



KEMPPI K7 WELDING EQUIPMENT

# FastMig X Pipe

HIGH-QUALITY WELDING FOR PIPES



## FastMig X Pipe



### A MULTI-PROCESS WELDING SOLUTION FOR PIPELINES AND PRESSURE VESSELS

In pipe welding, the quality demands are high and productivity expectations can be even higher. When we are talking about thousands and thousands of welds in oil & gas pipelines, water pipelines, or pressure vessels, even a small increase in quality and productivity will count – and we promise you a big one. This setup provides even five times faster welding with better quality. What more can you ask for?

We assembled the perfect setup for high-quality pipe welding, including root welding from one side. Scroll down to learn more. If you would like to get familiar with the whole Kempfi FastMig X concept, visit the [FASTMIG X FAMILY SITE](#).

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### KEY APPLICATIONS



PIPELINES



BUILDING STEEL  
FRAMES



OIL RIGS

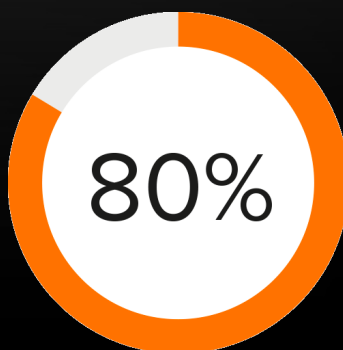


## KEY BENEFITS



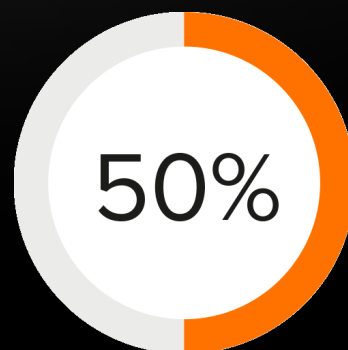
### TIMES FASTER

Up to five times faster than TIG  
and with better quality



### MORE WELDING PER DAY

Thanks to fast travel speed and  
less after-work



### SAVING IN COSTS

Save up to 50 % in labor and  
filler costs

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## BENEFITS

- WeldEye compatibility: easy and exact production and quality management.
- 5 times faster than TIG welding
- Weld over 80 % more per day and save 50 % in labor and filler costs with WiseRoot+ (see calculation)
- Optimal welding penetration and shape in all positions
- No spatter, less after-work
- Stable, easy-to-handle process: welder's skills less critical
- Faster parameter changes with MatchLog during welding: more speed and productivity
- Double feeder option for higher productivity with less equipment
- Fewer deformations, less straightening work: Saves time
- Easy to keep welding parameters inside WPS requirements with exact arc voltage measurement



## BENEFITS



### HIGH-QUALITY FROM THE ROOT TO THE TOP

This setup is customized specifically to meet all the needs of demanding pipe welding. Other key applications of the FastMig X Pipe include any welding tasks that require sheet welding from one side, such as pressure vessels, tanks, and heat exchangers. This setup can handle harsh weather conditions, including excessive heat, cold, salt, and dust. The high quality hardware is just the start. What truly makes the FastMig X Pipe setup a highly proficient system are its inbuilt special processes, welding programs and functions.



### THE BEST ROOT WELDING YOU'VE EVER SEEN

Our calculations show that with the WiseRoot+ application you can weld over 80 % more every day, and save up to 50 % in labor and filler costs. WiseRoot+ is a customized MIG/MAG process for root welding without backing. The WiseRoot+ process is based on precise voltage measurement and current control. It enables root pass welding in all positions, including vertical downhill and welding with or without an air gap. The voltage detecting cable ensures that you get accurate information from the arc. Despite the incredible capabilities it is easy to use; only two parameter regulations are needed.



### FASTER, BETTER WELDING, WITH A FOCUSED ARC

When welding process is stable and easy to handle, it has a positive effect on the weld quality. WiseFusion is a special process for synergic MIG/MAG and pulsed arc welding. It keeps the welding arc focused so that the arc density concentrates in a narrow area. It provides better penetration and faster travel speed. In addition to that, lower deformations in the welded material means less straightening work, saving time and money.

### DOUBLE THE FLEXIBILITY

An amazing range of special processes, welding programs, and functions together with easy adjustability and upgradability allow for faster responses to changing needs. This means less waiting, less adjusting, and more profitable welding. It enables you to connect two, or even three, wire feeders so that changes can be made quickly to the welding process, to the settings, or the different types of filler wires. Never let your equipment determine what you can or can't do.



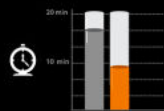
## MATCHING HIGH PRODUCT QUALITY WITH SUPERIOR SERVICE

FastMig X is fully compatible with the world's most comprehensive welding management software, WeldEye. Among other things, it monitors compliance to the WPS, ensures that welders have appropriate qualifications, and collects quality documentation. The Kemppi worldwide service network also ensures immediate support and consultation. Weld more, produce more, and profit more with the FastMig X.



## Weld over **80 %** more per day and save **50 %** in labor and filler costs with **WiseRoot+**

Pipe welding test with WiseRoot+  
MIG/MAG vs. **WiseRoot+**



Welding travel speed = 16,8 min/m  
Welding travel speed = 8,8 min/m



Time spent on one pipe = 28 min  
Time spent on one pipe = 14,6 min



Creates slag and  
spatter A lot of after  
work costs



No slag & spatter  
Less after work cost



Welded pipes per 8-hour work day = 3,5  
Welded pipes per 8-hour work day = **6,6**

Comparison table for root pass welding of a 530 mm pipe  
Arc time = 20 % and labour costs = 30 € per hour  
See calculation.



## WHAT'S IN THE SETUP - EQUIPMENT



### FastMig X 450 Power source

Provides 450 A with 60% duty cycle. Suitable for generator use.



### WFX 300 P Fe Wire feeder

For steel pipe welding with Ø 200/300 mm wire spools. Durable double-skin plastic casing with a strong two-motor GT04 wire feed mechanism. Built-in arc voltage measurement.



### Cool X Cooling unit

Cool X cooling unit for liquid-cooled setups is the ultimate choice providing 1 kW of cooling power with 3 liters of cooling liquid.





## WHAT'S IN THE SETUP - SOFTWARE



### WiseFusion

A welding function that ensures consistent weld quality in all positions by automatically regulating arc length. Creates and maintains an optimal short-circuit characteristic in pulsed MIG/MAG and spray-arc welding.



### WiseRoot+

Optimized short arc process for productive root pass welding. Excellent weld quality through control of arc voltage and timing of filler metal droplet transfer. Gives higher speed than MMA, TIG or MIG/MAG short arc welding.



### MatchLog

MatchLog includes Minilog and MatchChannel activation in WFX feeders (Minilog can be used only with MXF feeders). MatchChannel allows changing of the memory channel during welding and Minilog enables to change welding power in the same memory channel.



## ALTERNATIVE - EQUIPMENT AND SOFTWARE



**WFX 200 P Fe Wire feeder**

For steel pipe welding with Ø 200 mm wire spools. Strong double-skin plastic casing with a reliable DuraTorque wire feed mechanism. Built-in arc voltage measurement.



**WFX 200 P Ss Wire feeder**

For stainless steel pipe welding with Ø 200 mm wire spools. Strong double-skin plastic casing with a reliable DuraTorque wire feed mechanism. Built-in arc voltage measurement.



**WFX 300 P Ss Wire feeder**

For stainless steel pipe welding with Ø 200/300 mm wire spools. Durable double-skin plastic casing with a strong two-motor GT04 wire feed mechanism. Built-in arc voltage measurement.



## FastMig X 450 Power source

Product code	6103450
Connection voltage 3~ 50/60 Hz	400 V, (-15...+20%)
Fuse (delayed)	35A
Minimum generator power	35 kVA
Output 60% ED	450 A
Output 100% ED	350 A
Open circuit voltage MMA	U <sub>0</sub> = 70-98 V U <sub>av</sub> = 50 V
Open circuit voltage MIG/MAG	U <sub>0</sub> = 80 - 98 V
Operating temperature range	-20 ... +40 °C
External dimensions LxWxH	590 × 230 × 430 mm
Degree of protection	IP23S
Standards	IEC 60974-1, IEC 60974-5, IEC 60974-10

## WFX 300 P Fe Wire feeder

Product code	6103531
Output 60% ED	520 A
Output 100% ED	440 A
Wire feed mechanism	GT04
Wire feed speed	0.5 - 25 m/min
Gun connection	Euro
Wire spool weight, max.	20 kg
Wire spool diameter, max.	300 mm
Filler wire sizes (Ss)	0.6 - 2.0 mm
Filler wire sizes (Al)	0.8 - 2.4 mm
Filler wire sizes (Fe)	0.6 - 2.0 mm
Filler wire sizes (Cored wire)	0.8 - 2.4 mm
Software	WiseFusion WiseRoot+ MatchLog Pipe Steel pack Fe (25pcs)
Operating temperature range	-20 ... +40 °C
External dimensions LxWxH	590 × 240 × 445 mm
Degree of protection	IP23S
Standards	IEC 60974-5
Weight (empty)	13.1 kg



## Cool X Cooling unit

Product code	6068200 Cooling liquid - 10 liter can - SP9810765
Operating voltage (safety voltage)	400 V -15 ...+20 %
Maximum pressure	0.4 Mpa
External dimensions LxWxH	570 x 230 x 280 mm
Weight (no accessories)	11 kg
Degree of protection	IP23S
Tank volume	~3 L
EMC class	A
Cooling power	1 kW
Storage temperature range	-40 ...+60 °C
Operating temperature	-20 ...+40 °C

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**Kemppi** is the design leader in the arc welding industry. We are committed to boosting the quality and productivity of welding by continuous development of the welding arc and by working for a greener and more equal world. Kemppi supplies sustainable products, digital solutions, and services for professionals from industrial welding companies to single contractors. The usability and reliability of our products is our guiding principle. We operate with a highly skilled partner network covering over 70 countries to make its expertise locally available. Headquartered in Lahti, Finland, Kemppi employs close to 800 professionals in 16 countries and has a revenue of 195 MEUR in 2022.

