Outershield® 91K2-HSR

TOP FEATURES

- Low alloyed rutile flux cored wire and provides significant value for industry segments such as nuclear, pipelines and pressure vessels
- Superior weldability, low spatter, good bead appearance and outstanding operators appeal
- Exceptional mechanical properties
- Superior product consistency with optimal alloy control
- Excellent wire feeding
- Specific design to withstand high heat input procedures

TYPICAL APPLICATIONS

- Welding of 550MPa steels
- PWHT applications
- Pipeline

CLASSIFICATION

AWS A5.29	E91T1-GM-H4
EN ISO 18276-A	T 55 4 1.5NiMo P M21 2 H5

CURRENT TYPE

DC+

WELDING POSITIONS

All positions, except vertical down

APPROVALS

ABS, DNV, TÜV

SHIELDING GASES (ACC. EN ISO 14175)

M21	Mixed gas Ar+ 15-25% CO_2
Flow rate	15-25 l/min

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

Shielding gas	C	Mn	Si	P	S	Ni	Mo	HDM
M21	0.05	1.4	0.2	0.013	0.010	1.4	0.4	3 ml/100 g

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) -40°C
Required: AWS A5.29			min. 540	620-760	min. 17	-
EN ISO 18276-A			min. 550	642-820	min. 18	min. 47
Typical values	M21	AW	640	700	19	60

* AW = As welded

- = not specified

AVAILABLE SIZES AND PACKAGING INFORMATION

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (S200)	5.0	943211
	SPOOL (S300)	15.0	ED034116N
	SPOOL (S300)	16.0	943210N

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:

Subject to Change – The information is accurate to the best of our knowledge at the time of printing.
Please refer to www.lincolnelectric.eu for any updated information.