

Outershield® 101Ni1-HSR

TOP FEATURES

- Rutile micro alloyed flux-cored wire for welding in all positions, special of high carbon containing low alloy high strength steels such as SAE 4130
- Specific design for stress relieved applications. Outstanding operator appeal.
- Excellent mechanical properties (CVN >50J) at -40°C).
- Superior product consistency with optimal alloy control. Good wire feeding.
- Meets NACE MR-0175 requirements.

TYPICAL APPLICATIONS

- Offshore
- Stress relief
- Pipeline

CLASSIFICATION

AWS A5.29 E101T1-G H4

CURRENT TYPE

DC+

WELDING POSITIONS

All except vertical down

SHIELDING GASES (ACC. EN ISO 14175)

M21 Mixed gas Ar+ >15-25% CO₂
Flow rate 15-25 l/min

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

Shielding gas	C	Mn	Si	P	S	Ni	Mo
M21	0.06	2.0	0.3	0.013	0.010	0.95	0.4

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						-40°C	-50°C
Required: AWS A5.29			min. 610	830	min. 16		min. 27
Typical values	M21	AW	750	810	17	60	40
		SR	690	780	18		50

* AW = As welded; SR = Stress relieved: 4h/645°C

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (S300)	15.0	ED034210N

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.