

Outershield® 12-H

TOP FEATURES

- All position mix gas shielded 0.5% Mo-alloyed rutile cored wire
- Outstanding operator appeal
- Superior product consistency with optimal alloy control
- Excellent wire feeding

TYPICAL APPLICATIONS

- Power Generation
- Welding of 0.5% Mo alloyed creep resistant steel

CLASSIFICATION

AWS A5.29 E 81T1-A1M-H4
EN ISO 17634-A T MoL P M 2 H5

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

APPROVALS

TÜV

+

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

Shielding gas	C	Mn	Si	P	S	Mo	HDM
M21	0.065	0.8	0.2	0.014	0.010	0.46	3 ml/100 g

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-20°C
Required: AWS A5.29		SR = 620 ± 15°C/1h	min. 470	550-690	min. 19	not specified	
EN ISO 17634-A		SR = 570-620°C/1h	min. 355	min. 510	min. 22	min. 47	
Typical values	M21	SR = 1h/620°C	540	600	27	160	79

* SR = Stress relieved

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (B300)	16.0	943009N

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.

Outershield® 12-H-EN-17/11/22