

# **Product Catalogue**







## K2 The Basic Welding Expert

By offering quality, efficiency and value for money in one range, K2 by Kemppi sets a new standard for basic welding.

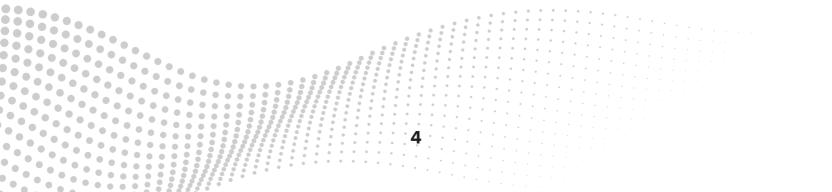
Inspired by the mighty K2 mountain of the Karakoram range, K2 by Kemppi challenges the welding industry by setting new benchmarks in basic welding that expand capabilities at affordable prices.

The K2 by Kemppi range offers a comprehensive product portfolio of power sources for MMA, MIG and TIG welding. The power sources are bundled with torches by Trafimet, a Kemppi company, located in Italy globally renowned for its wide range of welding and cutting torches, designed for maximising comfort, performance and accessibility for professional welders worldwide.



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## The K2 by Kemppi Advantage

Designed exclusively for efficient basic welding, K2 by Kemppi translates the needs of companies and welders focusing on basic welding into welding products that are effective, simple to use and best value for money. By offering these three qualities under one brand, K2 by Kemppi sets a new standard for basic welding.









Superior Quality

Effortless welding

#### Value for money

Two-year warranty

#### The best fit between the job to be done and product features

K2 power sources and Trafimet's quality torches offer just the right features needed to perform basic welding jobs successfully. Together, K2 and Trafimet offer that little extra, which makes the products perform better.

#### Any welder can use K2

We believe that even basic welding products should be welder friendly. K2 and Trafimet products are straightforward and simple-to-use. Welders learn to use them quickly and can effortlessly deliver consistent welding results.

#### **Investment that delivers**

The K2 and Trafimet package offers the most advantageous combination of cost and quality for companies who prefer to run their basic welding operations with products that originate from a well-known and trusted company.

## **K2 Special Symbols**



Wireless remote control panel (optional)



Remote control (optional)



Foot pedal control (optional)



Suitable for use with power generators



## **Professional performance, simple control**

#### Meet basic welding demands efficiently

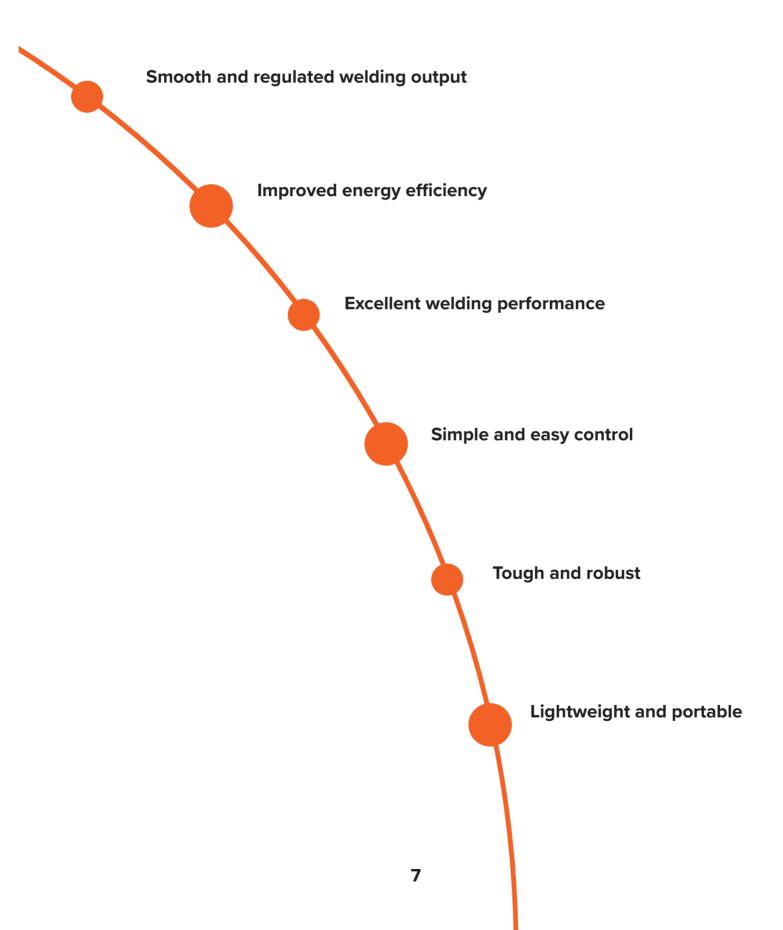
The distinctive grey casing colour of K2 by Kemppi welding equipment communicates professional welding performance, through simple and easy control. Inverter power source technology features throughout the range, ensuring smooth and regulated welding output and excellent energy efficiency.

Kemppi arc control logics means reliable ignition regardless of mains voltage fluctuations, improving weld quality and reducing rework costs. Each model is a perfect balance of lightweight, portable construction, and tough enough structure to survive the rigors of everyday welding work.

You can download complete product brochures and log into K2 Business Partner channel at **k2welding.net** 



## K2 Welding Machines –basic but different







Integrated 4-roll drive wire feed mechanism with a maximum wire spool capacity of 300mm

### Applications

- Medium and heavy metal fabrication
- Shipyards

## **R** Technical Specifications



## K2 MIG 500 DPULSE

**K2 MIG 500 DPULSE** is an inverterbased three-phase (IGBT) multi-process welding machine for MIG/MAG with Pulse and Double Pulse, (Lift) TIG, and MMA applications. Experience precise control, sophisticated user functions, accurate welding settings, and real-time monitoring through a clear LCD display.

- Synergic PULSE/MIG programs for aluminum, mild steel, stainless steel and CuSi
- Offshore industry
- Repair applications

K2 MIG 500 DPULSE			MIG	TIG	ММА
Input voltage	V	3-400 ±10%			
Frequency	Hz	50/60			
Input current	А		40.5	33	41.5
Input power	kVA		28.1	22.8	28.9
Welding current	А		20-500	10-500	10-500
No-load voltage	V		102	93	97
Power factor			0.764	0.744	0.768
Efficiency	%		90.96	89.97	91.27
Duty cycle	А	60% 500 A 100% 410A			
Wire diameter	mm	0.8–1.6			
Circuit Breaker Standard		LW31-32B-4AB-04/2			
Protection class		IP23			
Dimensions (mm)	LxWxH	720 x 260 x 500			
Weight	kg	30.5		• • •	

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- Integrated 4-roll drive wire feed mechanism with a maximum wire spool capacity of 300 mm
- Synergic MIG programs for mild steel, solid, and flux-cored wires

#### **Applications**

- Medium and heavy metal fabrication
- Shipyards



## K2 MIG 500 SYN

**K2 MIG 500 SYN** is an inverter-based three-phase (IGBT) multi-process welding machine for MIG/MAG, (Lift) TIG, and MMA applications. Experience precise control, sophisticated user functions, accurate welding settings, and real-time monitoring through a clear digital display.

- For standalone power source usage (TIG/MMA), an optional power source panel kit is available.
- Offshore industry
- Repair applications

## Rechnical Specifications

K2 MIG 500 SYN			MIG	TIG	MMA
Input voltage	V	3~400±10%			
Frequency	Hz	50/60			
Input current	А		40.5	32,5	41.3
Input power	kVA		28.0	22.6	28.6
Welding current	А		30-500	20-500	20-500
No-load voltage	V		82	13 (VRD)	13 (VRD)
Power factor			0.76	0.75	0.77
Efficiency	%		91.3	89.6	91.1
Duty cycle	А	60% 500 A 100% 390 A			
Wire diameter	Ømm	0.8-1.6			
Circuit Breaker Standard		LW31-32B-4AB-04/2			
Protection class		IP21S			
Dimensions (mm)	L x W x H	640 x 240 x 450			
Weight	kg	35.6			





- Light and medium metal fabrications
- Multiple workshop purposes



#### Applications

- Inverter-based single-phase machine
- Synergic programs for easy setting of parameters

### **Technical Specifications**



## K2 MIG 250 SYN

K2 MIG 250 SYN (LCD) MV is a

portable single-phase MIG welding power source with built-in wire feeding unit. Multi-process power source for MIG/MAG, (Lift) TIG and MMA welding with clear LCD display.

- Repair and maintenance applications
- Shipyard installations
- 4-roll wire feed mechanism
- Maximum wire spool capacity of 300 mm
- Multi-voltage 110V / 230V

K2 MIG 250 SYN			MIG	TIG	MMA
Frequency	HZ	50/60			
Input Voltage	V	1~110±10%			
Input Current	А		41	29	30.5
Input Power	kVA		4.5	3.17	3.36
Welding Current	А		40-160	10-150	10-110
Welding Voltage	V		16-22.0	10.4-16.0	20.4-24.4
Duty cycle	60% 100%		160A 125A	150A 115A	110A 85A
Input Voltage	V	1~230±10%			
Input Current	А		35	27.5	39
Input Power	kVA		7.99	6.28	8.97
Welding Current	А		40-250	10-250	10-250
Welding Voltage	V		16-26.5	10.4-20.0	20.4-30.0
Duty cycle	А	60% 250A 100% 195A	250A 195A	250A 195A	250A 195A
No-load Voltage	V		99	93.5	99
Protection class		IP21S			
Wire Diameter	Ømm	0.8-1.2			
Circuit breaker		LW31-32B 4AB-02/1			
Dimensions (mm)	L×W×H	720 x 260 x 490			
Weight	kg	27.5			
Power Factor		0.99	• • •		

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 Control panel (also wireless option)
 with sophisticated user functions and accurate welding setting and monitoring



## K2 TIG 400 DCPULSE

**K2 TIG 400 DCPULSE** is an inverterbased three-phase (IGBT) welding machine designed for medium and heavy-duty professional (HF/Lift) TIG and MMA welding. It features an optional wireless remote-control panel and a foot pedal control.

- Job (memory) channels for easy recalling of welding parameters
- Heavy duty-cycle, 60 % at 400 A

### Applications

- Installation and outfitting
- Repair and maintenance

- Wide range of fabrication workshops
- Chemical and process industry

## Rechnical Specifications

K2 TIG 400 DCPULSE			TIG	MMA
Input voltage	V	3 – 400 ±10%		
Frequency	Hz	50/60		
Input current	А		24.1	31.8
Input power	kVA		17.0	21.9
No-load voltage	V		72	10
Power factor			0.73	0.74
Efficiency	%		84.6	88.9
Duty cycle	А	60% 100%	400 A 310 A	400 A 310 A
Upslope/Downslope	S	0–10		
Pre/Post Flow	S	0.1-2.0/ 0.0-10.0		
Pulse frequency	Hz	0.5–999		
Pulse width range	%	5–95		
Circuit Breaker Standard		LW31-32B-4AB-04/2		
Protection class		IP23		
Cooling		AF		
Dimensions (mm)	LxWxH	700 x 270 x 480		
Weight	kg	30.6		





- High frequency and contact (Lift TIG) ignition
- Upslope and downslope functions
- Pre-gas and post-gas timer

### **Applications**

- Workshop and on-site applications
- Installation and outfitting
- Repair and maintenance

#### **Technical Specifications**



## K2 TIG 200 AC/DC

**K2 TIG 200 AC/DC** is an inverter-based single-phase high-performance AC/ DC Pulse TIG and MMA welding power source. Lightweight and portable. Gives smooth high frequency and contact ignition with arc characteristics for quality welding.

- Precise for thin sheet aluminum welding
- User-friendly digital display
- Thin sheet metal and aluminium fabrication workshops
- Chemical and process industry

K2 TIG 200 AC/DC			TIG	TIG	MMA	MMA
Input voltage	V	1~230±10%	AC	DC	AC	DC
Rated input current	А		33.5	34.2	38	40.5
Rated input power	kVA		7.7	7.86	8.74	9.33
Duty cycle	A		35% 200A 60% 155A 100% 120A	25% 200A 60% 130A 100% 100A	40% 170A 60% 140A 100% 110A	40% 170A 60% 140A 100% 110A
Welding current	А		10-200	10-200	10-170	10-170
Down slope	S	0-10				
No-load voltage	V	73.5				
Frequency	Hz	50/60				
Post flow	S	0-10				
Pulse frequency	HZ	0.5-200				
Pulse width range	%	5-95				
AC Balance		-5-+5				
Cooling		AF				
Circuit breaker		JD03-A1 30A				
Insulation class		IP21S				
Dimensions (mm)	L×W×H	450 x 155 x 286				
Weight	kg	7.8				

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- High frequency and contact (Lift TIG) ignition
- Upslope and downslope functions
- Pre-gas and post-gas timer

### Applications

- Installation and outfitting
- Repair and maintenance



## K2 TIG 200 DC

**K2 TIG 200 DC** is an inverter-based single-phase high performance DC Pulse TIG and MMA welding power source. Lightweight and portable. Gives smooth high frequency and contact ignition with arc characteristics for quality welding.

- Precise for mild steel and stainless-steel welding
- User-friendly digital display
- Thin sheet metal fabrication workshops
- Chemical and process industry

## R Technical Specifications

K2 TIG 200 DC			TIG	MMA
Input voltage	V	230 V ± 10%		
Frequency	Hz	50/60		
Input current	А		30.5	44.5
Input power	kVA		7.0	10.2
No-load voltage	V		64	64
Power factor			0.6	0.6
Duty cycle	А		60% 200 A 100% 155 A	40% 200 A 60% 165 A 100% 125 A
Welding current range	А	10-200		
Upslope/Downslope	S	0–10		
Pre/Post Flow	S	0-2/0-10		
Pulse frequency	Hz	0.5–200		
Pulse width range	%	5–95		
Protection class		IP21S		
Cooling		AF		
Dimensions (mm)	L x W x H	450 x 155 x 286		
Weight	kg	6.1		





- Hot start and arc force adjustment for optimized starts and arc control
- Simple user panel for easy parameter settings

### Applications

- Wide range of fabrication workshops
- On-site applications



**MMA 400** 

**K2 MMA 400** An inverter-based, threephase, high-performance MMA and Lift TIG welding power source suitable for all types of MMA electrodes. Includes advanced functions for better arc ignition and arc force control.

Optional remote control

K2

- VRD model available (optional)
- Offshore industry
- Water and gas pipelines

### **X** Technical Specifications

K2 MMA 400			MMA	TIG
Power Supply Voltage	V	3~400V±10%		
No-load voltage	V	73.5		
Frequency	Hz	50/60		
Rated input current	А		32	24
Rated input power	kVA		22.1	16.6
No Load Voltage	V		93.4	92
Duty cycle	А	60% 400A 100% 310A		
Welding current	А	20-400		
Efficiency	%	≥86		
Power Factor		0.7		
Protection class		IP21S		
Cooling		AF		
Weight	kg	25.7		
Dimensions (mm)	L x W x H	570x240x490		
Electrode Diameter	Ø mm	1.6-6.0		
Electrode Type		6013,7018, E6010 etc.		







## K2 **MMA 200 PFC**

K2 MMA 200 PFC is an inverter-based single-phased MMA and (Lift) TIG power source. Lightweight and portable machine which is suitable for all types of MMA electrodes.

### Key benefits

- Built-in anti-stick, hot start and arc force
  High duty-cycle, 40% at 200 A for optimized starts and arc control

  - Multi-voltage 110V / 230V •

### Applications

- Repair and maintenance
- Agriculture

- Metal workshops
- Chemical and process industry

### Technical Specifications

K2 MMA 200 PFC			ММА	TIG
Input voltage	V	110 V 230 V	30.5 28.5	18.5 19.5
Rated input power	kVA	110 V 230 V	3.33 6.53	2.03 4.42
Duty cycle	A		110 V: 40 % 110 A 110 V: 60 % 90 A 110 V: 100 % 70 A	230 V: 40 % 200 A 230 V: 60 % 160 A 230 V: 100 % 130 A
Welding current range	А	110 V: 10-110 230 V: 10-200		
Power factor		0.99		
No-load voltage	V	70		
Protection class		IP21S		
Electrode diameter	Ømm	1.6-5.0		
Electrode type		6010, 6011, 6013, 7018, etc.		
Cooling		AF		
Dimensions (mm)	L x W x H	450 x 160 x 310		
Weight	kg	6.5		





## TRAFIMET WELDING TORCHES

K2 by Kemppi welding machines are designed to be used together with Trafimet welding torches. For 50 years, Trafimet has been known worldwide for its wide range of products specializing in welding and cutting torches. Trafimet represents efficiency, quality, innovation, and attention to serving customer needs. In addition to currently being a member of the international Kemppi Oy Group, Trafimet to this day maintains its strong "made in Italy" imprint, staying true to its origins and history. Trafimet represents a wellknown brand appreciated by leading industrial companies in the field of welding and cutting.

The torches are manufactured by Kemppi WUXI factory and guarantee maximum performance, thanks to the right choice and high quality of raw materials and precise production.

## TRAFIMET MIG WELDING TORCHES

## **EXTREMIG**

**EXTREMIG MIG welding torches** are developed to combine functional characteristics with the new handle design. The newly designed handle has been developed to obtain balance during welding operations. The **EXTREMIG** MIG welding torch is supplied with an extended trigger.

**Resistant and flexible cable**, created for better performances. The new material composition of the cable ensure resistance and flexibility against wear, weather and chemical substances.

**Ergonomic ball-joint** allows moving around freely. The cable is connected to the torch by a ball-joint which allows better balance of the handle, reducing the weight and increasing the flexibility. This system increases the product lifecycle of the torch cable and of the electric connection.









#### EXTREMIG 35P air-cooled

Air cooled MIG torch for daily welding applications, equipped with coaxial cable, M6 contact tip and Euro connector. Resistant against higher duty cycles. Uses a specific consumables set (Panasonic type), different from standard EXTREMIG models.

TECHNICAL SPECIFICATIONS	EXTREMIG 35P	
Cooling	Air	
Weight (1m)	1,25kg	2.76lb
Voltage class	113	
Electrode diameter	0,8 ÷ 1,6 mm	.030" ÷ 1/16"
Duty cycle	35% 370A Mix	
Length	3/5 m	10'-16,4'
Connector	Euro	

#### EXTREMIG 50P air-cooled

Air cooled MIG torch for daily welding applications, equipped with coaxial cable, M6 contact tip and Euro connector. Resistant against higher duty cycles. Uses a specific consumables set (Panasonic type), different from standard EXTREMIG models.



TECHNICAL SPECIFICATIONS	EXTREMIG 50P	
Cooling	Air	
Weight (1m)	1,25kg	2.76lb
Voltage class	113	113
Electrode diameter	0,8 ÷ 1,6 mm	.030" ÷ 1/16"
Duty cycle	35% 500A Mix	
Length	3/5 m	10'-16,4'
Connector	Euro	







#### EXTREMIG 36 air-cooled

Air-cooled MIG torch for daily welding applications, equipped with coaxial cable, M8 contact tip and Euro connector.

TECHNICAL SPECIFICATIONS	EXTREMIG 36	
Cooling	Air	
Weight (1m)	1,6 kg	3,53 lb
Voltage class	113	
Electrode diameter	0,6÷1,6 mm	0,023"÷1/16"
Duty cycle	60% 330A CO <sub>2</sub> - 300A Mix	
Length	3/5 m	10'-16,4'
Connector	Euro	

#### EXTREMIG 500 water-cooled

Air cooled MIG torch for daily welding applications, equipped with coaxial cable, M6 contact tip and Euro connector. Resistant against higher duty cycles. Uses a specific consumables set different from standard EXTREMIG models.



TECHNICAL SPECIFICATIONS	EXTREMIG 500	
Cooling	Water	
Weight (1m)	1,45 kg	3,22 lb
Voltage class	113	113
Electrode diameter	1,0 ÷ 2,4 mm	0,040"÷3/32"
Duty cycle	100% 500A CO <sub>2</sub> - 450A Mix	
Length	3/5 m	10'-16,4'
Connector	Euro	





## TRAFIMET TIG WELDING TORCHES



## **EXPERTIG**

The **EXPERTIG** has a fresh and modern design, the handle is the result of a study of balanced weight, necessary to be able to weld easily and effortlessly. The **EXPERTIG** range includes air- and water-cooled torches.

**Ergonomic ball-joint** experience freedom of movement. The cable is connected to the torch with a ball joint, which lightens the weight of the handle and allows flexible handling. The ball joint also increases the lifetime of the cable set by protecting the electric control cable.





#### **EXPERTIG 18** water-cooled

Water-cooled TIG torch for basic welding jobs, equipped with TSK connector.

TECHNICAL SPECIFICATIONS	EXPERTIG 18	
Cooling	Water	
Weight (1m)	0,90 kg	1,98 lb
Voltage class	113	
Type of gas	Argon	
Electrode diameter	0,5÷4,0 mm	0,020"÷5/32"
Duty cycle (100%)	320 DC-230A AC	
Length	4/8 m	
Connector	TSK 50 - ¼ G	

#### **EXPERTIG 26** air-cooled

Air-cooled TIG torch for basic welding jobs, equipped with standard neck, with TSK connector.

TECHNICAL SPECIFICATIONS	EXPERTIG 26	
Cooling	Air	
Weight (1m)	0,80 kg	1,76 lb
Voltage class	113	
Type of gas	Argon	
Electrode diameter	0,5÷4,0 mm	0,020"÷5/32"
Duty cycle (35%)	180 A DC - 130A AC	
Length	4/8 m	
Connector	TSK 50 - ¼ G	

#### **EXPERTIG 26** air-cooled with flexible torch head

Air-cooled TIG torch for habitual welding jobs, equipped with flex neck, with TSK connector.

TECHNICAL SPECIFICATIONS	EXPERTIG 26 FLEX	
Cooling	Air	
Weight (1m)	0,80 kg	1,76 lb
Voltage class	113	
Type of gas	Argon	
Electrode diameter	0,5÷4,0 mm	0,020"÷5/32"
Duty cycle (35%)	180 A DC - 130A AC	
Length	4/8 m	
Connector	TSK 50 - ¼ G	



## **Notes**



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#### The Basic Welding Expert

By offering quality, efficiency, and value for money in one range, K2 by Kemppi sets a new standard for basic welding. The K2 by Kemppi range offers a comprehensive product portfolio of power sources for MMA, MIG, TIG welding. The power sources are bundled with torches of Trafimet a Kemppi Company, Italy – the world leader in torches over the last four decades, and a part of the Kemppi Group.

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#### k2welding.net