

Kempoweld

The Steel
Specialist



 **KEMPPPI**
The Joy of Welding

Kempoweld – The Steel Specialist

Kempoweld MIG machines are designed for welding professionals who demand superior performance from their welding equipment. Linking an innovative construction and design philosophy with the latest rectifier technology, Kempowelds deliver excellent welding characteristics even in demanding welding conditions. They can also be changed according to welding requirements and their wire feed unit can be used separately from the power source.

The Kempoweld semi-compact MIG product range consists of **250** (single phase), **320**, **400** and **550 A** power sources. The **320** and **400 A** machines are also available with an in-built water cooling unit. The **550 A** machine is always water cooled. The new efficient **Wire 200** wire feeder unit features a 2-wheel-drive, and **Wire 400** and **Wire 550** wire feeder units feature a 4-wheel-drive for a steady and disturbance-free wire feed.

EASY TO USE

Kempowelds are easy to control, with coarse and fine voltage steps clearly marked on the power source. The **Kempoweld 2501/3200/3200W** has 16 voltage steps and the **Kempoweld 4000/4000W** and **5500W** have 32 steps.

Kempoweld power sources offer two inductance output selections, - low and high - according to the plate thickness, material and gas used. Kempowelds provide excellent performance with CO₂ and mixed gases.

The Wire 200, Wire 400 and Wire 550 wire feed units have a stepless wire feed speed control for setting exact welding values. The standard automatic wire feed and wire inch control improve spool change.

COMPACT AND RELIABLE

Kempowelds are built according to the latest construction and safety requirements. This means that Kempoweld components won't let you down even in extreme welding conditions. The power sources also include a controlled cooling fan and over temperature and over current sensors.

Key construction and safety requirements

- IEC 974-1
- EN 60974-1
- EN 50199
- IP 23C protection class



Switches and control knobs are shielded by a strong polycarbonate panel cover.

Wire feed controls are protected against impact and shielded by a strong polycarbonate panel cover. To reduce wire feed disturbance in the welding gun, the MIG gun connection is correctly angled to the wire feed path. The **Wire 400** and **Wire 550 wire feed units** also feature a 4-wheel-drive system, which produces a stable weld even at the highest wire feed speed of 25 m/min. Both units support flux-cored wires.

BUILT TO LAST

Kempowelds come with a durable 4-wheel undercarriage for maximum mobility. The power source is built to the undercarriage at the factory for your convenience, and a wire feed unit mounting point is also provided. A special undercarriage P500 is available for mounting to the wire feed units.

The wire feed mechanism and wire spool are both housed inside a protective wire feed casing. The wire feed unit can also be attached to the power source to make a compact MIG machine.

PROFESSIONAL PERFORMANCE

Built by professionals for professionals, Kempowelds can deal with all MIG/MAG welding conditions. The duty cycle is 30% for 1phase 250 A and 40% for the 320 and 400 A power sources and 60% for the 550 A power source. This is more than enough for heavy duty manual use!

ADDITIONAL KEMPOWELD FEATURES

- burn-back time regulation
- KMW timer unit with 2/4 sequence and cycle arc/spot welding options
- Volt/Ampere display with optional MSD-1
- push-pull gun option with additional KMW Sync

The 2/4 sequence procedure makes it easier to use the welding gun during long welding cycles, and improves product and weld quality. Kempoweld's operational range can be improved by using a push-pull gun with the **KMW Sync** synchronizing unit.

The optional **MSD-1 Volt/Ampere metering unit** is available for power sources. The Kempoweld 5500 W power source comes with the MSD-1 metering unit as standard.

WELDING GUNS

The reliable **Kemppi KMG, MT and PMT MIG guns** can be used with Kempoweld machines and are mounted via a standard euro style connector. Kemppi guns guarantee excellent performance and smooth wire feed.

KMW timer unit with 2/4 sequence and cycle arc/spot welding options. You can improve Kempoweld's operational range by using the push-pull gun with the KMW Sync synchronizing unit.



Reliable Wire 200, Wire 400 and Wire 550 wire feed units guarantee steady and disturbance free wire feed.



MSD 1 V/A metering unit. Optional for 320 A and 400 A power sources, standard in 550 A power source.



Technical data		Kempoweld 2501	3200/3200W	4000/4000W	5500W
Connection voltage(V)	1~230 V	220 V-10%...240 V +6%	-	-	-
	3~230 V	-	220-10%...240 +6%	220-10%...240 +6%	-
	3~400 V	-	380-10%...415 +6%	380-10%...415 +6%	380-10%...415 +6%
Connection capacity	30% ED	12.0 kVA	-	-	-
	40% ED	-	13 kVA	18.5 kVA	-
	60% ED	8.0 kVA	9 kVA	13.5 kVA	30 kVA
	100% ED	5.2 kVA	7 kVA	9.0 kVA	20 kVA
Mains cable/fuse delayed	220-240 V	3 x 4.0 mm ² /25 A	-	-	-
	200-240 V	-	4 x 2.5 mm ² /20 A	4 x 6.0 mm ² /25 A	-
	380-415 V	-	4 x 2.5 mm ² /16 A	4 x 2.5 mm ² /16 A	4 x 6.0 mm ² /32 A
Loading capacity (nominal values)	30% ED	250 A/26.5 V	-	-	-
	40% ED	-	320 A/30 V	400 A/34 V	-
	60% ED	180 A/23.0 V	265 A/27 V	325 A/30 V	550 A/42 V
	100% ED	135 A/20.5 V	205 A/24V	260 A/27 V	430 A/36V
Connection to wire feeder unit		30 V/150 VA	30 V/150 VA	30 V/150 VA	30 V/150 VA
Open circuit voltage		14 - 45 V	14 - 40 V	15 - 48 V	18 - 56 V
Open circuit power		< 50 W	< 50 W	< 50 W	< 50 W
Degree of protection		IP 23C	IP 23C	IP 23C	IP 23C
Water tank volume (l)		-	3	3	3
Max flow / max pressure		-	4 l/min 4 bar	4 l/min 4 bar	4 l/min 4 bar
Cooling capacity (W)		-	600	600	1300
External dimensions (mm)	length	960	960	960	1075
	width	430	410	410	480
	height	750	3200:740, 3200W:970	4000:740, 4000W:970	1140
	weight (kg)	66	3200:104, 3200W:116	4000:124, 4000W:136	194



Technical data		Wire 200	400	550
Working voltage (safety voltage)	50/60 Hz	30 V AC	30 V AC	30 V AC
Rated power		150 VA	150 VA	150 VA
Loading capability (nominal values)	40 %ED	400 A	400 A	-
	60 %ED	-	-	550 A
	100 %ED	260 A	260 A	430 A
Operation principle		2-roll drive	4-roll drive	4-roll drive
Diameter of feed roll (mm)		32	32	32
Wire feed speed m / min	I	0...18	0...18	0...18
	II	-	0...25	0...25
Filler wires Ø mm	Fe,Ss	0.6...1.2	0.6...1.2	0.6...2.4
	Flux cored	0.8...1.6	0.8...1.6	0.8...2.4
	Al	1.0...1.6	1.0...1.6	1.0...1.6
Wire reel max	weight kg / ø mm	20 / 300	20 / 300	20 / 300
Storage temperature range		- 40 ... + 60 °C	- 40 ... + 60 °C	- 40 ... + 60 °C
Operating temperature range		- 20 ... + 40 °C	- 20 ... + 40 °C	- 20 ... + 40 °C
Degree of protection		IP 23C	IP 23C	IP 23C
External dimensions	length	570	570	570
	width	210	210	210
	height	440	440	440
	weight (kg)	12	12	13



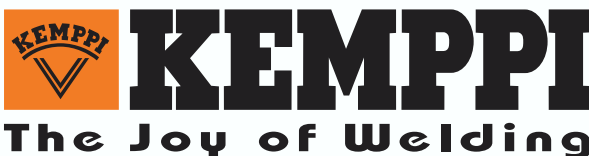
Reliable Wire 200, Wire 400 and Wire 550 wire feed units deliver steady and disturbance free wire feed.

Wire 400 and Wire 550 feed unit has an efficient 4 wheel drive, automatic wire inch, and adjustment for burn-back time.

Wire 550 has as standard ball bearing feed rolls.

Order Information

Power sources		Return current cables	
621532001	Kempoweld 3200 230/400 V	6184311	35 mm ² , 5 m
621632001	Kempoweld 3200W 230/400 V	6184511	50 mm ² , 5 m
621540201	Kempoweld 4000 230 V	6184921	95 mm ² , 5 m
621540401	Kempoweld 4000 400 V		
621640201	Kempoweld 4000W 230 V	MIG guns	
621640401	Kempoweld 4000W 400 V	6253023	MT 32, 3 m
6216554	Kempoweld 5500W 400 V	6253024	MT 32, 4.5 m
S6211255*	Kempoweld 2501	6253038	MT 38, 3 m
*Kempoweld 2501 is sold as package including Wire 200 wire feeder,		6253039	MT 38, 4.5 m
KMG 25, 3 m MIG gun, KW 35-5-GH, 5 m interconnection cable		6254036	MT 41W, 3 m
and 5 m earth cable.)		6254037	MT 41W, 4.5 m
Wire feeder		6255046	MT 51W, 3 m
6217200	Kempoweld Wire 200 (2 rolls)	6255047	MT 51W, 4.5 m
6217400	Kempoweld Wire 400	6252123	KMG 25, 3 m
6217550	Kempoweld Wire 550	6252124	KMG 25, 4.5 m
Accessories		6253033	KMG 32, 3 m
6185666	MSD-1 V/A metering unit (standard 5500W)	6253034	KMG 32, 4.5 m
6219100	KMW Sync	6253133	KMG 40, 3 m
6219200	KMW Timer unit (standard in Wire 400/550)	6253134	KMG 40, 4.5 m
6185247	KV 400 swing arm		
6185265	P 500 Transport unit for Wire 200 / Wire 400 / Wire 550		
Interconnection cables			
6260350	Interconnection cable KW 50-1.3-G		
626010401	Interconnection cable KW 50-5-GH		
626010601	Interconnection cable KW 50-10-GH		
6260352	Interconnection cable KW 50-1.5-W		
6260391	Interconnection cable KW 95-1.5-W		
626035401	Interconnection cable KW 50-1.5-WH		
626035601	Interconnection cable KW 50-10-WH		
6260393	Interconnection cable KW 95-5-WH		
6260394	Interconnection cable KW 95-10-WH		
Interconnection cable for swing arm			
6260351	KV 400 50-1.5-GH		
6260353	KV 400 50-1.7-WH		
6260392	KV 400 95-1.9		



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