



# FastMig X Pipe

HIGH-QUALITY WELDING FOR PIPES

Kemppi K7 Welding equipment



## 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 Kemppi FastMig X concept, visit the [FASTMIG X FAMILY SITE](#).

## 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

## KEY APPLICATIONS



PIPELINES



BUILDING STEEL FRAMES



OIL RIGS

## BENEFITS

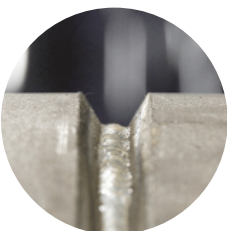


- Kemppi ARC System 3 compatibility: easy and exact production and quality management.
- 5 times faster than TIG welding
- Weld over 80 % more per day and save 50 % in labor and filler costs with WiseRoot+ (see calculation)
- Optimal welding penetration and shape in all positions
- No spatter, less after-work
- 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



### 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 Minarc Evo 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.

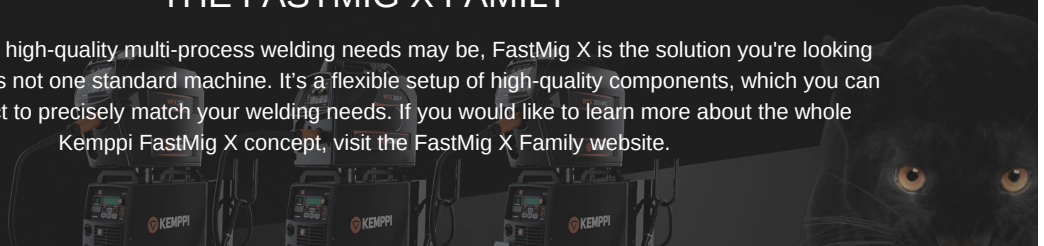


### MATCHING HIGH PRODUCT QUALITY WITH SUPERIOR SERVICE

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 Kempfi worldwide service network also ensures immediate support and consultation. Weld more, produce more, and profit more with the FastMig X.

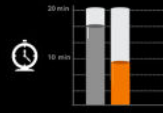
## THE FASTMIG X FAMILY

Whatever your high-quality multi-process welding needs may be, FastMig X is the solution you're looking for. FastMig X is not one standard machine. It's a flexible setup of high-quality components, which you can always select to precisely match your welding needs. If you would like to learn more about the whole Kempfi FastMig X concept, visit the FastMig X Family website.



## 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.

## HOW MUCH TIME AND MONEY CAN YOU SAVE?

To find out exactly how much you can save, download our calculation and see how WiseRoot+ compares to traditional MIG/MAG.

## WHAT'S IN THE SETUP EQUIPMENT



### FastMig X 450 Power source

FastMig X 450 is the ultimate power source. This unit boosts your productivity and welding quality to a whole new level.



### WFX 300 P Fe Wire feeder

This wire feeder truly helps make the FastMig X user a pipe welding expert. This unit includes a strong GT04 feed mechanism with two motors and the ArcVoltage feature as standard.



### 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.

## APPLICATION SOFTWARE



### WiseFusion

Ensures excellent weld quality, efficiency and ease of use. Keeps the welding arc focused and guarantees the optimal arc length in any welding position in pulse and synergic MIG/MAG welding. Also available for automated welding.



### WiseRoot+

Optimized short arc process for productive root pass welding with FastMig X.

Excellent weld quality through control of arc voltage and timing of filler metal droplet transfer. Gives higher speed than Stick (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



### **FastMig X 350 Power source**

The FastMig X 350 power source is the driving force behind productive welding.



### **FastMig X 350 MV Power source**

FastMig X 350 MV power source is a multi-voltage unit for demanding applications and welding.



### **WFX 200 P Fe Wire feeder**

This small and lightweight wire feeder is an excellent choice for pipe welding. A reliable DuraTorque wire feeder mechanism with strong double-skin plastic casing and ArcVoltage features as standard.



### **WFX 200 P Ss Wire feeder**

This small and lightweight wire feeder is an excellent choice for pipe welding. A reliable DuraTorque wire feeder mechanism with strong double-skin plastic casing and ArcVoltage features as standard.



### **WFX 300 P Ss Wire feeder**

A wire feeder that truly helps make the FastMig X user a pipe welding expert. This unit includes strong GT04 feed mechanism with two motors and the ArcVoltage feature as standard.



## TECHNICAL SPECIFICATIONS

### 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 MIG/MAG	U <sub>0</sub> = 80 - 98 V
Open circuit voltage MMA	U <sub>0</sub> = 70-98 V U <sub>av</sub> = 50 V
Standards	IEC 60974-1, IEC 60974-5, IEC 60974-10
External dimensions LxWxH	590 × 230 × 430 mm
Degree of protection	IP23S
Operating temperature range	-20 ... +40 °C

### WFX 300 P Fe Wire feeder

Product code	6103531
Output 60% ED	520 A
Output 100% ED	440 A
Gun connection	Euro
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
Wire spool diameter, max.	300 mm
Wire spool weight, max.	20 kg
Wire feed mechanism	GT04
Wire feed speed	0.5 - 25 m/min
Standards	IEC 60974-5
Weight (empty)	13.1 kg
External dimensions LxWxH	590 × 240 × 445 mm
Degree of protection	IP23S
Operating temperature range	-20 ... +40 °C
Software	WiseFusion WiseRoot+ MatchLog Pipe Steel pack Fe (25pcs) Pipe Stainless pack Ss (17pcs)

### Cool X Cooling unit

Product code	6068200
EMC class	A
Weight (no accessories)	11 kg



**Cool X Cooling unit**

External dimensions LxWxH	570 x 230 x 280 mm
Degree of protection	IP23S
Tank volume	~3 L
Cooling power	1 kW
Storage temperature range	-40 ...+60 °C
Operating temperature	-20 ...+40 °C
Operating voltage (safety voltage)	400 V -15 ...+20 %
Maximum pressure	0.4 Mpa