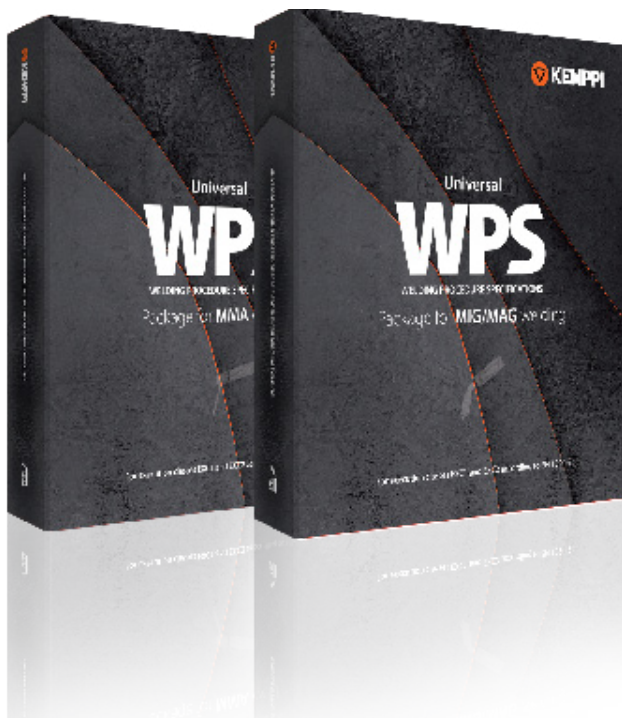


Universal WPS Packages for MIG/MAG and MMA welding

Get the jump on EN 1090 with Kemppi



+ Benefits

- The most comprehensive solution on the market, covering workshop as well as on-site work for both MIG/MAG and MMA welding
- Both packages can be used with all brands of welding machines
- MIG/MAG package offers support for solid, flux-cored and metal-cored wires, and it contains 84 qualified and tested MIG/MAG WPSs
- Pulse welding included in the MIG/MAG WPS package
- Both packages are valid also when impact-strength requirements apply. For more information on filler material classification, visit www.kemppi.com/wps.
- Tailored WPSs available on request to fit specific production needs
- MMA WPS package includes practical information for welding of truss connections.

From 1 July 2014, all structural steel and aluminium products must be CE marked, as stated in the Construction Products Regulation (CPR). This will bring great change in the life of workshops manufacturing structural steel buildings and their site erection process, because they must comply with the EN 1090-2 standard, which states that all welding activities have to be in compliance with EN ISO 3834, 'Quality Requirements for Fusion Welding of Metallic Materials'.

Key features

A comprehensive solution for workshop and on-site work and all welding equipment brands

To meet the requirements of the EN 1090-2 standard, we offer universal WPS (welding procedure specifications) packages for workshop and project-site use. These WPSs apply to both MIG/MAG and MMA welding. Kemppi is the first welding machine manufacturer in the world to offer Universal WPS package sets that support the constantly changing environments of workshops and construction sites, where there is a strong need for clear and simple instructions.

Kemppi Universal WPSs are compatible with all brands of welding machines

Kemppi WPSs for both MIG/MAG and MMA welding are compatible with all welding machine brands. Having a versatile fleet of welding machines is not a problem; Kemppi WPSs can be used with all of them. The universal welding procedure specifications comply in full with EN ISO 15612 and can be used for steel structures in execution classes EXC1 and EXC2 according to EN 1090-2.

For more product information, videos and news, please visit our website at www.kemppi.com



Universal WPSs for MIG/MAG and MMA welding

Universal WPSs for MIG/MAG welding in workshops

This comprehensive package contains 84 MIG/MAG WPSs that are compatible with all MIG/MAG welding machines. They are valid also when impact-strength requirements apply, and cover some of the most used solid, metal cored and flux cored wires. For more information on filler material classification, visit www.kemppi.com/wps.

Universal WPSs for MMA welding on work sites

Kemppi's universal WPS package for MMA welding is based on customer needs. It contains all necessary welding procedure specifications, compatible with all MMA welding machines, in easily understandable format. When impact requirements are specified and no impact testing has been performed, our WPSs for MMA welding can be used for thicknesses under 12 mm with consumables of class EN ISO 2560-A E 42 4 B 42 H5. Even if the thickness is greater than 12 mm, they can be used with filler materials Esab OK 48.00, Böhler FOX EV 50, and Elga P48 S. We have carried out impact toughness tests for those filler materials.

Just one WPS package needed per site

You won't have to buy a separate licence for each welding machine. Our WPSs are valid in workshops and sites running under the same technical and quality control.

Welding Procedure Qualification Records (WPQR)

You and your auditor can see all Welding Procedure Qualification Records (WPQRs) associated with the Welding Procedure Specifications right after you've purchased the WPS package and registered your user account on our WPS Service site.

Customer-specific specifications and solutions for execution classes EXC3 and EXC4

Kemppi is the first welding equipment manufacturer in the world whose welding operations have been granted ISO 3834-2 certification. This is a solid proof of our ability to develop and offer WPSs independently, which makes our WPS service fast and fluent. Contact weldingservices@kemppi.com for a customised solution.

The ArcQuality welding quality management system is meant for execution classes EXC3 and EXC4.

EULA

As stated in the EULA (End User License Agreement), the WPSs are valid in workshops and sites running under the same technical and quality control. Also, it requires that the welders and the welding coordinator are qualified.

Contents of the Kemppi Universal WPS package

The WPS packages contain a binder and a USB memory stick. The binder contains the EULA (end user license agreement), instructions for use and registration, serial number of the package and the laminated WPS documents (84 for MIG/MAG and 28 for MMA) in English. The USB memory stick contains the WPS documents in electronic format and an update check link.

Kemppi WPS Service site for registration, administration and updates

Kemppi WPS online service helps you to register and manage your WPSs and WPQRs (Welding Procedure Qualification Records) and provides new language versions and WPS revisions. The WPSs are available in English, German, Finnish and Swedish, and will soon be available in Danish, Dutch, French, Italian, Norwegian, Polish, Russian and Spanish as well.

Universal WPSs for MIG/MAG and MMA welding

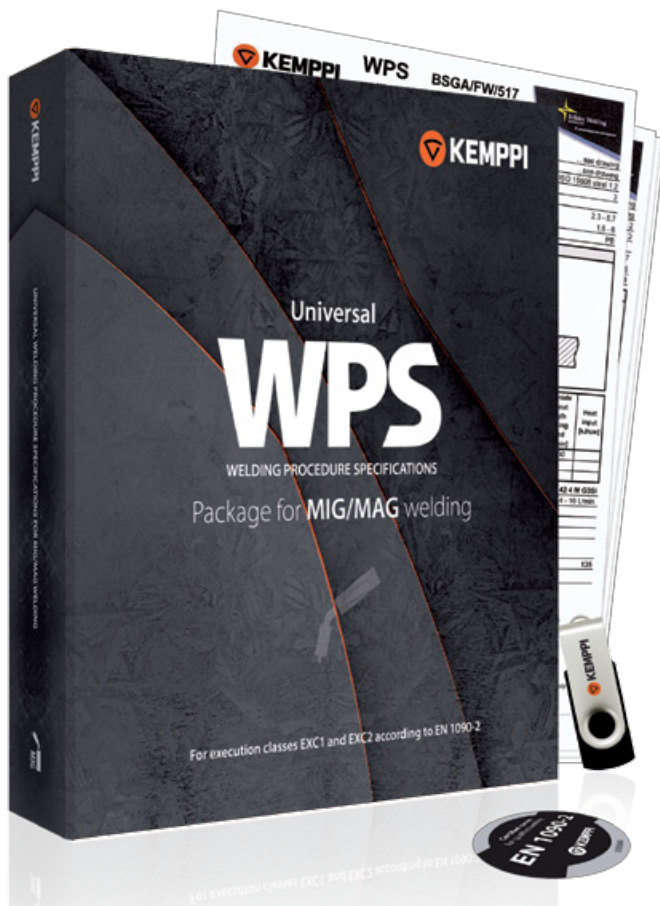
Where to buy

You can buy the Universal WPS packages for MIG/MAG and MMA directly from Kemppi Channel or from dealers and distributors.

Ordering codes

Package type	Ordering code
Universal WPS package for MIG/MAG	6800003
Universal WPS package for MMA	6800002

For more information, please visit our WPS Service Site at <http://www.kemppi.com/wps>
You can also contact our experts directly at weldingservices@kemppi.com



Example contents of the Kemppi WPS package for MIG/MAG welding

For more product information, videos and news, please visit our website at www.kemppi.com

MIG/MAG welding with solid wire electrode (process 135)

WPS number	Process	Weld type	Joint type	Material group	Filler material	Material thickness (mm)	Welding position	Weld details	Throat thickness (mm)
Filled welds									
WPS 135-FW-1	135	P/T	FW	1.1/1.2	EN ISO 14341-A G42 2 M/G3Si1 EN ISO 14341-A G42 3 M/G3Si1 EN ISO 14341-A G42 4 M/G3Si1	3...7	PA, PB, PC	sl	3...5
WPS 135-FW-2	135	P/T	FW	1.1/1.2		3...7	PD	sl	3...5
WPS 135-FW-3	135	P/T	FW	1.1/1.2		3...7	PF	sl	3...5
WPS 135-FW-4	135	P/T	FW	1.1/1.2		8...12	PA, PB, PC	sl	3...5
WPS 135-FW-5	135	P/T	FW	1.1/1.2		8...12	PF	sl	3...5
WPS 135-FW-6	135	P/T	FW	1.1/1.2		8...12	PC	sl	3...5
WPS 135-FW-7	135	P/T	FW	1.1/1.2		6...10	PA, PB, PC	ml	no restriction
WPS 135-FW-8	135	P/T	FW	1.1/1.2		6...10	PD	ml	no restriction
WPS 135-FW-9	135	P/T	FW	1.1/1.2		6...10	PF	ml	no restriction
WPS 135-FW-10	135	P/T	FW	1.1/1.2		11...24	PA, PB, PC	ml	no restriction
WPS 135-FW-11	135	P/T	FW	1.1/1.2		11...24	PD	ml	no restriction
WPS 135-FW-12	135	P/T	FW	1.1/1.2		11...24	PF	ml	no restriction
Butt welds									
WPS 135-BW-1	135	P/T	BW	1.1/1.2	EN ISO 14341-A G42 2 M/G3Si1 EN ISO 14341-A G42 3 M/G3Si1 EN ISO 14341-A G42 4 M/G3Si1	3...4	PA	sl	
WPS 135-BW-2	135	P/T	BW	1.1/1.2		3...4	PC	sl	
WPS 135-BW-3	135	P/T	BW	1.1/1.2		3...4	PE	sl	
WPS 135-BW-4	135	P/T	BW	1.1/1.2		3...4	PF	sl	
WPS 135-BW-5	135	P/T	BW	1.1/1.2		5...8	PA	ml	
WPS 135-BW-6	135	P/T	BW	1.1/1.2		5...8	PC	ml	
WPS 135-BW-7	135	P/T	BW	1.1/1.2		5...8	PE	ml	
WPS 135-BW-8	135	P/T	BW	1.1/1.2		5...8	PF	ml	
WPS 135-BW-9	135	P/T	BW	1.1/1.2		8...12	PA	ml	
WPS 135-BW-10	135	P/T	BW	1.1/1.2		8...12	PC	ml	
WPS 135-BW-11	135	P/T	BW	1.1/1.2		8...12	PE	ml	
WPS 135-BW-12	135	P/T	BW	1.1/1.2		8...12	PF	ml	
WPS 135-BW-13	135	P/T	BW	1.1/1.2		12...20	PA	ml	
WPS 135-BW-14	135	P/T	BW	1.1/1.2		12...20	PC	ml	
WPS 135-BW-15	135	P/T	BW	1.1/1.2		12...20	PE	ml	
WPS 135-BW-16	135	P/T	BW	1.1/1.2		12...20	PF	ml	

Filler materials that comply with the classifications above can be used, such as Esab OK Autrod 12.51, Elgamatic 100, Böhler EMK6. We have carried out impact toughness tests for a filler material that complies with EN ISO 1431-A G3 Si1.

For more product information, videos and news, please visit our website at www.kemppi.com

MIG/MAG welding with flux cored wire (process 136)

WPS number	Process	Weld type	Joint type	Material group	Filler material	Material thickness (mm)	Welding position	Weld details	Throat thickness (mm)
Filled welds									
WPS 136-FW-1	136	P/T	FW	1.1/1.2	EN ISO 17632-A T42 2 P M 1 H5 EN ISO 17632-A T46 2 P M 1 H5 EN ISO 17632-A T46 4 P M 2 H10	3...7	PA, PB, PC	sl	3...5
WPS 136-FW-2	136	P/T	FW	1.1/1.2		3...7	PD	sl	3...5
WPS 136-FW-3	136	P/T	FW	1.1/1.2		3...7	PF	sl	3...5
WPS 136-FW-4	136	P/T	FW	1.1/1.2		8...12	PA, PB, PC	sl	3...5
WPS 136-FW-5	136	P/T	FW	1.1/1.2		8...12	PF	sl	3...5
WPS 136-FW-6	136	P/T	FW	1.1/1.2		8...12	PC	sl	3...5
WPS 136-FW-7	136	P/T	FW	1.1/1.2		6...10	PA, PB, PC	ml	no restriction
WPS 136-FW-8	136	P/T	FW	1.1/1.2		6...10	PD	ml	no restriction
WPS 136-FW-9	136	P/T	FW	1.1/1.2		6...10	PF	ml	no restriction
WPS 136-FW-10	136	P/T	FW	1.1/1.2		11...24	PA, PB, PC	ml	no restriction
WPS 136-FW-11	136	P/T	FW	1.1/1.2		11...24	PD	ml	no restriction
WPS 136-FW-12	136	P/T	FW	1.1/1.2		11...24	PF	ml	no restriction
Butt welds									
WPS 136-BW-1	136	P/T	BW	1.1/1.2	EN ISO 17632-A T42 2 P M 1 H5 EN ISO 17632-A T46 2 P M 1 H5 EN ISO 17632-A T46 4 P M 2 H10	3...4	PA	sl	ss mb *Note
WPS 136-BW-2	136	P/T	BW	1.1/1.2		3...4	PC	sl	ss mb
WPS 136-BW-3	136	P/T	BW	1.1/1.2		3...4	PE	sl	ss mb
WPS 136-BW-4	136	P/T	BW	1.1/1.2		3...4	PF	sl	ss mb
WPS 136-BW-5	136	P/T	BW	1.1/1.2		5...8	PA	ml	ss mb
WPS 136-BW-6	136	P/T	BW	1.1/1.2		5...8	PC	ml	ss mb
WPS 136-BW-7	136	P/T	BW	1.1/1.2		5...8	PE	ml	ss mb
WPS 136-BW-8	136	P/T	BW	1.1/1.2		5...8	PF	ml	ss mb
WPS 136-BW-9	136	P/T	BW	1.1/1.2		8...12	PA	ml	ss mb
WPS 136-BW-10	136	P/T	BW	1.1/1.2		8...12	PC	ml	ss mb
WPS 136-BW-11	136	P/T	BW	1.1/1.2		8...12	PE	ml	ss mb
WPS 136-BW-12	136	P/T	BW	1.1/1.2		8...12	PF	ml	ss mb
WPS 136-BW-13	136	P/T	BW	1.1/1.2		12...20	PA	ml	ss mb
WPS 136-BW-14	136	P/T	BW	1.1/1.2		12...20	PC	ml	ss mb
WPS 136-BW-15	136	P/T	BW	1.1/1.2		12...20	PE	ml	ss mb
WPS 136-BW-16	136	P/T	BW	1.1/1.2		12...20	PF	ml	ss mb

* ss mb stands for single-sided welding and welding with backing

Filler materials that comply with the classifications above can be used, for example:

Esab OK Tubrod 15.14, Böhler Ti 52-FD and Elgacore DWA 50. We have carried out impact toughness tests for those filler material brands.

For more product information, videos and news, please visit our website at www.kemppi.com



MIG/MAG welding with metal cored electrode (process 138)

WPS number	Process	Weld type	Joint type	Material group	Filler material	Material thickness (mm)	Welding position	Weld details	Throat thickness (mm)
Filled welds									
WPS 138-FW-1	138	P/T	FW	1.1/1.2	EN ISO 17632-A T42 2 M M 1 H5 EN ISO 17632-A T46 4 M M 2 H5	3...7	PA, PB, PC	sl	3...5
WPS 138- FW-2	138	P/T	FW	1.1/1.2		3...7	PD	sl	3...5
WPS 138- FW-3	138	P/T	FW	1.1/1.2		3...7	PF	sl	3...5
WPS 138- FW-4	138	P/T	FW	1.1/1.2		8...12	PA, PB, PC	sl	3...5
WPS 138- FW-5	138	P/T	FW	1.1/1.2		8...12	PD	sl	3...5
WPS 138- FW-6	138	P/T	FW	1.1/1.2		8...12	PF	sl	3...5
WPS 138- FW-7	138	P/T	FW	1.1/1.2		6...10	PA, PB, PC	ml	no restriction
WPS 138- FW-8	138	P/T	FW	1.1/1.2		6...10	PD	ml	no restriction
WPS 138- FW-9	138	P/T	FW	1.1/1.2		6...10	PF	ml	no restriction
WPS 138- FW-10	138	P/T	FW	1.1/1.2		11...24	PA, PB, PC	ml	no restriction
WPS 138- FW-11	138	P/T	FW	1.1/1.2		11...24	PD	ml	no restriction
WPS 138- FW-12	138	P/T	FW	1.1/1.2		11...24	PF	ml	no restriction
Butt welds									
WPS 138- BW-1	138	P/T	BW	1.1/1.2	EN ISO 17632-A T42 2 M M 1 H5 EN ISO 17632-A T46 4 M M 2 H5	3...4	PA	sl	
WPS 138- BW-2	138	P/T	BW	1.1/1.2		3...4	PC	sl	
WPS 138- BW-3	138	P/T	BW	1.1/1.2		3...4	PE	sl	
WPS 138- BW-4	138	P/T	BW	1.1/1.2		3...4	PF	sl	
WPS 138- BW-5	138	P/T	BW	1.1/1.2		5...8	PA	ml	
WPS 138- BW-6	138	P/T	BW	1.1/1.2		5...8	PC	ml	
WPS 138- BW-7	138	P/T	BW	1.1/1.2		5...8	PE	ml	
WPS 138- BW-8	138	P/T	BW	1.1/1.2		5...8	PF	ml	
WPS 138- BW-9	138	P/T	BW	1.1/1.2		8...12	PA	ml	
WPS 138- BW-10	138	P/T	BW	1.1/1.2		8...12	PC	ml	
WPS 138- BW-11	138	P/T	BW	1.1/1.2		8...12	PE	ml	
WPS 138- BW-12	138	P/T	BW	1.1/1.2		8...12	PF	ml	
WPS 138- BW-13	138	P/T	BW	1.1/1.2		12...20	PA	ml	
WPS 138- BW-14	138	P/T	BW	1.1/1.2		12...20	PC	ml	
WPS 138- BW-15	138	P/T	BW	1.1/1.2		12...20	PE	ml	
WPS 138- BW-16	138	P/T	BW	1.1/1.2		12...20	PF	ml	

Filler materials that comply with the classifications above can be used, for example: Esab OK Tubrod 15.14, Böhler Ti 52-FD and Elgacore DWA 50. We have carried out impact toughness tests for those filler material brands.

For more product information, videos and news, please visit our website at www.kemppi.com



MMA Welding (process 111)

WPS number	Process	Weld type	Joint type	Material group	Filler material	Material thickness (mm)	Welding position	Weld details	Throat thickness (mm)
Filled welds									
WPS 111-FW-1	111	P/T	FW	1.1/1.2	EN ISO 2560-A E 42 4 B 42 H5	3...7	PA, PB	sl	3...5
WPS 111-FW-2	111	P/T	FW	1.1/1.2		3...7	PC	sl	3...5
WPS 111-FW-3	111	P/T	FW	1.1/1.2		3...7	PD	sl	3...5
WPS 111-FW-4	111	P/T	FW	1.1/1.2		3...7	PF	sl	3...5
WPS 111-FW-5	111	P/T	FW	1.1/1.2		8...12	PA, PB	sl	3...5
WPS 111-FW-6	111	P/T	FW	1.1/1.2		8...12	PC	sl	3...5
WPS 111-FW-7	111	P/T	FW	1.1/1.2		8...12	PD	sl	3...5
WPS 111-FW-8	111	P/T	FW	1.1/1.2		8...12	PF	sl	3...5
WPS 111-FW-9	111	P/T	FW	1.1/1.2		6...10	PA,PB	ml	no restriction
WPS 111-FW-10	111	P/T	FW	1.1/1.2		6...10	PC	ml	no restriction
WPS 111-FW-11	111	P/T	FW	1.1/1.2		6...10	PD	ml	no restriction
WPS 111-FW-12	111	P/T	FW	1.1/1.2		6...10	PF	ml	no restriction
WPS 111-FW-13	111	P/T	FW	1.1/1.2		11...16	PA, PB	ml	no restriction
WPS 111-FW-14	111	P/T	FW	1.1/1.2		11...16	PC	ml	no restriction
WPS 111-FW-15	111	P/T	FW	1.1/1.2		11...16	PD	ml	no restriction
WPS 111-FW-16	111	P/T	FW	1.1/1.2		11...16	PF	ml	no restriction
Butt welds									
WPS 111-BW-1	111	P/T	BW	1.1/1.2	EN ISO 2560-A E 42 4 B 42 H5	3...5	PA	sl	
WPS 111-BW-2	111	P/T	BW	1.1/1.2		3...5	PC	sl	
WPS 111-BW-3	111	P/T	BW	1.1/1.2		3...5	PE	sl	
WPS 111-BW-4	111	P/T	BW	1.1/1.2		3...5	PF	sl	
WPS 111-BW-5	111	P/T	BW	1.1/1.2		5...8	PA	ml	
WPS 111-BW-6	111	P/T	BW	1.1/1.2		5...8	PC	ml	
WPS 111-BW-7	111	P/T	BW	1.1/1.2		5...8	PE	ml	
WPS 111-BW-8	111	P/T	BW	1.1/1.2		5...8	PF	ml	
WPS 111-BW-9	111	P/T	BW	1.1/1.2		6...16	PA	ml	
WPS 111-BW-10	111	P/T	BW	1.1/1.2		6...16	PC	ml	
WPS 111-BW-11	111	P/T	BW	1.1/1.2		6...16	PE	ml	
WPS 111-BW-12	111	P/T	BW	1.1/1.2		6...16	PF	ml	

Kemppi WPSs for MMA welding can be used for thicknesses under 12 mm with consumables of class EN ISO 2560-A E 42 4 B 42 H5. Even if the thickness is greater than 12 mm, they can be used with filler materials Esab OK 48.00, Böhler FOX EV 50, and Elga P48 S. We have carried out impact toughness tests for those electrodes.

For more product information, videos and news, please visit our website at www.kemppi.com