400 V (±15 %)	230 V/400 V
Rated power		12 kVA	12 kVA	10 kVA
Connection cable	H07RN-F	4G1.5 (5 m)	4G1.5 (5 m)	4G1.5 (5 m)
Fuse, delayed		16 A	16 A	16 A
Output 40 °C	40 % ED	250 A/26.5 V	250 A/26.5 V	250 A/26.5 V
	60 % ED	207 A/24 V	207 A/24 V	207 A/24 V
	100 % ED	160 A/22 V	160 A/22 V	160 A/22 V
Open circuit voltage		30...45 V	56 V	68 V
Power factor at max. current		0.64	0.69	0.78
Efficiency at max. current		87 %	84 %	83 %
Welding range		10...30 V	8...30 V	8...30 V
Wire feed speed		1...18 m/min		
Wire spool	max. ø	300 mm	300 mm	300 mm
Wire feed mechanism		4-roll	4-roll	4-roll
Filler wires ø (mm)	Fe, Ss	0.6...1.0	0.6...1.2	0.6...1.2
	Cored wire	0.9...1.2	0.9...1.2	0.9...1.2
	Al	0.9...1.2	0.9...1.2	0.9...1.2
	CuSi	0.8...1.0	0.8...1.2	0.8...1.2
External dimensions (mm)	L x W x H	580 x 280 x 440	580 x 280 x 440	580 x 280 x 600
Weight		20 kg	22 kg	33 kg

KempactCool 10

Operating voltage	50/60 Hz	400 V (-15...+10 %)
Rated power	100 % ED	250 W
Cooling power		1.0 kW
Maximum pressure		450 kPa
Recommended cooling liquid		20–40 % ethanol/water
Tank volume		3 l
External dimensions (mm)	L x W x H	580 x 280 x 300 mm
Weight		13 kg

Ordering information

Kempact MIG 2530 (Incl. earth return cable (35 mm ² , 5 m) and gas hose 6 m)		621853002
Gun holder	GH 30	6256030
Earth return cable	35 mm ²	5 m 6184311
Transport units	ST 7 (power source + gas cylinder)	6185290
	P 250	6185268
KFH 1000 feeder hanger		6185100
Welding boom	Incl. KFH 1000 feeder hanger	6264026
Wire feeder hanging device		4298180
Kempact Pulse 3000		621830002
Kempact Pulse 3000 MVU		62183000302
KempactCool 10		6218600
Earth return cable	5 m, 35 mm ²	6184311



Ideal pulsed MIG/MAG solution for sheet metal fabrication and automotive repair.

Best arc characteristics

Kempact MIG machines have superb arc performance. Excellent arc ignition assisted by burn back time technology guarantee satisfaction. Electronic arc dynamics control offers the best arc performance in all situations.

Memory channels add usability

Kempact Pulse 3000 includes 100 memory channels to store welding values for later use. This makes it quick and easy to start welding without needing to adjust the settings once more.



Kempact Pulse 3000 control panel.

SuperSnake GT02S/GT02SW

The ultimate distance and access solution



Why buy

- Suitable for Fe/Ss/Al/FCW/MCW filler wires
- Includes voltage and wire speed adjustment
- Large, clear meter display
- Brights™ LED cabinet lighting
- 10-, 15-, 20-, 25-meter air- and water-cooled models
- Visible safety with tough, bright orange sheathing
- Gun remote control option

Applications

- Heavy and medium-heavy metal fabrication workshops
- Shipyards and offshore industry
- Installation and set-up

Weld predator

If distance and access are your problem, then take a look at **SuperSnake GT02S and GT02SW**. SuperSnake extends the reach of standard Euro MIG welding guns, providing simple distance wire feeding for a variety of filler wires up to 30m from the wire feed unit. Negotiating its terrain with ease, SuperSnake is the ultimate predator of the welding world.

The **SuperSnake GT02S/GT02SW** removes the need to carry large and heavy wire feed units, reducing personnel fatigue, improving safety, and increasing productivity. The SuperSnake connects easily to FastMig MXF wire feed units, bringing quality welding to locations that other welding brands just can't reach.

SuperSnake GT02S/GT02SW is compatible with FastMig KMS, FastMig Pulse, Kemppi Pro equipment.



reddot design award
honourable mention 2009

Technical specifications

SuperSnake		
Output 40 °C	60 % ED	380 A
Wire feed mechanism	2-roll	
Wire feed speed	0...25 m/min	
Feeder body (GT02SW) dimensions L x W x H	102 x 371 x 138 mm	
Wire recommendations, 25 m	Solid Fe/Ss	ø 1.0...1.6 mm
	Al alloys	ø 1.2...1.6 mm
	FCW/MCW	ø 1.2...1.6 mm
Cable diameter	50 mm ²	
Supply voltage	50 VDC	
Protection class	IP23S	

Ordering information

SuperSnake	
GT02S, 10 m	6153100
GT02S, 15 m	6153150
GT02S, 20 m	6153200
GT02S, 25 m	6153250
GT02SW, 10 m	6154100
GT02SW, 15 m	6154150
GT02SW, 20 m	6154200
GT02SW, 25 m	6154250
MXF synchronisation kit	W004030



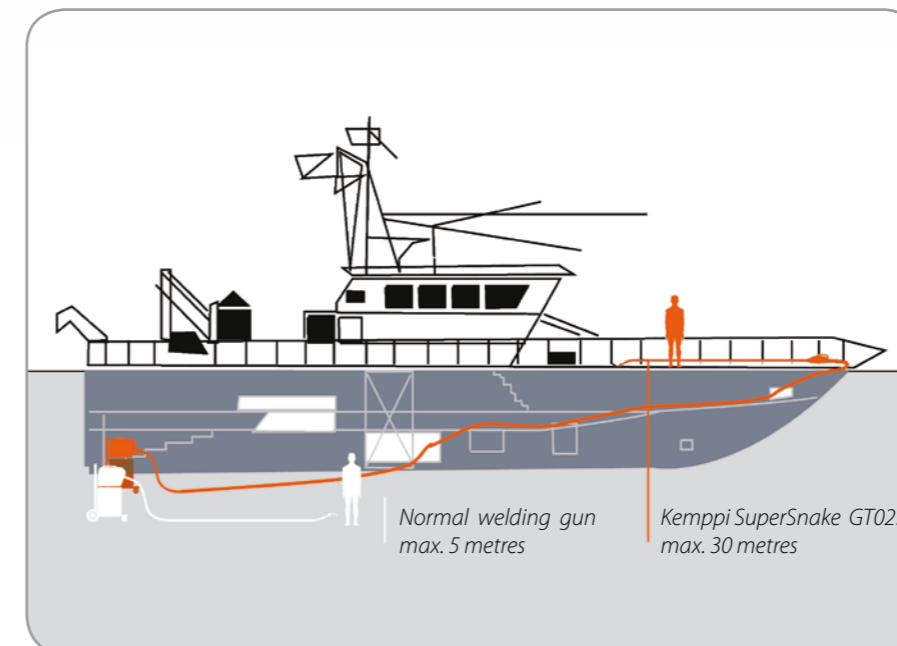
Liberate your welding team by giving greater freedom of movement.



Traditional motor pistols and spool gun designs increase weight and strain on the operator's wrist and are limited by their distance, filler wire, or volume welding capability. The SuperSnake GT02S resolves all of these issues, providing distance and volume welding, whilst reducing the weight and strain on the operator's wrist by using standard welding guns.



When connected with Kemppi FastMig equipment, SuperSnake is compatible with the RMT10 Gun remote control, making real-time power management or remote channel selection easy and convenient.



FitWeld 300

Big power, small package,
quick ignition



Why buy

- 300 A at 20 % duty cycle, 14.5 kg
- Easy tune stepless voltage and wire speed
- Adjustment for shielding gas flow to welding gun
- Three position switch for self-shielded and gas-shielded filler wires

Applications

- Shipyards and offshore industry
- Metal fabrication workshops
- Installation and set-up
- Car repair
- Agriculture

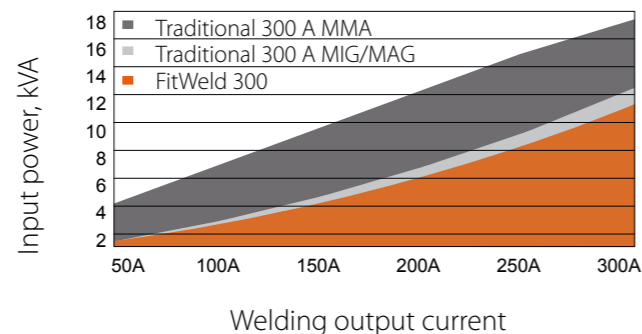


red dot design award
honourable mention 2009

Speed, quality and economy

FitWeld 300 MIG/MAG machine is the solution for tacking and welding in heavy industry. QuickArc™ ignition techniques, the latest GT WireDrive™ mechanics and Brights™ cabinet lighting, combine with other features to make welding faster, easier and safer. Offering real economy of size and weight, FitWeld also saves up to 57 % on input power and increases tack and welding speed to twice that of traditional MMA equipment.

FitWeld's welding heritage shines through with precise and crisp arc character. Its tough and robust plastic case protects the power source in extreme conditions. The GT WireDrive unit is compact and strong, giving rapid response to welding gun trigger signals, making it ideal for multiple arc starts in tack welding environments.



FitWeld architecture:

1. Adjustment for shielding gas flow to welding gun.
2. Brights™ LED's illuminate the wire feed cabinet, making wire spool changes and adjustment easy and safe in dark conditions.
3. GT WireDrive™ is compact and strong, giving rapid response to welding gun trigger signals. Designed for multiple arc start use.
4. QuickArc™ ignition ensures precise, clean arc ignition, so spatter is minimised and arc stabilisation is fast.
5. Reinforced fibre plastic case protects the power source in extreme conditions.
6. GasGuard™ function prevents welding without shielding gas in 2T/4T position.
7. Three position switch for self-shielded and gas-shielded filler wires.
8. Strong grab handles make carrying and lifting easy, also protecting rear fittings.
9. Enclosed wire cabinet design helps to protect filler wire from the welding environment.
10. Cabinet door latch mechanism is protected from damage and accidental opening.
11. Easy polarity change allows either positive or negative welding.



Tough and robust for tacking and welding in demanding environments



For independence of movement in and around workshop or site.



Technical specifications

FitWeld 300		
Connection voltage	3~, 50/60 Hz	380 – 440 V ±10%
Rated power at max. current		11.0 kVA
Output 40 °C		300 A / 20 %
Connection cable	H07RN-F	4G1.5 (5 m)
Fuse (delayed)		10 A
Open circuit voltage		40 – 46 V
Power factor at max. current		0.95
Efficiency at max. current		0.85
Welding range		11 ... 32 V
Wire spool	max. ø	200 mm
Wire feed mechanism		2-roll feed
Filler wires	Fe solid, Fe cored, Ss	0.8...1.2 mm
	Al	1.0...1.2 mm
External dimensions	L x W x H	457 x 226 x 339 mm
Weight		14.5 kg

Ordering information

FitWeld 300		
FitWeld 300, MMT32, 3 m		P2101
FitWeld 300, MMT32, 4.5 m		P2102
MMT32, 3 m		6253213MMT
MMT 32, 4.5 m		6253214MMT
Earth return cable, 35 mm ² , 5 m		6184311
Shielding gas hose, 6 m		W000566

ArcFeed 200/300/300P/300RC

MIG/MAG productivity from any CC or CV welding power source



Why buy

- Utilise MMA power sources for productive MIG/MAG welding
- Ideal for tough site environments
- Excellent for self shielded filler wires
- Compact, lightweight, robust
- Large, clear LCD display

Applications

- Heavy steel welding in workshops
- Construction and shipyards
- Oil and gas pipe welding
- On-site welding
- Equipment hire business

Voltage sensing wire feeder

ArcFeed 200 and 300 are voltage sensing wire feed units for productive MIG/MAG welding. They can be used from almost every welding power source, including welder generators. Even old static MMA equipment can be transformed for productive MIG/MAG welding.

ArcFeed gives a good, smooth start and the backlit LCD display is protected by thick polycarbonate glass.

ArcFeed equipment only requires one power cable and the earth return lead from the power source, so it's ideal for site conditions where multi-core control cables could easily damage. Less cable means less to carry on site, making the lightweight cabinets easy to live with.

Each unit is equipped with a 4x4 wire drive mechanism and ArcFeed 300RC model is equipped with a useful remote control function for adjusting welding current.

Other additional features include:

- Burn back time control
- Wire inch switch
- Gas test
- Post gas timer

Technical specifications

ArcFeed		200	300, 300RC	300P
Rated power		150 W	150 W	150 W
Output 40 °C	100 % ED	300 A	300 A	300 A
Wire feed mechanism		4-roll	4-roll	4-roll
Filler wires ø mm	Cored filler wires	1.2...2.0	1.2...2.0	1.2...2.4
	Self-shielded flux-cored wires	1.6...2.0	1.6...2.0	1.6...2.4
	Solid wires	1.0...1.6	1.0...1.6	1.0...1.6
External dimensions	L x W x H	510 x 200 x 310 mm	590 x 240 x 445 mm	590 x 240 x 445 mm
Weight		11 kg	15 kg	15 kg

Ordering information

Wire Feeders		
Kemppi ArcFeed 200		6120200
Kemppi ArcFeed 300		6120300
Kemppi ArcFeed 300P		6120310
Kemppi ArcFeed 300RC		6120301
Accessories		
Gas flow regulator		W000364
Hanging frame for the ArcFeed 200 model		6185285
KFH 1000 hanging device for ArcFeed 300, 300P and 300RC models		6185100
Safety slide bars for the ArcFeed 200 model		6185286
Safety slide bars for ArcFeed 300, 300P and 300RC models		6185287
Cables		
Extension cable	70 mm ² , 25 m	6183725
Extension cable	70 mm ² , 10 m	6183710
Earth return cable	16 mm ² , 5 m SKM25	6184015



ArcFeed 200 shown with KMS 400 AS power source



TIG welding

MinarcTig Evo	34
MinarcTig	36
MasterTig MLS	38
MasterTig MLS ACDC	40
MasterTig AC/DC	42

Professional TIG welders know what they want. At Kemppi we've developed the tools to keep them smiling. Precise ignition and smooth, stable current flow are the baseline for every model in our TIG welding range. Optional remote control units can be selected to suit either workshop or site conditions, allowing welders to concentrate on quality.

MinarcTig Evo 200/200MLP

The finest TIG welding quality



Why buy

- 200 A DC @ 25% duty cycle, 1-phase, 230 V
- Smooth welding quality
- Refined arc ignition from 5 A
- Pre and post gas timer
- Slope in/out timer
- Torch switch latching
- MLP and Pulse welding option
- Remote current controls options
- PFC technology for ultimate energy efficiency
- Mains networks or generator use
- Kemppi 2+ warranty for parts and labour

Smooth, refined and powerful

MinarcTig Evo is just what you'd expect from a Kemppi TIG welding machine.

Accurate and refined HF ignition and the necessary control, power and work capacity to reliably complete a variety of professional welding tasks. MinarcTig Evo is the ideal DC TIG welding solution for light industrial manufacturing, installation, repair and maintenance applications. The lightweight and compact size is a real bonus for welding professionals on the move.

Models include either the MinarcTig Evo 200 or the MinarcTig Evo 200MLP.

The powerful PFC power source design combines useful performance advantages, including excellent energy efficiency and the ability to reliably perform on extra long power supply cables of more than 100 meters long.

MinarcTig Evo models include large LED metering displays and feature a range of functions including pre and post gas time control, slope current time controls and remote control options. MLP models are equipped with additional functions including Minilog control and semi-automatic arc pulse function. MinarcTig Evo is a dual-process machine that also provides quality MMA welding for a range of DC electrode types.

Technical specifications

MinarcTig Evo 200/200MLP		
Connection voltage	1~, 50/60 Hz	230 V ±15 % (AU 240 V ±15 %)
Rated power at max. current	25 % ED TIG	200 A/4.9 kVA
	35 % ED MMA	170 A/5.7 kVA
Supply current, I _{1max}	TIG	21.1 A
	MMA	24.8 A
Supply current, I _{1eff}	TIG	12.7 A
	MMA	14.7 A
Connection cable	H07RN-F	3G1.5 (1.5 mm ² , 3 m)
Fuse	type C	16 A
Output 40 °C	TIG	25 % ED 200 A/18 V
		100 % ED 140 A/15.6 V
	MMA	35 % ED 170 A/26.8 V
Welding range	TIG	5 A/10.2 V...200 A/18.0 V
	MMA	10 A/20.4 V...170 A/26.8 V
Open circuit voltage		95 V (VRD 30 V, AU VRD 12 V)
Idle power	TIG	10 W
	MMA	30 W
Power factor at 100 % ED	TIG	0.99
	MMA	0.99
Efficiency at 100 % ED	TIG	77 %
	MMA	83 %
Striking voltage		6...12 kV
Stick electrodes, MMA	∅	1.5...4.0 mm
External dimensions	L x W x H	449 x 210 x 358 mm
Weight (without cables)		11 kg
Temperature class		F (155 °C)
Degree of protection		IP23S
EMC class		A
Operating temperature range		-20...+40 °C
Storage temperature range		-40...+60 °C
Standards	IEC 60974-1, IEC 60974-3, IEC 60974-10, IEC 61000-3-12	

Ordering information

MinarcTig Evo (incl. earth return and welding cables and shoulder strap)	
MinarcTig Evo 200, TTC 220 4 m	P0640
MinarcTig Evo 200, TTC 220 8 m	P0641
MinarcTig Evo 200MLP, TTC 220 4 m	P0642
MinarcTig Evo 200MLP, TTC 220 8 m	P0643
MinarcTig Evo 200 AU, TTC 220 4 m	P0672
MinarcTig Evo 200 AU, TTC 220 8 m	P0673
MinarcTig Evo 200MLP AU, TTC 220 4 m	P0674
MinarcTig Evo 200MLP AU, TTC 220 8 m	P0675
MinarcTig Evo 200 DK, TTC 220 4 m	P0676
MinarcTig Evo 200 DK, TTC 220 8 m	P0677
MinarcTig Evo 200MLP DK, TTC 220 4 m	P0678
MinarcTig Evo 200MLP DK, TTC 220 8 m	P0679

Applications

- Installation and set-up
- Repair and maintenance
- Thin sheet metal fabrication workshops
- Chemical and process industry



Minilog function is a very easy-to-use pulsing feature: you just set the pulse time and current average and start welding.



Quality welding, wherever work takes you



MinarcTig Evo 200
MinarcTig Evo 200 MLP with Pulse function

MinarcTig 250, 250MLP

Powerful, portable and compact



Why buy

- Excellent low current ignition
- Clear parameter display
- Pre and post gas timer
- Slope in/out timer
- Torch switch latching
- Pulse welding option

Applications

- Installation and set-up
- Repair and maintenance
- Thin sheet metal fabrication workshops
- Chemical and process industry

Refined TIG welding quality for precise applications

MinarcTig 250 is the ideal DC TIG welding solution for installation, repair and maintenance applications. The 250 amp model suits high quality work and the lightweight and compact size is a real bonus for professionals on the move around site.

MinarcTig 250 is a dual-process machine, providing an impressive DC TIG and MMA welding experience. In addition to the basic 250 machine there is the 250 MLP model, equipped with special features, such as Minilog and pulsed arc function. High 35% duty cycle and light weight combine real performance advantages, plus exceptional control in low current ignition means refined TIG welding quality for precise applications.

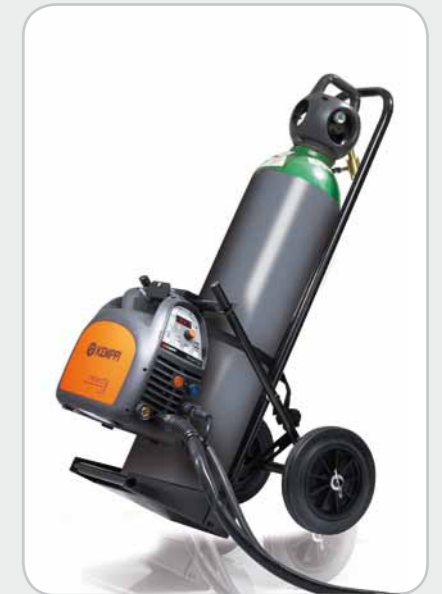
Technical specifications

MinarcTig 250/250MLP		
Connection voltage	50/60 Hz	3~, 400 V (-20...+15 %)
Rated power at maximum current	TIG	7.2 kVA
	MMA	8.2 kVA
Connection cable	H07RN-F	4G1.5 (5 m)
Fuse, slow		10 A
Output 40° C	35 % ED TIG	250 A/20.1 V
	100 % ED TIG	160 A/16.4 V
	35 % ED MMA	220 A/28.8 V
	100 % ED MMA	150 A/26.0 V
Welding range	TIG	5 A/10.2 V – 250 A/ 20.1 V
	MMA	10 A/20.4 V – 220 A/ 28.8 V
Open circuit voltage		95 V
Power factor at maximum current	TIG	0.92
	MMA	0.91
Efficiency at maximum current	TIG	80 %
	MMA	86 %
Stick electrode	∅	1.5–5.0 mm
External dimensions	L x W x H	400 x 180 x 340 mm
Weight (without cables)		11 kg

Ordering information

MinarcTig		
Power source, TTC 160; 4 m, earth return cable; 25 mm ² 5 m		MINARC250TTC164
Power source, TTC 160; 8 m, earth return cable; 25 mm ² 5 m		MINARC250TTC168
Power source, TTC 220; 4 m, earth return cable; 25 mm ² 5 m		MINARC250TTC224
Power source, TTC 220; 8 m, earth return cable; 25 mm ² 5 m		MINARC250TTC228
Power source, TTC 160; 4 m, earth return cable; 25 mm ² 5 m		MINARC250MLPTTC164
Power source, TTC 160; 8 m, earth return cable; 25 mm ² 5 m		MINARC250MLPTTC168
Power source, TTC 220; 4 m, earth return cable; 25 mm ² 5 m		MINARC250MLPTTC224
Power source, TTC 220; 8 m, earth return cable; 25 mm ² 5 m		MINARC250MLPTTC228

Accessories		
Welding cable	25 mm ² 5 m	6184201 (250/250 MLP)
Earth return cable	25 mm ² 5 m	6184211 (250/250 MLP)



MinarcTig 250 shown on optional 2-wheel transport unit MST400.



MinarcTig 250 is an ideal machine for thin sheet fabrication tasks. The low current ignition and stable arc, make quality welding easy.



MinarcTig can be used in the production and maintenance of many metal products. In the workshop or site, MinarcTig 250 is a dependable and portable welding partner.

MasterTig MLS 3000/4000

Some tools simply feel better to use than others



Why buy

- DC TIG and MMA power output
- Compact size ensures effortless mobility
- Excellent ignition quality, even with long TIG torches
- Quick pulse function increases welding speed and quality
- Suitable for mains or power generator use

Applications

- Installation and set-up
- Repair and maintenance
- Thin sheet metal fabrication workshops
- Chemical and process industry

DC equipment for industrial applications

MasterTig MLS DC range has become an industry standard for many users, offering precise welding performance and lightweight, portable design. A popular choice for welding professionals, options include 300 and 400 amp power sources with 30% duty cycle at maximum output current.

Choose from four control panel options, allowing you to select exactly the parameter control that's right for your welding application.

MTL/MTX/MTM/MTZ control panel options contain basic and specialist functions required for quality DC TIG and MMA welding. Features can include: HF or contact ignition, pre-gas and post-gas control, torch switch latching 2T/4T, remote control and setup options, welding current upslope and downslope timer, MMA ignition pulse, MMA arc dynamics, pulse and synergic pulse TIG, spot timer, 4T log and memory channel function.

Technical specifications

MasterTig MLS™		3000	4000
Connection voltage	50/60 Hz	3~, 400 V -15...+20 %	3~, 400 V -15...+20 %
Rated power at 100 % ED	TIG	8.4 kVA	13.8 kVA
	MMA	9.4 kVA	15 kVA
Connection cable	HO7RN-F	4G1.5 (5 m)	4 G2.5 (5 m)
Fuse, delayed		10 A	16 A
Output 40 °C	30 % ED TIG	300 A/22 V	400 A/26 V
	60 % ED TIG	230 A/19.2 V	320 A/22.8 V
	100 % ED TIG	200 A/18 V	270 A/20.8 V
	35 % ED MMA	-	-
	40 % ED MMA	250 A/30 V	350 A/34 V
	60 % ED MMA	205 A/28.2 V	285 A/31.4 V
	100 % ED MMA	160 A/26.4	220 A/28.8 V
Welding range	TIG	5 A/10 V ... 300 A/22 V	5 A/10 V ... 400 A/26 V
	MMA		
Open circuit voltage		80 V DC	80 V DC
Power factor at 100% ED		0.95	0.95
Efficiency at 100% ED		86 %	86 %
Stick electrode	∅	1.5...5.0 mm	1.5...6.0 mm
External dimensions	L x W x H	500 x 180 x 390 mm	500 x 180 x 390 mm
Weight		22 kg	23 kg

MasterCool 10

Connection voltage	50/60 Hz	400 V (-15...+20 %)	230 V (-15...+10 %)
Cooling power	100 % ED	1.0 kW	
Rated power	100 % ED	250 W	
External dimensions	L x W x H	500 x 180 x 260 mm	
Weight		10 kg	

Ordering information

Power Sources

MasterTig 3000 MLS	6114300
MasterTig 4000 MLS	6114400

Cooling units

MasterCool 10	6122350
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Control panels

MTL	6116000
MTX	6116005
MTM	6116010
MTZ	6116015

Transport units

T 100	6185250
T 130	6185222
T 200	6185258

MasterTig MLS options



MTM



MTL



MTZ



MTX



MasterTig MLS equipment is lightweight and portable for site use, but delivers high welding current and duty cycle.

MasterTig MLS

2300/3003 ACDC

MLS control for the finest TIG welding quality



Energy efficient

Why buy

- TIG and MMA process eg: DC-/DC+/AC/MIX TIG
- Power cost efficient, compact dimensions
- MasterCool option for high duty applications
- MicroTack for fast, low heat tack welding

Applications

- Metal fabrication workshops
- Shipyards and offshore industry
- Chemical and process industry
- Mechanised welding

Make demanding work easy

MasterTig MLS ACDC offers TIG welding professionals the necessary control to meet their exacting needs. Whatever the application, enjoy the performance. Model choice includes a 230 A version with 1-phase 230 V power supply, and 300 A version with 3-phase 230/460 V power supply.

MasterTig MLS ACDC is a precise aluminium welding specialist that suits all welded materials. Modular design allows you to build the package that best suits your needs.

Choose from either ACS or ACX control panels allowing fast adjustment of base parameters including: pre and post gas time control, AC arc frequency and upslope and downslope control. ACS provides all necessary controls for DC, AC and MIX TIG welding with either HF or contact ignition. ACX offers additional functions including MicroTack, memory channels and pulsed welding function.

Technical specifications

MasterTig MLS		2300 ACDC	3003 ACDC
Connection voltage	50/60 Hz	1~, 230 V (±15 %)	3~, 230 V (-10 %)... 460 V (+10 %)
Rated power at 100 % ED	TIG	5.7 kVA	9.2 kVA
	MMA	6.0 kVA	10 kVA
Connection cable	H07RN-F	3G2.5 (3.3 m)	4G2.5 (5 m)
Fuse recommendation (slow)		15 A	20/16 A
Output 40 °C	40 % ED TIG	230 A/19.2 V	300 A/22 V
	60 % ED TIG	200 A/18 V	230 A/19.2 V
	100 % ED TIG	170 A/16.8 V	190 A/17.6 V
	40 % ED MMA	180 A/27.2 V	250 A (230 V AC 30 %)/30 V
	60 % ED MMA	150 A/26 V	230 A/29.2 V
	100 % ED MMA	120 A/24.8 V	190 A/27.6 V
Welding range	TIG	3 A/10 V–230 A/19.2 V	3 A/10.0 V–300 A/22 V
	MMA	10 A/20.5 V/180 A/27.2 V	10 A/20.5 V–250 A/30 V
Open circuit voltage		58 V DC	58 V DC
	AU models	20 V DC/VRD	-
Power factor at 100% ED		0.99	0.95
Efficiency at 100% ED		82 %	81 %
Stick electrode, MMA	∅	1.5...4.0 mm	1.5...5.0 mm
External dimensions	L x W x H	430 x 180 x 390 mm	500 x 180 x 390 mm
	Weight	15 kg	25 kg

Cooling unit		MasterCool 20	MasterCool 30
Connection voltage		230 V (±15 %)	24 V DC
Rated power at 100 % ED		50 W	50 W
Cooling power		1.0 kW	1.0 kW
Maximum pressure		400 kPa	400 kPa
Recommended cooling liquid		20...40 % ethanol/water	20...40 % ethanol/water
Tank volume		3 l	3 l
External dimensions	L x W x H	500 x 180 x 260 mm	500 x 180 x 260 mm
	Weight	8 kg	8 kg

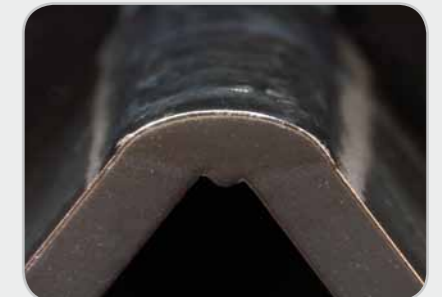
Ordering information

Power Sources	
MasterTig MLS 2300 ACDC	6162300
MasterTig MLS 2300 ACDC VRD AU	6162300AU
MasterTig MLS 3000 ACDC VRD	6163000VRD
MasterTig MLS 3003 ACDC	6163003
Cooling units	
MasterCool 20	6162900
MasterCool 30	6163900
Control panels	
ACS	6162805
ACX	6162804

Options



All MasterTig MLS ACDC welding devices can be equipped with an ACX or ACS control panel introducing numerous additional features that make welding easier and more efficient.



A stable arc ensures a smooth weld and strong base material attachment, thus ensuring good mechanical properties for the joint.



MicroTack welding is an easy, fast and precise way of improving quality and productivity for taking and setting tasks. Extremely effective with very thin materials.

MasterTig

AC/DC 3500W

Powerful, dependable
and reassuringly economic



MasterTig AC/DC 3500 mounted to T22 transport unit.



Energy efficient

Why buy

- Automatic AC balance increases the quality and speed of welding
- Precise penetration control based on AC frequency adjustment
- Reliable arc ignition and functionality
- A choice of three control panels suiting different customer needs
- Energy efficient and excellent for limited fused supplies

Applications

- Fabrication workshops
- Chemical and process industry
- Installation and set-up
- Repair and maintenance

Powerful AC/DC TIG equipment with a small appetite

MasterTig AC/DC 3500W only requires a 20 amp 3-phase power supply, some small indication of the economy offered by this modern power source design. A maximum power output of 350 amp at 60 % duty cycle ensures you have enough power and the integral water cooling unit keeps torches cool during high duty production welding.

MasterTig AC/DC 3500W control panels provide all of the necessary functions needed for TIG welding. Simply choose the control level that suits your particular needs. Options include pulsed and basic versions with large clear meter displays. Standard features include: pre and post gas time control, upslope and downslope control, arc shape AC balance control, torch switch latching, remote control selection and MMA process. Safety codelock feature prevents unauthorised use of the equipment.

Technical specifications

MasterTig AC/DC 3500W		
Connection voltage	3~, 50/60 Hz	400 V (±10 %)
Rated power, max.	TIG	11.7 kVA
	MMA	15.7 kVA
	60 % TIG AC	350 A/24 V
	100 % TIG AC	280 A/21.2 V
Fuse, delayed	400 V	20 A
	60 % MMA DC	350 A/34 V
Output 40 °C	100 % MMA DC	280 A/31.2 V
	TIG DC	3 A/10 V...350 A/24 V
Welding range	AC	10 A/10 V...350 A/24 V
	MMA	10 A/20 V...350 A/34 V
	AC, DC	70 V DC
Open circuit voltage	AC, DC	70 V DC
Power ratio at max. current		0.9
Efficiency at max. current		80 %
External dimensions	L x W x H	690 x 260 x 870 mm
Weight		74 kg

Ordering information

MasterTig AC/DC 3500W	6163505
Control panels	
ACDC basic panel	6162801
ACDC Minilog panel	6162802
ACDC Pulse panel	6162803
Transport unit T22	6185256



MasterTig AC/DC 3500W has earned its reputation as a dependable, quality welding equipment

Choose from three control panel options:



ACDC



ACDC Minilog



ACDC Pulse



MMA welding

Minarc Evo	46
Minarc 220	48
Master MLS	50
FastMig KMS 400 AS	52
KempGouge	54

Compact, lightweight and capable. Kemppi MMA equipment meets professional welding demands in every respect. Arc ignition and stability dynamic control ensure every electrode burns effortlessly to produce quality welding.

All models are power generator compatible and able to operate in sub zero or desert sun conditions. So whether you need to repair your snow bike or complete that steel building project in the heat of the midday sun, you can trust Kemppi MMA equipment to get the job done.

Minarc Evo 150

Little giants of the welding world



Energy efficient



Why buy

- Premium welding performance
- Use with all electrode types
- PFC technology for ultimate energy efficiency
- Designed for use with long supply cables
- High current output and duty cycle
- Lightweight and portable
- Precise lift TIG technology
- Mains network or generator use
- Optional remote control
- Kemppi 2+ warranty for parts and labour

Outstanding welding performance

Every element of Minarc Evo 150 is designed to meet the needs of professional welders on the move. Where size, weight and welding quality are concerned, there is no equal.

Ideal for site use, you can use Minarc Evo 150 from mains or generator power supplies, even with extra long supply cables. Minarc Evo is easy to carry, so you can normally take everything you need in one journey.

Large voltage reserves and automatic arc force control provide excellent arc stability in all welding positions and for a wide range of electrode types, making sure you get quality welding results every time.

The large and clear meter display makes accurate current setting simple and easy, and precise lift TIG ignition ensures high quality DC TIG welding. Connect Minarc Evo's remote control option and you can adjust welding parameters at distance during welding, for the ultimate convenience and weld pool control.

Technical specifications

Minarc Evo 150		
Connection voltage	1 ~ 50/60 Hz	230 V ±15 % (AU 240 V ± 15 %)
Rated power at max. current	35 % ED MMA	140 A/4.5 kVA
	35 % ED TIG	150 A/3.2 kVA
Supply current	35 % ED I _{1max}	19.7 A
	100 % ED I _{1eff}	12.9 A
Connection cable	H07RN-F	3G1.5 (1.5 mm ² , 3 m)
Fuse	type C	16A: 140A ED 35% 10A: 140A ED 28%
Output 40 °C	35 % ED MMA	140 A/25.6 V
	100 % ED MMA	100 A/24.0 V
	35 % ED TIG	150 A/16.0
Welding range	100 % ED TIG	110 A/14.4 V
	MMA	10 A/15 V...140 A/37 V
	TIG	10 A/1 V...150 A/36 V
No-load voltage; peak		90 V (VRD 30 V, AU VRD 12 V)
Idle power		17 W
Voltage steps		stepless
Power factor at 100 % ED		0.99
Efficiency at 100 % ED	MMA	82 %
Stick electrodes	∅	1.5...3.25 mm (some 4 mm)
External dimensions LxWxH	height with handle	361x139x267 mm
Weight	without connection cable	5.4 kg
	with connection cable	5.85 kg
Temperature class		B (130 °C)
EMC class		A
Degree of protection		IP23S
Operating temperature range		-20...+40 °C
Storage temperature range		-40...+60 °C
Standards: IEC 60974-1, IEC 60974-10, IEC 61000-3-12		

Ordering information

Minarc Evo (includes earth- and welding cables)	
Minarc Evo 140 AU	61002140AU
Minarc Evo 150	61002150
Minarc Evo 150 AU	61002150AU
Minarc Evo 150 (Denmark)	61002150DK
Minarc Evo 150VRD	61002150VRD
Earth return cable and clamp	6184015
Welding cable and electrode holder	6184005
Carrying strap	9592163
Optional: TIG torch TTM15V	4 m 6271432
BETA 90X electronic welding shield	9873047
R10 Hand held remote control	5 m 6185409

Applications

- Metal workshops
- Construction industry
- Agriculture
- Repair and maintenance



Lightweight, compact and super portable



Large and clear meter display



Minarc Evo 150 includes electrode holder and welding cable set.

Minarc 220

Powerful, portable and compact



Why buy

- Excellent welding quality and ignition dynamics
- Light weight, high power and duty
- Ready to weld packages

Applications

- Metal workshops
- Construction industry
- Agriculture
- Repair and maintenance

For welding on the move

Minarc 220 is a three phase, 220A DC MMA welding power source, offering a truly portable specification for welding technicians on the move.

Ignition performance is excellent with all MMA electrode types and the TIG welding TouchArc function provides reliable DC TIG welding capability when combined with the TTC 220 GV TIG torch. Remote control for MMA and TIG is also possible with either the R10 remote control unit or the RTC10 torch control unit.

Technical specifications

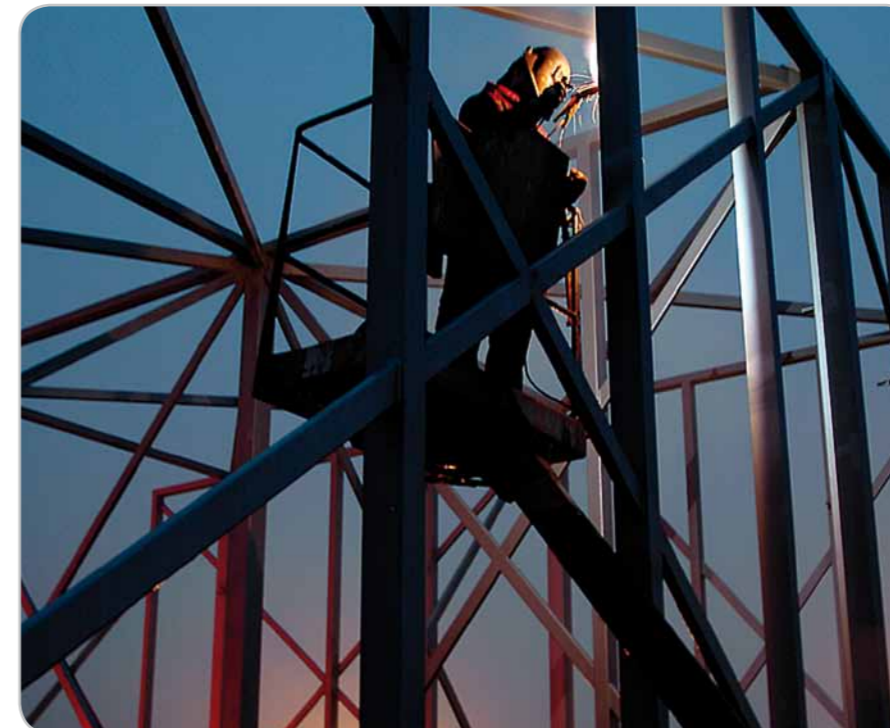
Minarc 220, 220 VRD		
Connection voltage	3~, 50/60 Hz	400 V -20 %...+15 %
Rated power	35 % ED MMA	220 A
	100 % ED MMA	150 A
Output 40 °C	35 % ED TIG	220 A
	100 % ED TIG	160 A
Connection cable	H07RN-F	4G1.5 (5 m)
Fuse, delayed		10 A
Welding range	MMA	10 A/20.4 V-220 A/28.8 V
	TIG	10 A/10.4 V-220 A/18.8 V
Open circuit voltage		85 V (30 V/VRD)
Power factor at maximum current	MMA	0.91 (TIG 0.92)
Efficiency at max current		0.86 (TIG 0.80)
Stick electrode	∅	1.5–5.0 mm
External dimensions	L x W x H	400 x 180 x 340 mm
Weight		9.2 kg

Ordering information

Minarc 220, incl. earth return and welding cable, connection cable	6102220
Minarc 220 VRD, incl. earth return and welding cable, connection cable	6102220VRD
Accessories	
Earth return cable	6184211
Welding cable	6184201
Carrying straps	9592162



Exceptional welding performance and compact size makes Minarc 220 ideal for maintenance workshops repairing heavy equipment.



Minarc 220 for MMA site welding



Minarc 220 is easy to set. Electrode type selection ensures the best welding quality and you can also use an optional remote control to make fine current adjustments during welding.

Master MLS 2500/3500

Premium MMA
welding quality



Why buy

- Specific design for MMA welding
- Compact and portable
- Control panel choice for varied applications
- Designed for all electrode types
- MMA and TIG welding function
- Suitable for use with power generators

Applications

- Installation and set-up
- Repair and maintenance
- Chemical and process industry
- Shipyards and offshore industry

Excellent arc control, durable design

Master MLS machines offer the best choice in MMA welding refinement. Combine either the 250 or 350 amp power source with the basic MEL or advanced MEX control panels for outstanding welding performance. High 40 % duty cycle ensures you have the work capacity to get the job done; whilst the compact and lightweight design makes work around site easy.

Control panel options MEL and MEX include all of the necessary parameter functions for high quality MMA welding. MEL panel includes process selection for MMA or basic TIG welding, large, clear meter display, hot start and arc force control, plus remote control function. MEX panel offers a more diverse selection of parameter controls including: Electronic electrode type selector, arc gouging, or broken arc welding technique and memory channel function. High quality TouchArc function provides a credible DC TIG welding facility.

Technical specifications

Master MLS™		2500	3500
Connection voltage	3~, 50/60 Hz	400 V (-15...+20 %)	400 V (-15...+20 %)
Rated power at max. current	MMA	9.4 kVA	15 kVA
	TIG	8.4 kVA	13.8 kVA
Connection cable	H07RN-F	4G1.5 (5 m)	4G2.5 (5 m)
Fuse, delayed		10 A	16 A
Output 40 °C	40 % ED	250 A/30 V (300 A/22 V TIG)	350 A/34 V (400 A/26 V TIG)
	100 % ED	160 A/26.4 V	220 A/28.8 V
Welding range	MMA	10 A/20.5 V...250 A/30 V	10 A/20.5 V...350 A/34 V
	TIG	5 A/10 V...300 A/22 V	5 A/10 V...400 A/26 V
Open circuit voltage		80 V	80 V
Power factor at 100% ED		0.95	0.95
Efficiency at 100% ED		86 %	86 %
Stick electrode	∅	1.5...5.0 mm	1.5...6.0 mm
External dimensions	L x W x H	500 x 180 x 390 mm	500 x 180 x 390 mm
Weight		20 kg	21 kg

Ordering information

Master MLS™ 2500		6104250
Welding cable 35 mm ²	2.5 m	6184301
Earth return cable 25 mm ²	2.5 m	6184311
Electric plug 16 A	5-poles	9770812
Master MLS™ 3500		6104350
Master MLS™ 3500 VRD		6104350C1
Welding cable 50 mm ²	2.5 m	6184501
Earth return cable 50 mm ²	2.5 m	6184511
Electric plug 16 A	5-poles	9770812
Control panels		
MEL		6106000
MEX		6106010



Master MLS is designed for professional use in demanding conditions.



Master MLS, shown here with T100 2-wheel transport unit

Master MLS options



MEL



MEX

FastMig KMS 400 AS

CC/CV site welding with extraordinary credentials



Why buy

- High output power and duty cycle
- For DC MMA and MIG/MAG welding
- Power generator compatible
- Light weight and compact, only 35 kg

KMS 400 AS features include:

- Power source metering
- CC/CV process mode selection
- MMA Arc Force control
- MIG/MAG dynamics adjustment
- Start power control

Power all DC welding process

Site welding machines normally serve a little compromise in performance. Not so with FastMig KMS 400 AS. 400 amp at 80 % duty cycle, 0.58 m³ and weighing only 35 kg leaves most competitors in the cold – and that's before you start comparing the welding performance.

Use FastMig KMS 400 AS for MMA welding or as a quality MIG/MAG power supply. The perfect partner for ArcFeed 200/300 tough case site wire feed units. FastMig KMS 400 AS and ArcFeed combination requires no control cable and only a single power cable and earth return lead. Excellent for site welding applications.

FastMig KMS 400 AS operation is clear and simple, providing clean, efficient welding results. Select either CC mode for MMA welding or CV for MIG/MAG welding. Arc tuning functions are available at the touch of a button including MMA arc force and MIG/MAG dynamics control. For the Kemppi MXF wire feed user, FastMig KMS 400 AS provides full functionality for SF and SFW control panels, including appropriate Wise welding processes.

Technical specifications

FastMig KMS 400 AS		
Connection voltage	3~, 50/60 Hz	400 V (-15...+20 %)
Rated power	60 % ED	-
	80 % ED	19.5 kVA
	100 % ED	18.5 kVA
Connection cable/fuse delayed	H07RN-F	4G6 (5 m)
Fuse (delayed)		35 A
Output 40 °C	60 % ED	-
	80 % ED	400 A
	100 % ED	380 A
Welding current and voltage range	MMA	10...400 A
	MIG	10...39 V
Max. welding voltage		46 V
Open circuit voltage		50 V
Open circuit power		25 W
Efficiency at 100 % ED		87 %
Power factor at 100 % ED		0.9
Operating temperature range		-20...+40 °C
Storage temperature range		-40...+60 °C
Degree of protection		IP23S
EMC class		A
External dimensions	L x W x H	590 x 230 x 430 mm
Weight		35 kg
Voltage supply for auxiliary devices		50 V DC
X14, X15		fuse 6.3 A delayed
Voltage supply for cooling unit		1~ 400 V AC and 24 V DC

Ordering information

FastMig KMS 400 AS	6054001
Wire feeders	
ArcFeed 200	6120200
ArcFeed 300	6120300
ArcFeed 300P	6120310
ArcFeed 300RC	6120301
MXF 65	6152100EL
MXF 67	6152200EL
MXF 63	6152300EL
MXF 65	6152100
MXF 67	6152200
MXF 63	6152300
Panels for MXF feeders	
SF 51	6085100
SF 52W	6085200W
SF 53W	6085300W
SF 54	6085400



KMS 400 AS shown with ArcFeed 200 voltage sensing site wire feed unit.

KempGouge ARC 800

Mobile, heavy duty carbon arc gouging power



Energy efficient

Why buy

- Designed specifically for carbon arc gouging
- Extremely power efficient
- Compact and easy to move
- Panel or remote current adjustment

Applications

- Shipyards
- Metal fabrication workshops
- Foundries

The heavy-duty gouging specialist

KempGouge offers 800 amps of gouging power with 50% duty cycle. The characteristics curve is specifically designed for carbon arc gouging, so gouging properties are optimised and noise levels kept very low. Package includes power source, control panel, and transport unit for easy mobility. KempGouge lets you open roots or faulty welds, prepare welding grooves, cut metals, pierce holes, clean casts and remove excess metal.

KempGouge ARC 800 gives productivity and convenience to gouging work. When equipped with the optional R10 remote control unit, gouging current adjustment can be made directly from the work site, removing the need to move between the work piece and the power source. The carbon arc gouging electrode holder GT4000 is designed for use with the KempGouge and suits either round or flat electrodes. The air pressure used for gouging can be adjusted via the control mounted on the holder itself.

KempGouge ARC 800 is a fast, effective, and safe way to:

- Open root welds
- Remove faulty welds and cracks
- Prepare welding grooves
- Cut metal
- Pierce holes



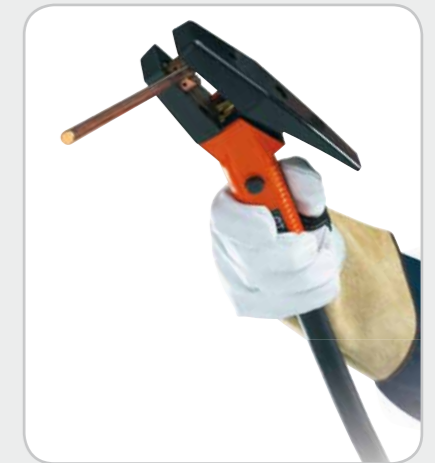
KempGouge ARC 800 makes easy work of carbon arc gouging tasks.

Technical specifications

KempGouge™ ARC 800		
Connection voltage	3~, 50/60 Hz	400 V, -15...+20 %
Rated power at max. current	50 % ED	44 kVA
Output	50 % ED	800 A/44 V
	100% ED	600 A/44 V
Fuse		63 A delayed
Welding range		20 A/20 V...800 A/44 V
Connection cable	H07RN-F	4G16 (16 mm)
Open circuit voltage		50 V
Power ratio at 100 % ED		0.9
Efficiency at 100 % ED		0.90
External dimensions	L x W x H	700 x 660 x 1400 mm
Weight with transport unit		115 kg

Ordering information

Power Sources	
KempGouge ARC 800 (includes transport unit)	6284000
Gouging electrode holder	
GT 4000 with 2.1 m cable	6285400
Remote control units	
R10 5 m	6185409
R10 10 m	618540901
Remote control extension cable for R10 10 m	6185481



The carbon arc gouging electrode holder GT4000 is designed for use with the KempGouge and suits either round or flat electrodes.



KempGouge ARC 800 can be equipped with a R10 remote control unit, which enables gouging current adjustment directly from the work site.



A mobile, heavy duty carbon arc gouging power source for multiple type metals removal and cutting tasks.

Guns and torches

MIG/MAG welding gun range	58
Consumable and replacement parts	60
TIG welding torch range	68
Consumable and replacement parts	70

Designed for comfortable and productive welding.

Many welding tasks carry exceptional responsibility for the business and craftsman completing the work. So whether you're welding ship hulls or pleasure boats, rail cars or racing cars, you can trust Kemppi welding guns and torches to deliver value to every weld.





MIG/MAG welding gun range

Designed for comfortable and productive welding

The best combination of weight and balance ensures welding craftsmen comfortably deliver their skill weld after weld. Choose from a wide range of Euro connected MIG/MAG welding guns in a variety of lengths from 3 to 8 meters.

FE guns are specifically designed for regular fabrication tasks using ferrous filler wires and are available from 3.5 to 5 meters in length.

MMT guns are suitable for use across a wide range of materials and tasks, and they are available in both air and water cooled models from 3 to 4.5 meters in length.

PMT guns are available in both air and water cooled models from 3 to 4.5 meters in length and also accept the RMT10 remote control device. When fitted with compatible Kemppi MIG/MAG equipment, the RMT10 remote control provides selection of welding power or memory channels during welding.

WS guns offer extended reach and distance for stainless steel and aluminium welding and are available in both air and water cooled models from 6 to 8 meters in length. WS guns use a patented DL liner material that reduces friction loss and makes distance wire feeding possible.

Technical specifications and ordering information

FE		FE 20	FE 25	FE 27	FE 32	FE 35	FE 42
Load capacity, Ar + CO ₂	35 %	200A	250 A	270 A	320 A	350 A	420 A
Cooling		Air	Air	Air	Air	Air	Air
Filler wires	ø mm	0.6...1.2	0.6...1.2	0.6...1.2	0.8...1.6	0.8...1.6	0.8...1.6
Length / Ordering code	3.5 m	6602003	6602503	6602703	6603203	6603503	6604203
	5 m	6602004	6602504	6602704	6603204	6603504	6604204

MMT		MMT 25	MMT 27	MMT 32	MMT 35	MMT 42	MMT 30W	MMT 42W	MMT 52W
Load capacity, Ar + CO ₂	35 %	250 A	270 A	320 A	350 A	420 A	-	-	-
	100 %	-	-	-	-	-	300 A	400 A	500 A
Cooling		Air	Air	Air	Air	Air	Water	Water	Water
Filler wires	ø mm	0.6...1.2	0.6...1.2	0.8...1.6	0.8...1.6	0.8...1.6	0.8...1.6	0.8...1.6	0.8...1.6
Length / Ordering code	3 m	6252513MMT	6252713MMT	6253213MMT	6253513MMT	6254213MMT	6253043MMT	6254203MMT	6255203MMT
	4.5 m	6252514MMT	6252714MMT	6253214MMT	6253514MMT	6254214MMT	6253044MMT	6254204MMT	6255204MMT

PMT		PMT 25	PMT 27	PMT 32	PMT 35	PMT 42	PMT 30W	PMT 42W	PMT 52W
Load capacity, Ar + CO ₂	35 %	250 A	270 A	320 A	350 A	420 A			
	100 %						300 A	400 A	500 A
Cooling		Air	Air	Air	Air	Air	Water	Water	Water
Filler wires	ø mm	0.6...1.2	0.6...1.2	0.8...1.6	0.8...1.6	0.8...1.6	0.8...1.6	0.8...1.6	0.8...1.6
Length / Ordering code	3 m	6252513	6252713	6253213	6253513	6254213	6253043	6254203	6255203
	4.5 m	6252514	6252714	6253214	6253514	6254214	6253044	6254204	6255204

The gun's standard delivery has welding set for steel wire.

WS		WS35	WS30W	WS42W	MMG	MMG 20	MMG 22
Load capacity, Ar + CO ₂		300 A/35 %	250 A/100 %	300 A/100 %		200 A (35 %)	200 A (35 %)
Cooling		Air	Water	Water		Air	Air
Filler wires ø mm	Ss	1.0	1.0...1.2	1.0...1.2	Fe	0.6...1.0	0.6...1.0
	Al	1.2	1.2 (1.6)	1.2 (1.6)	Ss, Al	0.8...1.0	0.8...1.0
Ordering codes	6 m, Al 1.2	6253516A12	6253046A12	6254206A12	3 m	6250200	6250200
	6 m Ss 1.0	6253516S10	6253046S10	6254206S10	MMG 20 and MMG 22 guns are used only in MinarcMig equipment.		
	6 m Ss 1.2	-	6253046S12	6254206S12			
	8 m, Al 1.2	-	6253048A12	6254208A12	Wire liners:		
	8 m Ss 1.0	-	6253048S10	6254208S10	MMG 20	0.6...1.0 mm (Fe)	4307650
	8 m Ss 1.2	-	6253048S12	6254208S12		0.8...1.0 mm (Ss, Al)	4307660
The ordering number comprises the gun, the DL Teflon wire liner and 5 contact tips.					MMG 22	0.6...1.0 mm (Fe)	4307650

Consumable and replacement parts

Kemppi consumable and replacement parts are specifically designed for their application and manufactured under the ISO quality system. Please ensure that you always select and replace damaged or worn gun parts with original Kemppi equipment.

All parts listed suit the model specifications at the time of publication.



Contact tips

When you replace the contact tip, always check the label on the tip to make sure that the part is suitable for the filler wire. As a general rule, the contact tip hole must be 0.2–0.5 mm greater than the filler wire diameter.

M8 Standard contact tips M8 (DHP) for solid mild steel and flux-cored wire

Marking: Kemppi 1.2	Wire ø	Hole ø	Tolerance	Order number
	0.8	0.9	+0.1/-0.0	9580122
	0.9	1.05	+0.05/-0.02	9580121
	1.0	1.15	+0.05/-0.02	9580123
	1.2	1.4	+0.05/-0.05	9580124
	1.4	1.6	+0.05/-0.05	9580125
	1.6	1.8	+0.1/-0.0	9580126
	2.0	2.3	+0.0/-0.1	9580127
	2.4	2.7	+0.05/-0.05	9580128
	2.8	3.1	+0.1/-0.0	9580129
	3.2	3.6	+0.05/-0.05	9580130



Contact tips M8 (DHP) for Aluminium wire

Marking: Kemppi 1.2 A	Wire ø	Hole ø	Tolerance	Order number
	0.8	1.05	+0.05/-0.02	9580122A
	0.9	1.15	+0.05/-0.02	9580121A
	1.0	1.4	+0.05/-0.05	9580123A
	1.2	1.6	+0.05/-0.05	9580124A
	1.4	1.8	+0.10/-0.00	9580125A
	1.6	2.3	+0.00/-0.10	9580126A

Contact tips M8 (CuAg) for Fe and flux cored wire

Marking: Kemppi 1.2 Ag	Wire ø	Hole ø	Tolerance	Order number
	1.0	1.15	+0.05/-0.02	9580123AG
	1.2	1.4	+0.05/-0.05	9580124AG

Contact tips M8 (CuCrZr) for solid mild steel and flux cored wire

Marking: Kemppi 1.2 CRZR	Wire ø	Hole ø	Tolerance	Order number
	1.0	1.15	+0.05/-0.02	9580123ZR
	1.2	1.4	+0.05/-0.05	9580124ZR
	1.4	1.6	+0.05/-0.05	9580125ZR

Contact tips M8 (DHP) for stainless and high acid-resistant steel

Marking: Kemppi 1.2 SS	Wire ø	Hole ø	Tolerance	Order number
	0.8	1.15	+0.05/-0.02	9580122SS
	0.9	1.4	+0.05/-0.05	9580121SS
	1.0	1.6	+0.05/-0.05	9580123SS
	1.2	1.8	+0.10/-0.00	9580124SS
	1.6	2.3	+0.00/-0.10	9580126SS

M6 Standard contact tips M6 (DHP) for solid mild steel and flux cored wire

Marking: Kemppi 1.2	Wire ø	Hole ø	Tolerance	Order number
	0.6	0.8	+0.05/-0.02	9876634
	0.8	0.95	+0.05/-0.02	9876635
	0.9	1.05	+0.05/-0.02	9876633
	1.0	1.15	+0.05/-0.02	9876636
	1.2	1.37	+0.05/-0.02	9876637
	1.6	1.8	+0.05/-0.02	9876639

Wire liners

Kemppi gun liners are strong, durable and efficient. Designed to suit specific filler wire materials and applications, Kemppi liners support the filler wire and ensure reliable delivery to the welding arc. The liner selection tables describe gun type, filler material, liner colour, item code and gun length. Steel spiral liners carry the same colour coding as Kemppi machine feed rolls and drive rolls, making wire size, liner and drive roll matching easier if the gun is connected to Kemppi equipment. Steel spiral liners are suitable for welding solid and cored filler wires of corresponding wire diameter.

Kemppi DL-Teflon liners are the latest solution for reliable feeding of aluminium, stainless steel and acid-resistant filler wires. Kemppi's patented technology, two layer DL-Teflon, significantly reduces friction losses between the filler wire material and liner wall, ensuring reliable and worry-free feeding of listed wires types, even in guns up to 8 meters in length.

Please refer to the following tables to ensure accurate selection of liners for your chosen welding application.

Wire liners for FE guns

Steel/ cored wire	Filler wire ø, mm	Order number, 3.5 m	Order number, 5 m
White	0.6...0.8	4188573	4188576
Red	0.9...1.2	W006453	W006454
Yellow	1.4...1.6	W006455	W006456
Aluminium/ Stainless steel			
DL-Teflon liner	0.8...1.0	W006457	W006458
DL-Teflon liner	1.0...1.6	W006459	W006460

Wire liners for MMT, PMT guns

Steel/ cored wire	Filler wire ø, mm	Order number, 3 m	Order number, 4.5 m
White	0.6...0.8	4188571	4188572
Red	0.9...1.2	4188581	4188582
Yellow	1.4...1.6 (1.2)	4188591	4188592
Green	1.6...2.0	4188601	4188602
Black	2.0...2.4	4188611	4188612
Blue	2.8...3.2	4188621	4188622
Aluminium/ Stainless steel			
DL-Teflon liner	0.8...1.6	4300840	4300850
DL-Teflon liner	0.8...1.0	4302680	4302690
WeldSnake™			
	Filler wire ø, mm	Order number, 6 m	Order number, 8 m
DL-Teflon liner /AL/SS	1.0...1.6	4304100	4304110
DL-Teflon liner AL/SS	0.8...1.0	4304120	4304130



FE 20, FE 25, MMT 25, PMT 25



Gas nozzle	
1. 9580101*	Standard
2. 958010101	With insulating ring
3. 4113470	For spot welding
4. 9580101E	Thick wall

Insulating bush	
9591010*	

Contact tip		
9876635*	0,8 mm / M6	FE 20
9876636*	1,0 mm / M6	

Please see page 61 for a full listing of available contact tips.

Contact tip adapter	
9580173*	

Insulating ring	
9591079*	

Locking spring	
4275240*	

Neck 45°	
4153040*	

Wire liners			
4188573*	Spiral	0.6...0.8	3.5 m/white
4188576*	Spiral	0.6...0.8	5 m/white
4188581*	Spiral	0.9...1.2	3m/red
4188582*	Spiral	0.9...1.2	4.5m/red
W006453*	Spiral	0.9...1.2	3.5 m/red
W006454*	Spiral	0.9...1.2	5 m/red

Suitable liners: white, red, yellow, DL-Teflon.
* Standard delivery

FE 27, MMT 27, PMT 27, FE 32, MMT 32, PMT 32, MMT 30W, PMT 30W, WS 30W



Gas nozzle

1. 4295760*	Standard / M8
2. 4295760L	Long
3. 4295760C	Conical
4. 4294970	Standard / M6

Contact tip

9580123* 1.0 / M8

Please see page 61 for a full listing of available contact tips.

Contact tip adapter

4295740* M8
4294890 M6

Gas diffuser

4294880*
4294880CER

1. Neck 50°

3146800 MMT 30W/PMT 30W/WS 30W

2. Neck 50°

3146780 FE 27/MMT 27/PMT 27
FE 32/MMT 32/PMT 32

Wire liners

4188581*	Spiral	0.9...1.2	3m/red
4188582*	Spiral	0.9...1.2	4.5m/red
W006453*	Spiral	0.9...1.2	3.5 m/red
W006454*	Spiral	0.9...1.2	5 m/red

Suitable liners: white, red, yellow, DL-Teflon.

* Standard delivery/WeldSnake according to filler wire.

FE 35, MMT 35, PMT 35, WS 35, MMT 42W, PMT 42W, WS 42W



Gas nozzle

1. 4307050*	Standard, isolated
2. 4300260	Standard
3. 4300260L	Long
4. 4300260C	Conical

Insulating bush

4307020*

Contact tip

9580123* 1.0 / M8

Please see page 61 for a full listing of available contact tips.

Contact tip adapter

4295740* M8 PMT/MMT/WS 35

Contact tip adapter

W006183* Brass PMT/MMT/WS 42W
W006182 Copper PMT/MMT/WS 42W

Gas diffuser

W006146 PMT/MMT/WS 42W
W004390 FE/PMT/MMT/WS 35

1. Neck 50°

SP004539* MMT 42W/PMT 42W/WS 42W

2. Neck 50°

SP004585* FE 35/PMT 35/MMT 35

3. Neck 50° (temperature resistant)

SP600317 PMT 35/MMT 35

Wire liners

4188581*	Spiral	0.9...1.2	3m/red
4188582*	Spiral	0.9...1.2	4.5m/red
W006453*	Spiral	0.9...1.2	3.5 m/red
W006454*	Spiral	0.9...1.2	5 m/red

Suitable liners: white, red, yellow, DL-Teflon.

* Standard delivery/WeldSnake according to filler wire.

FE 42, MMT 42, PMT 42, MMT 52W, PMT 52W

MMG 20, MMG 22



Gas nozzle	
1. 4307070*	Standard, isolated
2. 4300380	Standard
3. 4300380L	Long
4. 4300380C	Conical
5. 4308190	Special long (89.5 mm)

Insulating bush	
4307030*	

Contact tip	
9580123* 1.0 / M8	
<i>Please see page 61 for a full listing of available contact tips.</i>	

Contact tip adapter	
W004508 M8*	PMT 52W/MMT 52W
4304600 M8*	FE 42/PMT 42/MMT 42

Gas diffuser	
W004505	PMT 52W/MMT 52W FE 42/PMT 42/MMT 42

1. Neck 50°	
SP004563	PMT 52W/MMT 52W

2. Neck 50°	
SP004578	FE 42/PMT 42/MMT 42

3. Neck 50°	
SP600316	PMT 42/MMT 42

Wire liners			
4188581*	Spiral	0.9...1.2	3m/red
4188582*	Spiral	0.9...1.2	4.5m/red
W006453*	Spiral	0.9...1.2	3.5 m/red
W006454*	Spiral	0.9...1.2	5 m/red

Suitable liners: white, red, yellow, DL-Teflon.
* Standard delivery



Gas nozzle	
1. 9580101*	
2. 9580101E	Thick wall

Insulating bush	
9591010*	

Contact tip	
9876635* 0.8 / M6	
<i>Please see page 61 for a full listing of available contact tips.</i>	

Contact tip adapter	
9580173* M6	

Insulating ring, neck	
9591079*	

Locking spring	
4275240*	

Neck 45°	
4153040*	

Wire liners			
4307650 *	Fe	0.6...1.0	3 m
4307660	Ss, Al	0.8...1.0	3 m

* Standard delivery



TIG welding torch range

Welding craftsmen deserve the best tools

Kemppi TIG torches just feel that little bit better in the hand for those quality welding tasks. Kemppi TIG torches suit a variety of equipment and are available from 4 to 16 meters in length. Manufactured using the best materials, you can trust Kemppi TIG torches to perform, allowing you to concentrate on completing beautiful looking TIG welds.

The TTM range is equipped with manual gas valves to regulate the shielding gas flow, ensuring basic TIG welding tasks are easily completed. Use with MMA power sources for scratch and TouchArc TIG ignition.

The TTK range fits a wide range of industrial TIG welding machines. Standard thread terminations easily connect for power, gas and water (model dependent) and every model is fitted with an ignition switch, cable and plug as standard.

The TTC range is designed for use with specific Kemppi TIG machines and available in both air and water cooled models. TTC torches support RTC10 and RTC20 remote control units that replace the standard on/off switch with a convenient and precise remote current regulator for easy ignition and power control at distance.

Technical specifications and ordering information

	TTM 15V 4M	TTM 15V BC 4M	TTC 220 GV 4M
Output, DC TIG	140 A (35%)	150 A (35%)	220 A (40%)
Machine connector	R1/4	R3/8	R3/8
Ordering code	6271432	627143201	627022304

Technical specifications and ordering information

TTK		TTK 130	TTK 130F	TTK 160	TTK 160S	TTK 220	TTK 220S	TTK 300W	TTK 350W	TTK 250WS
Output	DC 40 % ED	130 A	130 A	160 A	160 A	220 A	220 A	300 A	350 A	250 A
	DC 100 % ED	-	-	-	-	-	-	200 A	250 A	200 A
	AC 40 % ED	100 A	100 A	120 A	110 A	160 A	120 A	250 A	300 A	250 A
	AC 100 % ED	-	-	-	-	-	-	140 A	200 A	140 A
Electrodes	ø mm	1.0...2.4	1.0...2.4	1.0...2.4	1.0...2.4	1.0...3.2	1.0...3.2	1.0...2.4	1.0...4.0	1.0...4.0
	Connection	Gas/current	R¼	R¼	R¼	R¼	R¼	-	-	-
Length/ Ordering code	Water/current	-	-	-	-	-	-	R3/8	R3/8	R3/8
	Gas	-	-	-	-	-	-	R¼	R¼	R¼
	4 m	627063004	627063104	627066004	627066204	627072004	627072304	627080504	627085504	627075704
8 m	627063008	627063108	627066008	627066208	627072008	627072308	627080508	627085508	627075708	
16 m	627063016	627063116	627066016	627066216	627072016	627072316	627080516	627085516	627075716	

TTC		TTC 130	TTC 130F	TTC 160	TTC 160S	TTC 220	TTC 220S	TTC 200W	TTC 250W	TTC 250WS
Output	DC 40 % ED	130 A	130 A	160 A	160 A	220 A	220 A	300 A	350 A	250 A
	100 % ED	-	-	-	-	-	-	200 A	250 A	200 A
Electrodes	ø mm	1.0...2.4	1.0...2.4	1.0...2.4	1.0...2.4	1.0...3.2	1.0...2.4	1.0...2.4	1.0...4.0	1.0...4.0
	Connection	Gas/current	R¼	R¼	R¼	R¼	R¼	R¼	R¼	R¼
Length/ Ordering code	Water	-	-	-	-	-	-	Snap connection	Snap connection	Snap connection
	4 m	627013004	627013104	627016004	627016204	627022004	627022204	627020504	627025504	627025704
	8 m	627013008	627013108	627016008	627016208	627022008	627022208	627020508	627025508	627025708
	16 m	627013016	627013116	627016016	627016216	627022016		627020516	627025516	627025716
	30 m				627016230					

RTC 10 (6185477) and RTC 20 (6185478) remote control units are available as options

TTC/TTK		TTK 130	TTK 130F	TTK 160	TTK 160S	TTK 220	TTK 220S	TTK 200W	TTK 300W	TTK 250W	TTK 350W	TTK 250WS
<input type="checkbox"/> 4285650		■	●	●	●	●	●					
<input type="checkbox"/> 9878040 (Flex)		●	■	●	●	●	●					
4270580		●	●	■	●	■	●					
<input type="checkbox"/> 4285660								■	●	●		
4270600								●	■	●		
4276530		●	●	●	■	●	■					
<input type="checkbox"/> 4276300		●	●	●	■	●	●	●	●	●		■
4276290		●	●	●	●	●	■	●	●	●		●
4276550								●	●	■		
■	Standard delivery											
●	Accessory											
<input type="checkbox"/>	Small consumable parts											

Consumable and replacement parts

Big torch head: TTK 160, 220, 220S, 350W, TTC 160, 220, 250W

1. Gas nozzle mm

No.	Ordering number	a	b	c	d
4	7990766	18.0	11.5	6.5	47.5
5	7990770	18.0	12.5	8.0	47.5
6	7990771 *	18.0	14.5	9.5	47.5
7	7990772	18.0	16.0	11.0	47.5
8	7990773	18.0	18.0	12.5	47.5
10	7990775	21.0	21.0	16.0	47.5
12	7990776	24.0	24.0	19.0	47.5

2. Gas nozzle/lens mm

No.	Ordering number	a	b	c	d
5	7990783	25.0	12.5	7.5	42.0
6	7990784	25.0	14.0	9.0	42.0
7	7990785	25.0	15.5	11.0	42.0
8	7990786	25.0	16.5	12.0	42.0
11	7990787	25.0	22.0	17.0	42.0

Housing for tightening bush

1. standard 2. gas lens

ø 1.6	7990681	ø 1.6	7990711
ø 2.4	7990682 *	ø 2.4	7990712
ø 3.2	7990683	ø 3.2	7990713
ø 4.0	7990684	ø 4.0	7990714

Insulating ring

- 9580266 *
- 9876860
- 9580267

Torch body

Find codes of the torch body from the separate table, page 69.

Tightening bush

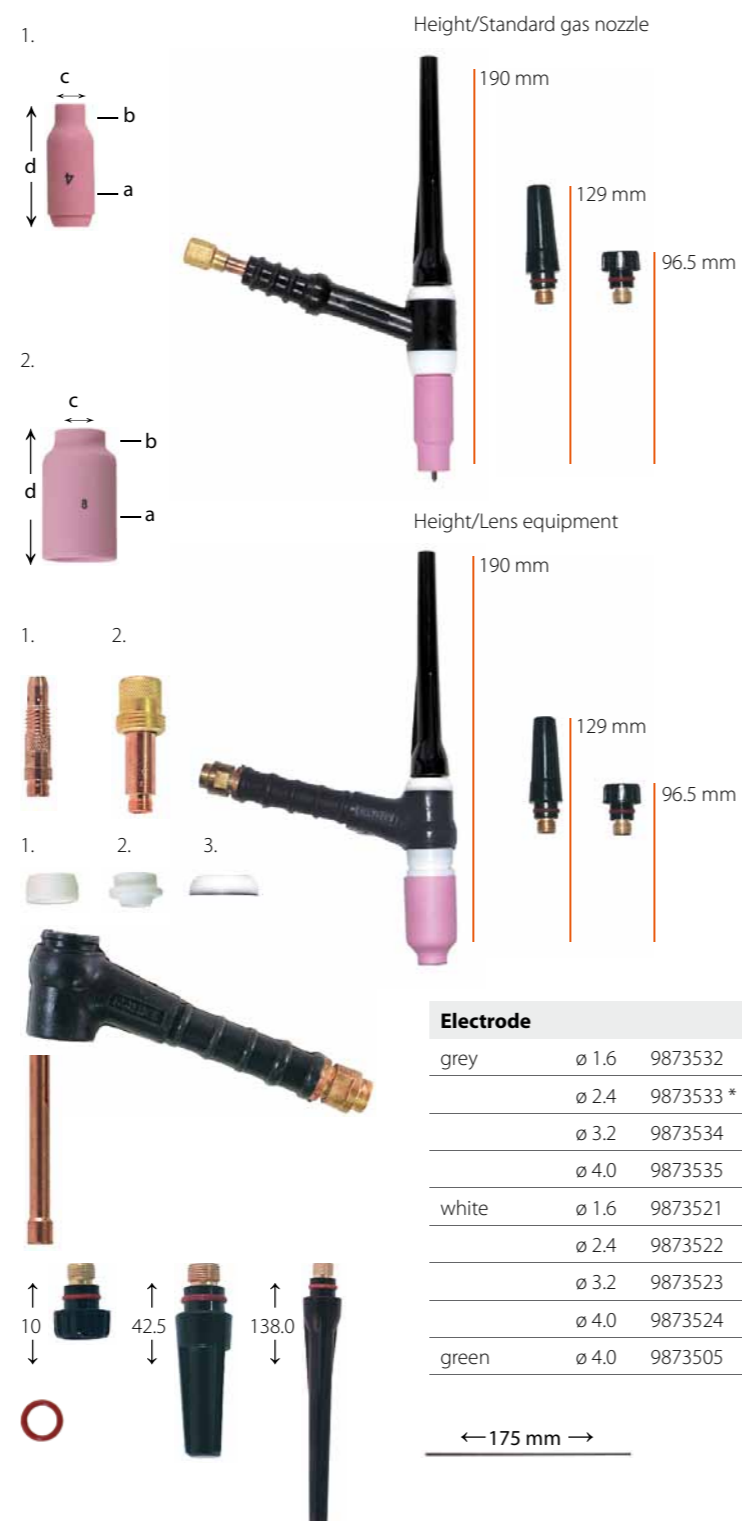
ø 1.6	9876867
ø 2.4	9876868 *
ø 3.2	9876869
ø 4.0	9876870

Electrode shield including O-ring

short	7990731
medium	7990735
long	7990741 *

O-ring 7990791

* Delivery equipment is for ø 2.4 mm electrode. Lens equipment is delivered as an accessory. The above mentioned dimensions are directive.



Color	Electrode	Ordering number
grey	ø 1.6	9873532
	ø 2.4	9873533 *
	ø 3.2	9873534
	ø 4.0	9873535
white	ø 1.6	9873521
	ø 2.4	9873522
	ø 3.2	9873523
	ø 4.0	9873524
green	ø 4.0	9873505

Small torch head: TTK 130, 130F, 160S, 250WS, 300W, TTC130, 130F, 160S, 200W, 250WS

1. Gas nozzle mm

No.	Ordering number	a	b	c	d
4	7990760	14.5	10.0	6.5	30
5	7990761 *	14.5	11.0	8.0	30
6	7990762	14.5	14.5	10.0	30
7	7990763	14.5	14.5	11.0	30

Special gas nozzle mm

4	9878019	15.0	10.5	6.5	48
5	9878020	15.0	11.5	8.0	48
6	9878021	15.0	13.5	9.5	48

2. Gas nozzle/gas lens mm

No.	Ordering number	a	b	c	d
4	7990779	18.5	10.5	7.0	25.5
5	7990780	18.5	12.0	8.0	25.5
6	7990781	18.5	13.5	9.5	25.5
7	7990782	18.5	15.0	11.0	25.5

Housing for tightening bush

1. standard 2. lens

ø 1.0	7990660	ø 1.0	7990700
ø 1.6	7990661	ø 1.6	7990701
ø 2.4	7990662 *	ø 2.4	7990702

Insulating ring

9878013 *

Torch body

Find codes of the torch body from the separate table, page 69.

Tightening bush

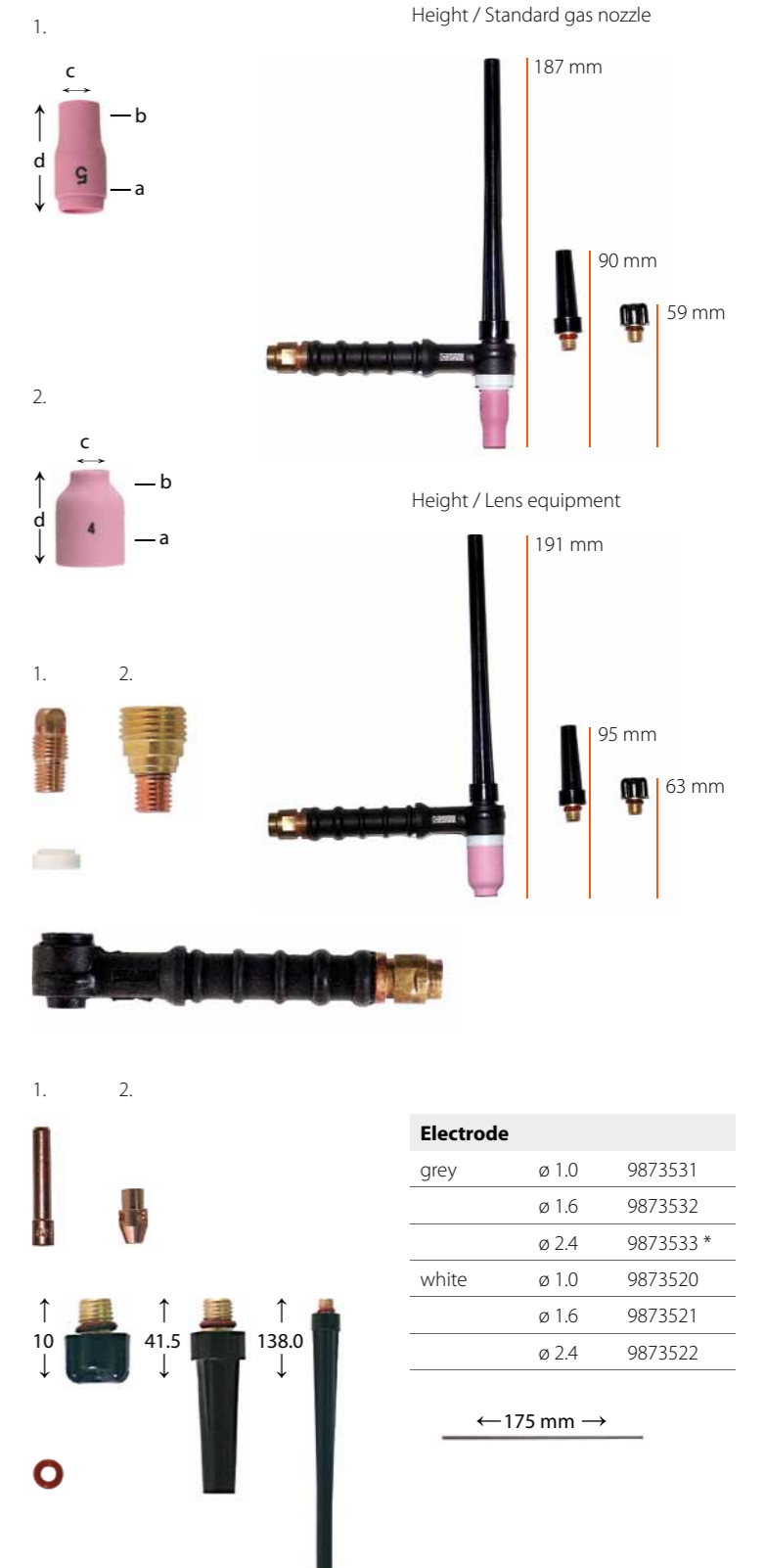
1.	2. short		
ø 1.0	7990635	ø 1.0	7990640
ø 1.6	7990636	ø 1.6	7990641
ø 2.4	7990637 *	ø 2.4	7990642

Electrode shield including O-ring

short	7990730
medium	7990734 *
long	7990740

O-ring 7990790

* Delivery equipment is for ø 2.4 mm electrode. Lens equipment is delivered as an accessory. The above-mentioned dimensions are directive.



Color	Electrode	Ordering number
grey	ø 1.0	9873531
	ø 1.6	9873532
	ø 2.4	9873533 *
white	ø 1.0	9873520
	ø 1.6	9873521
	ø 2.4	9873522



Welding automation and arc performance solutions

KempArc SYN / KempArc Pulse	74
MagTrac	78
KempArc Pulse TCS	80

Repetitive high volume welding is synonymous with automated welding systems.

Kemppi offers a range of equipment and software solutions, designed to increase arc welding productivity and quality for the wide ranging needs, applications and materials of automated welding industry.

KempArc

SYN 300, 400, 500,
Pulse 350, 450

Modular MIG/MAG welding systems for automation



Why buy

- Synergic or pulsed MIG/MAG welding
- Digital or analogue models
- Compact, lightweight wire drive mechanism
- Wise welding solutions compatible
- KempArc browser robot interface

Application

- Robotic welding
- Mechanised welding
- Automated systems

Key features

KempArc is specifically designed for MIG/MAG welding automation. Synergic or pulsed welding process variants are available in either 300, 400 or 500 amp synergic models, or 350 or 450 amp pulsed models. Each range offers logical process adjustment, ensuring quick setup for busy industry.

KempArc automation range allows standard or tailored welding packages to suit your specific welding environment. For example KempArc Pulse range offers Work Pack, including welding software selections for steel, aluminium, and stainless steel filler wires, or Project Pack where you match your specific local welding needs perfectly. Either version can be upgraded at anytime.

Choose either digital or analogue models for integration with different robotic control systems. Digital process management ensures fast communication speeds for precise ignition and welding quality. Memory channels are available as standard for systems that demand independent parameter storage.

Options

Wise™ process functions for automation applications offer additional choice and solutions that match welding in the real world, so you can be sure to cover your welding requirements now and far into the future.

KempArc Browser robot interface is an easy way to control the welding parameters of KempArc robotic welding equipment. Just take your teach pendant device and open the control panel with the KempArc Browser. You can also connect to it through intranet or with a laptop for easy maintenance and service of your KempArc system.

DT400 wire feed unit mounts to the back of the robot arm or as a convenient integrated wire feed solution for any mechanised welding system. DT400 is compact and light in weight, incorporating a 4x4 drive mechanism and full metal feed rolls.

KF 62 control pendant offers remote welding control for KempArc Pulse power source.



Robot control pendant displaying KempArc Browser interface.



DT400 wire feed unit



KempCool 10 keeps a cool head in the heat of production welding with 1 kW of cooling power.



KempArc™ Synergic 500

KempArc SYN 300, 400, 500, Pulse 350, 450

Technical specifications

KempArc	SYN 300	SYN 400	SYN 500	Pulse 350	Pulse 450
Connection voltage	400 V (-15...+20 %)	400 V (-15...+20 %)	400 V (-15...+20 %)	400 V (-15...+20 %)	400 V (-15...+20 %)
Rated power at max. current	13.9 kVA	19.5 kVA	26.1 kVA	16.0 kVA	22.1 kVA
Connection cable	HO7RN-F 4G6 (5 m)	4G6 (5 m)	4G6 (5 m)	4G6 (5 m)	4G6 (5 m)
Fuse, delayed	25 A	35 A	35 A	25 A	35 A
Output 40 °C	60 % ED	-	500 A	-	450 A
	80 % ED	-	400 A	350 A	-
	100 % ED	300 A	380 A	430 A	350A
Open circuit voltage	50 V	50 V	50 V	50 V	50 V
Power factor at max. current	0.9	0.9	0.9	0.85	0.9
Efficiency at max. current	0.87	0.87	0.87	0.88	0.88
Dimensions, mm	L x W x H 590 x 230 x 500	590 x 230 x 500	590 x 230 x 500	590 x 230 x 430	590 x 230 x 430
Weight	34 kg	35 kg	36 kg	36 kg	37 kg

DT 400

Operating voltage	50 V DC
Rated power	100 W
Output 40 °C	80 % ED 600 A
	100 % ED 500 A
Operating principle	4-wheel feed
Wire feed speed	0...25 m/min
Filler wires	∅ Fe, Ss 0.6...1.6 mm
	∅ Flux-cored wire 0.8...1.6 mm
	∅ Al 1.0...1.6 mm
Welding gun connector	Euro
Operating temperature range	-20...+40 °C
Storage temperature range	-40...+60 °C
EMC class	A
Degree of protection	IP23S
Dimensions	L x W x H 269 x 175 x 169 mm
Weight	4.5 kg



KempArc Browser robot interface is an easy way to control the welding parameters of KempArc robotic welding equipment.

KempArc SYN300,400,500, Pulse 350, 450

Ordering information

KempArc™ power sources	
SYN 300 (digital)	6201300
SYN 400 (digital)	6201400
SYN 500 (digital)	6201500
SYN 300 (analogue)	6201300AN
SYN 400 (analogue)	6201400AN
SYN 500 (analogue)	6201500AN
KempArc Pulse 350 (digital)	6200350
KempArc Pulse 450 (digital)	6200450
KempArc Pulse 350 (analogue)	6200350AN
KempArc Pulse 450 (analogue)	6200450AN
Wire feeders	
DT 400	6203400
DT 400L	6203400L
Interface cards	
Interbus S	9774120IBC
Interbus S, optical	9774120IBO
Profibus	9774120PRF
Devicenet	9774120DEV
Control devices	
KempArc Browser Synergic	6202100
KempArc Browser Pulse	6202200
Wise™ welding functions	
WiseRoot-A	9991011
WiseThin-A	9991013
WisePenetration-A	9991010
WiseFusion-A	9991015
Cooling unit	
KempCool 10	6208100
Cables	
Interconnection cable 5 m, air cooled	6260441
Interconnection cable 10 m, air cooled	6260445
Interconnection cable 5 m, water cooled	6260461
Interconnection cable 10 m, water cooled	6260465
Cable clamps, jointless	W003210
Cable clamps, ball-joint	W003211
Earth return cable 70 mm ² , 5 m,	6184711
Earth return cable 70 mm ² , 10 m	6184712



MagTrac F 61

A quick way to welding mechanisation

Why buy

- A magnetic carriage unit for MIG/MAG welding mechanisation
- Connects to Kemppi FastMig Synergic and Pulse models
- Extensive selection of functions
- Only the welding gun needed between carriage and wire feeder
- Welding values and memory channels selection at the carriage control panel
- Cycle Weld, Wire Inch and Gas Test functions
- Heat input and other welding statistics

Applications

- Horizontal fillet weld mechanisation
- Shipyards and heavy metal industry

An express carriage to higher welding productivity and quality

Light mechanisation is the most efficient way of improving welding productivity at shipyards and metal workshops. It has also a favourable effect on the safety and ergonomics of welding work. As welding carriage performs the heavy work, the welder can concentrate on monitoring the process and quality.

Kemppi's MagTrac F 61 is a quick and easy way of changing from manual MIG/MAG welding to productive mechanisation. Operating MagTrac F 61 is similar to operating any ordinary welding machine, so there's no need for special expertise. With MagTrac F 61 you don't need auxiliary control cables or transformers, because everything is fully integrated in one cable.

Productivity, quality, comfort

MagTrac F 61 is sold in sales packages that contain everything you need for efficient welding mechanisation: the carriage unit, a synergic FastMig power source, an MXF wire feed unit, a special welding gun and the necessary cables. You can optionally select a package that includes a SuperSnake subfeeder to get up to 15 meters of extra reach.

MagTrac F 61 is compatible with Kemppi's Wise™ welding processes and functions, which allow you to further increase your welding productivity and quality. Full process control is enabled via Kemppi's LCD control panel, integrated to the MagTrac F 61 carriage. This new control system allows full operational control for both carriage drive and welding parameters alike. Combined with Kemppi high-quality process control and industrial welding systems, the MagTrac F 61 offers truly unique qualities.

Technical specifications

MagTrac F 61		
Input power		50 VDC / 1 A
Data bus type		KempBus
Travel speed		150...1800 mm/min
Towing power		16 kg
Driving method		Rail-less drive with permanent magnetic suction
Wheels		4 rubber wheels
Tracing method		Guide rollers
Guide roller height range		10...38 mm, 3 positions
Non-welding distance	Start	127 mm
	End	127 mm
Auto-stop function		Limit switch on both sides
Torch model		Kemppi MMT 42C
Torch angle adjustment range		±30°
Torch distance adjustment range	up/down, fw/bw	45 mm
External dimensions	L x W x H	259 x 259 x 285 mm
Weight		6.9 kg
Max surface temperature		150 °C

Ordering information

MagTrac F 61 package		
MagTrac F61, FastMig KMS, air-cooled		P08818
MagTrac F 61 package with SuperSnake, air-cooled		P08819
MagTrac F61, FastMig Pulse, air-cooled		P08822
MagTrac F61, FastMig Pulse, SuperSnake, air-cooled		P08828
MagTrac F61, FastMig KMS, liquid-cooled		P08826
MagTrac F61, FastMig Pulse, liquid-cooled		P08827

Features



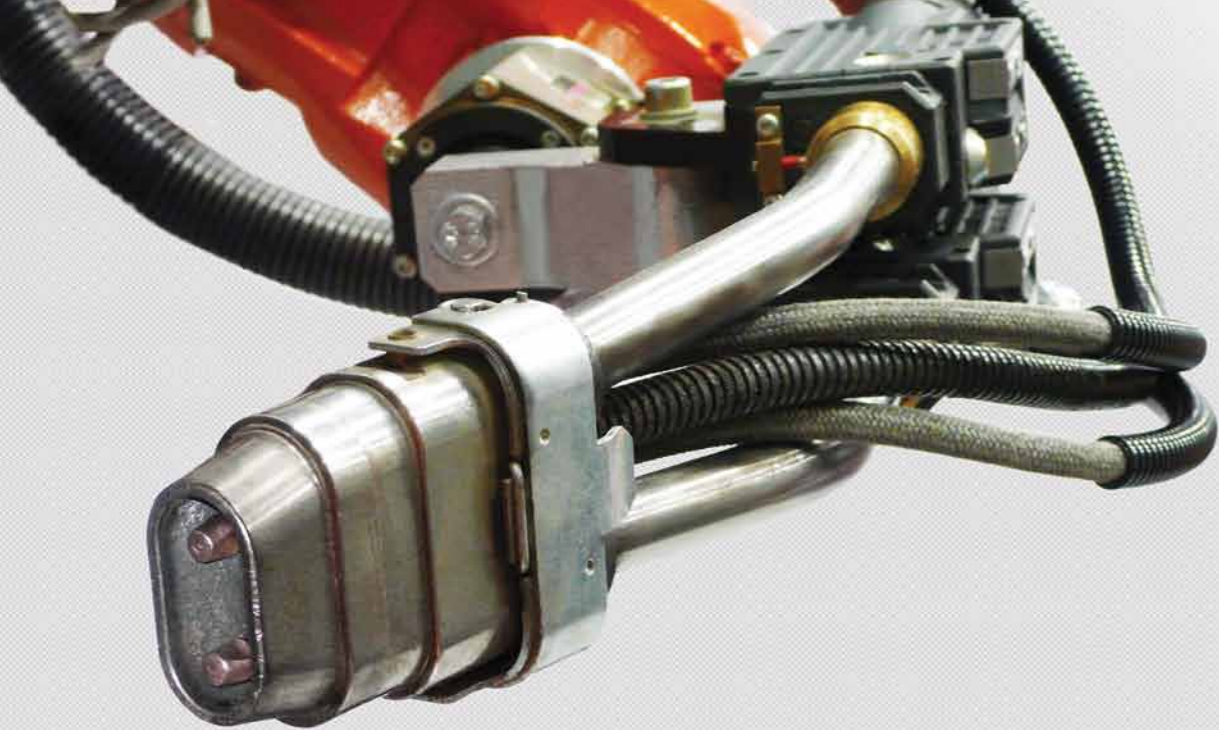
MagTrac F 61 is fully compatible with Kemppi's SuperSnake subfeeder, which gives you up to 15 meters of further reach.



The strong magnet keeps it on the right track even in demanding jobs.



Operation is easy to instruct, plus all welding regulation is set from the carriage unit, reducing set-up time and making distance work easy.



KempArc Pulse TCS

Increase productivity with TCS technology

Why buy

- Increases productivity between 40 and 80 % over single wire process
- Easy process setting and parameter control
- Optional ON/OFF switching of either electrode during the weld cycle
- Suitable for both steels and aluminium applications
- Reduced heat input on thin sheet materials
- Tack welding selection with either electrode
- TCS process can be direction independent
- Connects to all robot brands

Higher levels of productivity and quality

Replacing single-wire welding with dual-wire tandem welding is an efficient way to increase welding speed and productivity and reduce costs. However, early market models prevented users taking full advantage of the tandem process benefit. Parameter selection and adjustment was complicated, time consuming and unreliable, due to the complex synchronising of both leading and trailing arcs.

Today, **KempArc Pulse TCS** (Tandem Control System) delivers on its promise, opening the door to reliable dual arc welding. TCS smart software solutions provide easy system setup and automatic arc regulation, achieving significant welding speed increase and reliable welding quality.

Intelligent TCS software actively monitors and controls the arcs separately, making it possible to precisely adjust them independently from each other. The slave arc continuously monitors the master arc and adjusts itself accordingly, giving several performance benefits including:

- no system arc interference
- optimised, independent and real time arc length adjustment
- fast, flexible and easy parameter adjustment.

Technical specifications

KempArc Pulse TCS		
Connection voltage	3~, 50/60 Hz	400 V -15...+20 %
Rated power	60 % ED	22.1 kVA
	100 % ED	17.8 kVA
Connection cable	HO7RN-F	4G6 (5 m)
Fuse (delayed)		35 A
Output 40 °C	60 % ED	450 A
	100 % ED	380 A
Welding current and voltage range		10...50 V
Open circuit voltage		50 V
Open circuit power		100 W
Power factor at max. current		0.9
Efficiency at max. current		88 %
Operating temperature range		-20...+40 °C
Storage temperature range		-40...+60 °C
EMC class		A
Minimum short circuit power S_{SC} of supply network		5.5 MVA
Degree of protection		IP23S
External dimensions	L x W x H	590 x 230 x 430 mm
Weight		36 kg
Voltage supply for auxiliary devices		50 V DC / 100 W
Fuse (delayed)		6.3 A
Voltage supply for cooling unit		24V DC / 50 VA

Ordering information

KempArc Pulse TCS		
KempArc Pulse TCS package Devicenet		P161
KempArc Pulse TCS package Can Open		P162
KempArc Pulse TCS package Ethernet		P163
KempArc Pulse TCS package Profibus		P164
KempArc Pulse TCS package Profinet		P165
KempArc Pulse 450TCS Digital		6200455
KempArc DT 400 wire feeder	Right hand side	6203400
KempArc DT 400L wire feeder	Left hand side	6203400L
Wise Fusion		9991015
Match curve		9990401
Devicenet Card		9774120DEV
Can Open card		9774120CAN
Ethernet Card		9774120ETH
Profibus Card		9774120PRF
Profinet Card		9774120PRN
Tandem control cable		W005451
Interconnection Cable ROBOT 95-10-WH		6260466
KempCool 40		6208400
Binzel Tandem W 800 CAT torch		204.Z000.1

Architecture:



KempArc Pulse TCS can be delivered with a welding torch option of your choice, either normal or push-pull model.



DT 400 wire feeders are equipped with the reliable 4-roll DuraTorque wire feeding mechanism and full metal feed rolls with excellent wear resistance.



1. The welding power is delivered from two 450 amp KempArc Pulse power sources. Their settings can be controlled independently from each other.

2. KempCool 40 is an efficient water cooling device designed for use with KempArc Pulse TCS.

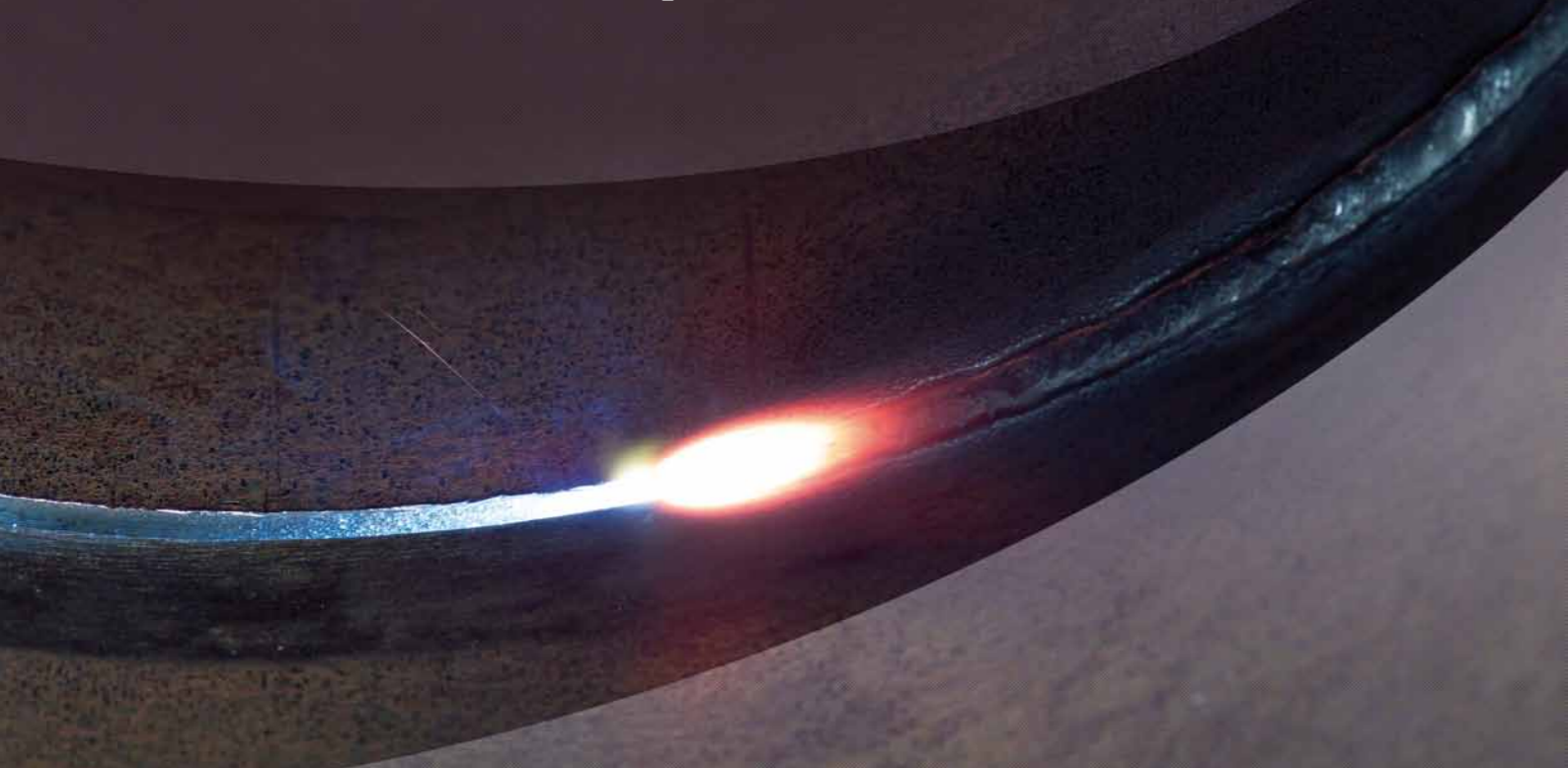


Software products, online services and arc monitoring

Wise performance software	84
DataStore, DataGun	86
Arc System	88
ArcTimer	89

Production demands can change over time and it's important to know that equipment will meet future requirements. Wise and Match is a welding software range designed to serve customer specific needs. DataStore offers you immediate access to these innovative software solutions for compatible Kemppi equipment. However, once you are welding you may wish to analyze your arc time performance or more detailed parameters concerning your operational welding fleet. Kemppi Arc System and Arc Timer serve these alternative ends of the monitoring scale.

Wise decisions create a more productive result



Manage welding skill, productivity and quality

Finding the best solutions to problematic welding cases, Wise™ software product family has been developed and tested together with industrial partners, and proved inside production environments.

Wise products are welding software solutions, enabling levels of welding performance that otherwise would be impossible to achieve with standard MIG/MAG welding process. Use Wise products for enhanced root closure, constant power management, automated arc length control and precise thin sheet welding.

Compatible with FastMig synergic, FastMig Pulse and KempArc automation equipment, Wise products can be tested in your local environment before or after your equipment purchase.

Contact your local Kemppi representative for further details, or visit www.kemppi.com

	Order code	KempArc Synergic	KempArc Pulse	FastMig Synergic	FastMig Pulse
WiseRoot	6265011			•	•
WiseRoot-A	9991011	•	•		
WiseThin	9991013			•	•
WiseThin-A	6265013	•	•		
WisePenetration	9991000			•	•
WisePenetration-A	9991010	•	•		
WiseFusion	9991014				•
WiseFusion-A	9991015		•		



WiseRoot is a highly efficient and unique tailored cold arc process for manual and automated root pass welding in ferrous and stainless steel materials. Designed for the effective closure of root joints and tolerance of gaps created by poor joint fit-up, WiseRoot is three times faster in root welding than TIG process, is easy to learn and use and saves time on rework costs. Traditionally, welding engineers have been reluctant to employ the standard MIG/MAG process for quality root welding, due to known quality issues. However Kemppi WiseRoot is everything but traditional and is now a proven and accepted root welding solution.

Why buy

- Produces high quality root welds
- Allows wide root gap tolerance
- No need for backing ring or ceramics
- Three times faster than TIG welding
- Easy to learn and use
- Saves rework costs
- Can decrease joint volume in thick materials, reducing filler materials volume and cost



WiseThin is a tailored cold arc process for manual and automated thin sheet welding and brazing. Typical applications include automotive manufacturing and quality light plate fabrication in ferrous and stainless steel materials.

Why buy

- Reduces spatter with all materials including zinc-coated plates
- Provides 10–25 % lower heat input than normal MIG/MAG welding, reducing post weld material distortion
- Excellent weld pool control with varying joint geometry and fit-up
- Reduced post weld rework
- Increased welding speed in many applications



WisePenetration delivers consistent power to the weld pool regardless of distance changes and deviations between the welding gun nozzle and work piece. Suitable for both manual and automated synergic MIG/MAG welding, WisePenetration solves some age old problems.

Why buy

- Reduces the risk for lack of fusion
- Reduces the need for welding parameter adjustments
- Saves rework time and cost through reductions in weld defects
- Easy to use and deploy into production
- Suitable for use with long or short cable sets
- Can reduce welding time and filler materials costs



WiseFusion creates and maintains an optimal short-circuit characteristic in pulsed MIG/MAG and spray-arc welding applications. Keeping the arc length optimally short for manual and automated welding, WiseFusion ensures consistent weld quality in all positions, and once set, eliminates the need for regular parameters adjustments.

Why buy

- Automatic arc length regulation for pulsed MIG/MAG and spray-arc welding
- Excellent weld pool control for out-of position welding
- Narrow and energy-dense arc
- Improved weld quality and appearance
- Increased welding speed

DataStore, DataGun

Online shopping for your welding machine



Why buy

- Adapt equipment to specific needs
- Improve equipment utilisation
- Convenient self service equipment upgrades
- Online order system for Kemppi account customers
- Wise™ performance products
- Materials welding programs
- Operating system software
- Equipment performance upgrades
- Product and process information

What you need, when you need it

Kemppi DataStore and DataGun have revolutionised industrial welding machine ownership. Customers can now purchase precisely customised welding machines that match existing local needs, safe in the knowledge that their changing circumstances are catered for with simple and cost effective software upgrades covering future projects requirements.

The imaginative new format also relieves the welders' need to search through superfluous welding programs, eliminating wasted time and incorrect welding program selection.

A fast response to changing local needs

DataStore is an online store accessible to Kemppi dealers and registered customers through the Kemppi Channel portal. The DataStore includes downloadable welding processes, materials programs and equipment firmware updates. DataStore also provides details of the listed products, applications and video material.



Kemppi account customers can purchase directly from DataStore.

Select, confirm, install

Simply plug DataGun to a computer, access Kemppi DataStore via www.Kemppi.com, select your chosen product and confirm the order. Your software purchase is then transferred via DataGun to your chosen welding machine and is ready to use. It only takes a few minutes to purchase a product and successfully install it to the welding equipment.

The user is guided with illustrations at every stage in this process, which can be performed from start to finish with fewer than ten mouse clicks. The DataStore service also records the customer's order history for return use when needed.



Never before has it been so easy to adapt a machine to customer needs



DataGun device can also be used as a tool for backing up and restoring the settings of welding machines.



Welding programs are available at DataStore - <http://datastore.kemppi.com>



DataStore helps to manage costs and equipment utilisation in a variety of welding environments

Arc System



Why buy

- Reliable and factual
- Wireless welding data collection
- Measure data by the minute, hour or day
- Service includes system and data analysis design
- Specify individual report needs from the comfort of your office

Comprehensive reporting

- Duty cycle
- Welder arc time
- Consumption monitoring
- Energy monitoring
- Stock monitoring
- Monitoring mechanised /robot welding
- Production pause reporting
- Memory channels follow-up
- WPS follow-up
- Synergic curve
- Working method and time follow-up
- Preventive maintenance indicators
- Production development
- Welding machine fleet monitoring
- Weld quality

Facts and figures when you need them

How much do you know about the welding activity and productivity at your company? Normally answered on the basis of assumptions and individual observations, this question is difficult to qualify. With Kemppi Arc System you can really start knowing and stop the guess work. Establish accurate information about welding process costs, equipment efficiency and utility.

Kemppi Arc System helps you dig out the facts required to define efficiency and assist productivity improvements. Arc System is a client-server welding solution consisting of data collection, data transfer, data analysis, and reporting functionality. Offered as a high-quality turn-key solution, Arc System suits large national and international multiple welding unit and site users.

Benefit from the collection of reliable data, identifying key operational performance at required levels. Kemppi Arc System is a comprehensive, full service solution, tailored according to customer specific needs. In addition to the data transfer hardware, our service includes device architecture specification, consultancy and target specification, design of data analysis, implementation of the system and the required hosting services.

ArcTimer

Great cost savings with a small device



New level of welding productivity

Kemppi ArcTimer is a monitoring device attached to the welding or earth return cable of a welding machine. It monitors the current flow in the cable and shows the arc burning time in hours with an accuracy of two decimals. The device can be used with any welding machine.

The reliable arc time information received from ArcTimer can be utilized in many ways to increase welding productivity. For example calculations of actual manufacturing costs and cost specifications of different work stages lay a solid ground for production development. When planning is based on clear facts, also the increase in productivity will be well-grounded.

Welding is a very labour-intensive field. Thus even a small increase in productivity of welding work results in significant decrease in total production costs. For example only one percent increase in arc time can give savings of thousands of Euros per welding machine in five year's period.

Installing the ArcTimer is quick and easy. You just fasten the device to the cable, and the display starts to show the accumulated arc time since the latest reset. It is also possible to lock the device to the cable with a padlock. The lock is not included in the delivery.

Why buy

- Exact information about arc burning time
- Arc time information helps increase productivity
- Great cost savings
- Easy to install and use

Technical specifications

ArcTimer	
Measured current range	20...500 A
Cable diameter	50...95 mm ²
Minimum battery lifetime	5 years
Protection class	IP23
Operating temperature	-10...+50 °C
Dimensions LxWxH	92 x 82 x 32 mm
Weight	215 g

Ordering codes

ArcTimer	6209200
Protective plate	W003231
Timer card A001 ArcTimer	SP003238
Magnetic locking plate	SP003230



ProTrainer

Process training

Training craft students is a costly exercise. Heavy increases in the cost of training materials and energy are impacting significantly to traditional training models. Kemppi ProTrainer helps to manage those costs, reducing material and power costs wastage per student, through a virtual welding and learning experience.



ProTrainer

Welding process training in a virtual environment

A valuable asset to any welding learning environment

Why buy

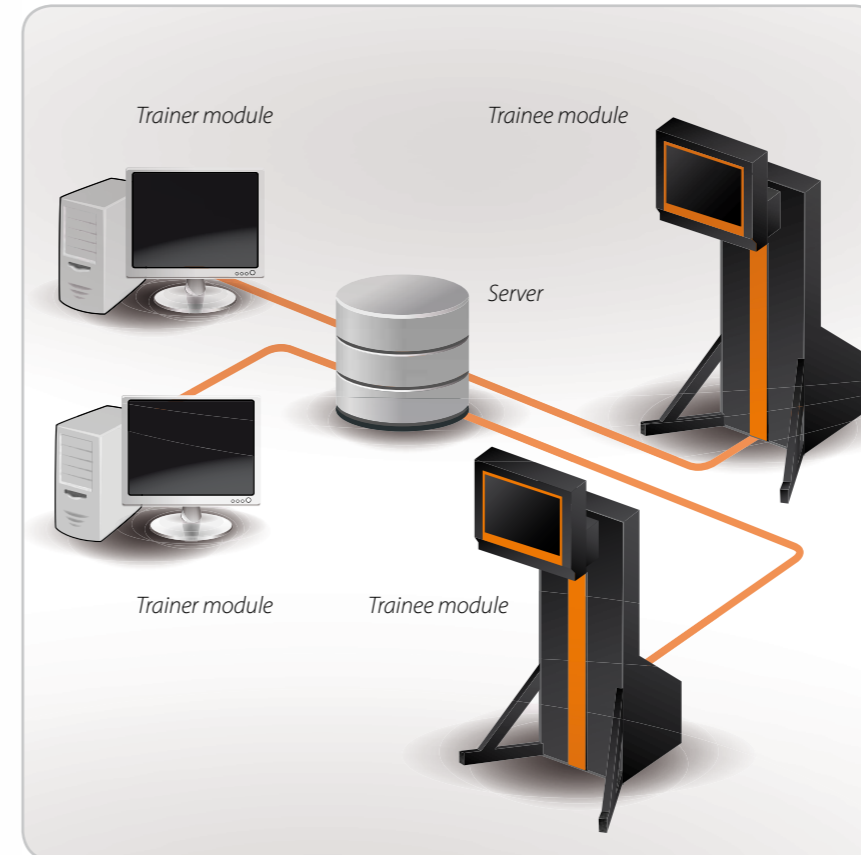
- Increase the speed of learning
- Reduce the cost of training
- Improve communication between student and trainer
- Suitable for new and experienced students
- Student tutorials
- Record and replay weld tests
- Teaching EN and IIW welding standards

Learning to weld can be a daunting exercise. Initiating a live welding arc for the first time is certainly an exciting experience for students, but mastering the techniques of each welding process, including gun, torch and electrode angles, travel speeds and weld pool control, plus positional techniques, requires instruction and significant practice. Training costs can be high in both time and materials. Kemppi ProTrainer offers the solution to these problems, guiding students through the different welding processes and developing the fundamental skills required for professional welding, before progressing to live arc welding.

Kemppi ProTrainer combines greater opportunity for weld practice and increases the interaction between student and trainer, at a fraction of traditional costs. ProTrainer offers a realistic virtual welding environment that simulates the welding process, and parameters necessary for successful welding outcomes. Real welding guns and torches are used in hand, but there is no welding helmet restricting communication between student and trainer. Kemppi ProTrainer increases the speed of learning by up to 50 %, and significantly reduces the cost of student welder training by up to 40 %.

NOTE: ProTrainer is only available on Scandinavian market.

Architecture



The central server

The central server module manages communication between trainer module and trainee module, plus manages user profile information together with exercise description and test results data.

The trainer module

The trainer module provides user management tools (add, remove, update), real-time follow-up for the monitoring and regulation of trainee progression. It also allows the trainee to visualise and analyse their personal performance and results.

The trainee module

The trainee module allows each trainee to select and work through specified welding exercises and to visualise and analyse their personal results. Trainee modules are available in either WORKBENCH or a LITE variants.

Workbench

The welding WORKBENCH is the main hardware tool of ProTrainer. It is a robust motorised workbench providing a clear, high resolution, wide screen display and is equipped with real welding tools including gun/torch and an electrode holder. These tools are not only dedicated to the welding simulation but also the navigation tool through the workbench interface.



ProTrainer LITE offers mobility between training sites.



Accessories and ancillary products

Welding helmets	96
Remote controls	98
Ancillary products	99
2-wheel transport units	100
4-wheel transport units	101

Kemppi offers a range of ancillary products to improve work safety, comfort and productivity.

Welding helmets, gas guards, earth return clamps, gun holders, remote power control and transport units are designed to compliment the use and efficiency of our equipment.

Beta 90/90A/90X

Welding helmets



Why buy

- Beta 90 standard glass lens model
- Beta 90A fixed shade EN3/11 electronic lens model
- Beta 90X variable shade and sensitivity EN4/9-13 electronic lens model
- Welding and grinding impact rated for eye and face protection to EN175
- Two stage pivoting filter glass including 'peep' position
- Deep cut design ensures additional face and neck protection

Better visibility, better protection

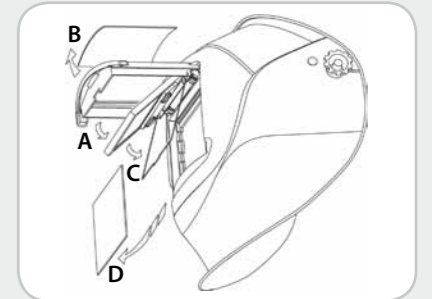
Kemppi Beta welding helmets provide excellent protection for welding and post weld cleaning and grinding processes. Equipped with either a standard glass filter or electronic arc sensitive lens, in fixed or variable filter shade specification. All Beta models feature the same lightweight shell that includes grinding impact rating. So whichever model you choose, you can be sure to enjoy the same safety protection.

Technical specifications

Beta		90	90A	90X
Filter lens dimensions	mm	90 x 110	90 x 110	90 x 110
Viewing window	mm	90 x 110	46.5 x 95	46.5 x 95
Shade range		EN 8-14	EN 3 / 11	EN 4 / 9 - 13
Sensitivity			Fixed	Adjustable
Switching time			0.0005	0.00015
Delay (dark → bright), (s)			0.2	0.2-0.8 adjustable

Ordering information

Welding helmet		
Beta 90		9873045
Beta 90 A		9873046
Beta 90 X		9873047
A. Filter glass		
90 x 110 mm EN 8		9873241
90 x 110 mm EN 9		9873242
90 x 110 mm EN 10		9873243
90 x 110 mm EN 11		9873244
90 x 110 mm EN 12		9873245
90 x 110 mm EN 13		9873246
90 x 110 mm EN 14		9873247
B, C. Spatter protection glass		
Beta 90X	51 x 107 x 1.0	9873251
Beta 90, 90A, 90X	90 x 110 x 1.0	9873253
D. Safety plate		
Clear safety plate	90 x 110 x 1.5	9873254
Colored safety plate Beta, polycarb. DIN 3	90 x 110 x 1.5	9873255
Magnifying filter glass		
Beta (1,0)	51 x 108 mm	9873260
Beta (1.5)	51 x 108 mm	9873261
Beta (2.0)	51 x 108 mm	9873262
Beta (2.5)	51 x 108 mm	9873263
A. Auto-darkening welding filter lens		
Beta 90 A, DIN 3/11	90 x 110	9873051
Beta 90 X, DIN 4/9-13	90 x 110	9873055
Glass support spring		
Beta 90, 90 A, 90 X		3149850
Headband		
Beta		4306370
Alfa		9873012
Sweatband		
		9873018



- A - Filter glass, auto-darkening welding filter
- B - Spatter protection glass
- C - Spatter protection glass
- D - Safety plate



Beta 90



Beta 90A/90X



Pivoting filter glass including 'peep' position. Particularly useful with Beta 90 standard model.

Degrees of protection for lenses

Welding processes	Current strength, A																			
	15	20	30	40	60	80	100	125	150	175	200	225	250	275	300	350	400	450	500	
MMA Welding			9	10	11	11	12	12	12	12	13	13	13	13	13	14	14	14	14	14
MIG, steels					10	11	11	12	12	12	13	13	13	13	14	14	14	14	14	14
MIG, aluminium					10	11	11	12	12	12	13	13	13	14	14	14	14	14	14	15
TIG, all metals	9		10	11	11	12	12	13	13	13	14	14	14	14	14	14	14	14	14	15
MAG (CO ₂ welding)					10	11	11	12	12	13	13	13	14	14	14	14	14	14	14	15
Carbon arc gouging								10	11	11	12	12	13	13	14	14	14	14	14	15
Plasma cutting					11	11	11	12	12	12	13	13	13	13	14	14	14	14	14	15

Remote controls



C100C C100AC C100D R10 R20 R11T R30

Increase welding quality, work efficiency, comfort and safety with appropriate, easy to use remote controls. Gun remotes, hand-held and pedal units reduce the need for movement between workplace and power source, increasing work efficiency and reducing fatigue.

Remote controls	C100C	C100C	C100AC	C100D	R10	R10	R20	R11T	R30	R30
Length (m)	5	10	10	5	5	10	5		5	10
Order code	6185410	6185411	6185417	6185413	6185409	618540901	6185419	6185442	6185420	618542001
FastMig Synergic					•	•	•		• (MXF)	• (MXF)
FastMig Pulse									•	•
Minarc 220					•	•				
MinarcTig					•	•				
MasterTig MLS					•	•		•		
MasterTig MLS ACDC					•	•				
MasterTig AC/DC	•	•	•	•						
Master MLS					•	•		•		
KempGouge ARC 800					•	•				



C100F



R11F



R11T



RMT10



RTC10



RTC20

Remote controls	C100F	R11F
Length (m)	5	5
Order code	6185405	6185407
MinarcTig		•
MasterTig MLS		•
MasterTig MLS ACDC		•
MasterTig AC/DC	•	

Gun/torch compatible remote controls		Order code
RMT 10	For PMT guns	6185475
RTC 10	For TTC torches	6185477
RTC 20	For TTC torches	6185478

Ancillary products



Earth clamps/Connection		Order code
Kemppi 200, 200A	25...35 mm, cable shoe connection ø 6 mm	9871531
Kemppi 350, 350A	50...70 mm, cable shoe connection ø 6 mm, copper braid between the connector jaws	9871540
Kemppi 500, 500A	70...95 mm, cable shoe connection ø 8 mm, copper braid between the connector jaws	9871541
Kemppi G- 600, 600A	35...120 mm, cable connection with hex screw, brass frame, screw-type	9871560



Electrode holders	60/35 % ED, current rating	Weight (g) / cable size (mm ²)	Order code
KEMPPI 300	150/200, 300 A	321/16-25	9871021
KEMPPI 400	200/250, 400 A	421/16-25	9871031
URANIA 5	250/300, 500 A	500/35-50	9871041
URANIA 6	300/400, 600 A	855/50-70	9871051
MYKING 200	200 A	285/10-25	9871060
MYKING 450	450 A	485/35-70	9871070
MYKING 600	600 A	535/50-70	9871080

All have a copper alloy frame and cable connection with a hex screw



Cable connectors	Order code	Order code
Current durability A	Cable mm ²	
200	10...25	9771650 9771626
250	35	9771671 9771628
315	50	9771670 9771627
400	70	9771680 9771629
500	95	9771630
600	95	9771681
Branch connector (1 male and 2 female connections)	70/90	9771637



Gun holders	Order code
GH 10	6256010
GH 20	6256020
GH 30	6256030

Gun holders are primarily intended to be attached to welding machines, but they can also be attached to transport units and welding tables.



Gas guards	Order code
GG 400	6237405
GG 200/300	6237406

GG 400 regulates gas flow range 5-25 l/min. It stops the welding automatically, if the gas pressure is not sufficient.

2-wheel transport units



* Recommended for smaller gas bottle sizes

Order code	Weight, kg	Master MLS 2500, 3500	MasterTig MLS 2000	MasterTig MLS 3000, 4000	MasterTig MLS 3000, 4000 MasterCool 10	MasterTig AC/DC 3500W	MasterTig MLS 2300, 3000, 3003 ACDC	FastMig Basic + Synergic + Pulse* (T 10 installation set W002085)	FastMig Basic + Synergic + Pulse *(T 120 installation set W003053)	FitWeld 300	Kempact Pulse 3000	KempArc SYN 300, 400, 500 KempArc Pulse 350, 450	MinarcMig and MinarcMig Evo	Minarc Tig and MinarcTig Evo	Minarc 220
MST 400	6185294	11.8													
ST 7	6185290	17													
T 10	6185231	18													
T 100	6185250	20	•	•	•	•									
T 110*	6185251	18	•	•	•										
T 120	6185252	33													
T 130	6185222	23	•	•	•	•									
T 200	6185258	28													

4-wheel transport units



Order code	Weight kg	Kempact Pulse 3000 + KempactCool 10	FastMig Basic + Synergic + Pulse	FastMig Basic + Synergic + Pulse auxiliary unit PSL 55	KempoWeld	KempArc	MasterTig AC/DC 3500W
P 20	6185261	25	•				
PM 500	6185291	23		•		•	
PM 501	6185292	25		•			
PM 502	6185293	7.5		•		•	
T 22	6185256	25					•

Transport units for wire feeders and compact power sources

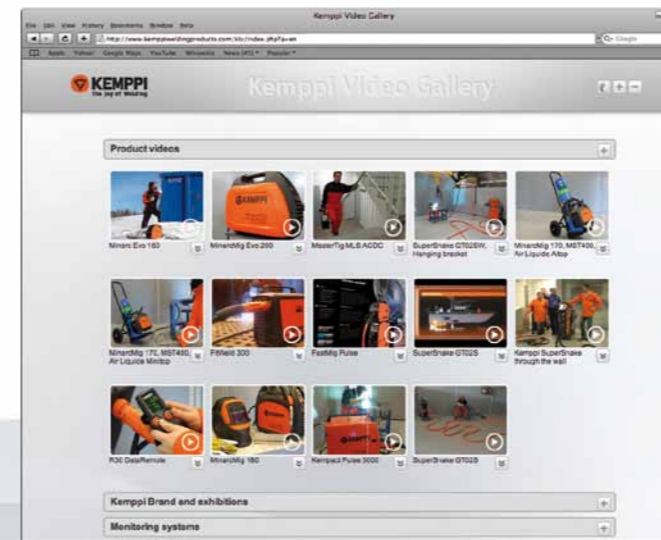
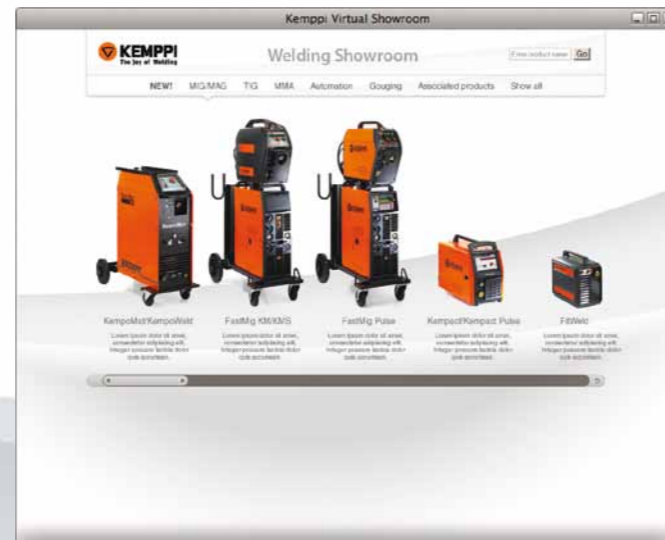
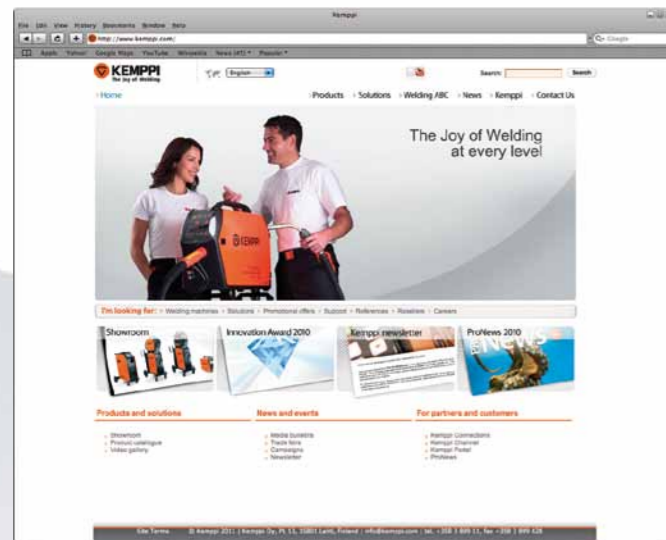


Order code	Weight kg	KempoWeld/WIRE	Kempact MIG 2530/Pulse 3000	Kempact Pulse 3000 + KempactCool 10	FastMig MXF65, MXF67	FastMig MF33 (with mounting kit 6185287)
P 250	6185268	7.2	•	•		
P 500	6185265	7.2	•			•
P 501	6185269	6.5			•	

Check mounting kit requirements for wire feed units

Web space information

www.kemppi.com



Front Page

Kempfi web site provides easy access for product information, news and events. You can also subscribe to Kempfi's e-newsletter, 'The welding issue'. Following subscription, it will be conveniently sent to your designated email address. Kempfi distributors and dealers can also use this site to access the Kempfi Portal and Kempfi Channel sites.

Showroom

Click the Showroom banner on the home page to visit our virtual showroom. Here you can view our products range listed by image, name and process. Click through to find technical data, support information, images, video and downloads.

Video gallery

Kempfi video content is presented at the video gallery. Located on the front page below the heading 'Products and solutions', the video archive includes product, brand and slow motion process film. All materials are available for download. Just click the image and view.

Kempfi Connections

Kempfi Connections site contains information on subjects connected to Kempfi business. Listed on the front page below the heading 'For partners and customers', Kempfi Connections includes sections titled Sports, Welding fun, Welding tips and Community and Environment.

Quality and standards

ISO 9001/ISO 14001

Kemppi is committed to achieving technical excellence. Standards are compliant with ISO 9001 quality management system and ISO 14001 environmental management system. CE marking indicates that product complies with all European directives and essential harmonised standards.



Kemppi products conform to the following international standards:

Safety requirements for arc welding equipment

- IEC / EN 60974-1 Part 1: Welding power sources
 - IEC / EN 60974-2 Part 2: Liquid cooling systems
 - IEC / EN 60974-3 Part 3: Arc striking and stabilising devices
 - IEC / EN 60974-5 Part 5: Wire feeders
 - IEC / EN 60974-7 Part 7: Torches
 - IEC / EN 60974-10 Part 10: Electromagnetic compatibility (EMC) requirements
 - IEC / EN 60974-11 Part 11: Electrode holders
- EMC classification according to CISPR 11: Class A. Kemppi's arc welding devices are designed for industrial applications.

Degree of protection and operating temperature

Degree of protection for Kemppi machines is IP23S, indicating protection against impact and outside storage. Welding equipment is not intended for use in the rain or in wet conditions. The operating temperature for Kemppi equipment is -20...+40 °C, making them suitable for extreme conditions. The storage temperature is -40...+60 °C.

Load capacity and duty cycle

The load capacity of Kemppi welding machines is given as amperage based on the duty cycle percentage. The duty cycle indicates the proportion of a 10 minute cycle that you can weld with the given current without the device overheating. Because the duty cycle has been given for the temperature of +40 °C, performance is normally higher in many ambient temperatures.

Environment

The Joy of Welding

Kemppi's development and commercialisation of inverter welding technology during the 1970's dramatically reduced power source electrical consumption. Today, so called green technology features strongly in our business model. Product life cycle impact, power consumption, materials selection and product disposal are all considered factors by design.

Joy and welding? We believe there is a powerful connection, and it is our role to make sure that welders get their job done just the way they wanted it. Technology matters, but business is still between people – our customers and partners know what "dealing with the human touch" really means.

Kemppi is dedicated to the Joy of Welding at every level.



Please note!

Whilst every effort has been made to ensure that the information contained in this catalogue is accurate and complete, no liability can be accepted for any errors or omissions. Kemppi reserves the right to change the specification of the product described at any time without prior notice.



Kemppi Warranty 2+



Kemppi has harmonised its global warranty promise. The new 2+ warranty cover includes all welding equipment manufactured and sold by Kemppi after 1st July 2010 (excluding the wearing parts) for two years starting from the date of sale. Local warranty service is available in any country where Kemppi has representation, irrespective of the original country of purchase. Cover includes parts and labour.



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