

# Wise Root/Penetration/Fusion/Thin

## Wise decisions create a more productive result



### In brief

- Manage welding skill requirement
- Increase welding productivity
- Improve welding quality
- Reduce rework costs

## Key features

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 that provide a range of useful benefits, enabling levels of welding performance that otherwise would be impossible to achieve with standard MIG/MAG welding process.

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.

## WiseRoot

WiseRoot is a highly efficient and unique tailored cold arc process for manual (WiseRoot) and automated (WiseRoot-A) root pass welding in Fe/StSt 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 Kemppe WiseRoot is everything but traditional and is now a proven and accepted root welding solution.

- 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

## WisePenetration

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.

- Reduce the risk of lack of fusion
- Reduce the need for welding parameter adjustments
- Save rework time 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

# Wise Root/Penetration/Fusion/Thin

## WiseFusion

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 (WiseFusion) and automated (WiseFusion-A) welding, WiseFusion ensures consistent weld quality in all positions, and once set, eliminates the need for regular parameters adjustments.

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

## WiseThin

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

- 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

## Order information

	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		•		