OP 49

TOP FEATURES

- Combines high yield and tensile strength after PWHT and good toughness at low temperature with mild steel wires
- Highly basic flux with silicon and manganese pick-up
- Offers good toughness in two-run and multirun with S2Mo wire grade

CLASSIFICATION

Flux	EN ISO 14174: S A FB 1 76 AC H5

Flux/wire	AWS 5.17	AWS 5.23	EN ISO 14171-A
OE-S2	F7A6/F7P6-EM12K		S 42 5 FB S2
OE-SD2	F7A6/F7P6-EM12K		S 42 5 FB S2
OE-SD3	F7P5-EH12K		
OE-SD3	F8A4-EH12K		
OE-S2Mo		F8P5-EA2-A4	S 46 4 FB S2Mo
OE-S2Mo		F9A4-EA2-A4	

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

Wire grade	C	Mn	Si	Mo
OE-S2	0.06	1.4	0.5	
OE-SD2	0.06	1.4	0.6	
OE-SD3	0.07	2.0	0.9	
OE-S2Mo	0.06	1.5	0.7	0.5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
					-20°C	-40°C	-50°C
OE-S2	AW	≥ 440	530-620	≥24	≥90	≥60	≥47
OE-S2	PWHT 600°C/2h	≥410	500-590	≥26	≥120	≥70	≥47
OE-SD2	AW	≥440	550-620	≥24		≥80	≥47
OE-SD2	PWHT 620°C/1h	≥420	510-590	≥26	≥100	≥60	≥47
OE-SD3	AW	≥520	620-690	≥20	≥80	≥40	
OE-SD3	PWHT 600°C/2h	≥420	560-620	≥20	≥100	≥50	≥27
OE-S2Mo	AW	≥570	650-700	≥20	≥80	≥50	
OE-S2Mo	PWHT 620°C/1h	≥520	620-670	≥20	≥100	≥60	

*AW = As welded; PWHT = Post weld heat treatment

FLUX CHARACTERISTICS

Current type	AC, DC+
Basicity (Boniszewski)	2.1

PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
DRY BAG	25.0	W000280058

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.