

# OP 181

## TOP FEATURES

- Recommended for limited amount of passes applications
- For high speed welding fillet welds
- High Mn and Si pick-up from the flux

## CLASSIFICATION

Flux	EN ISO 14174: SA AR 1 88 AC	
Flux/wire	AWS A5.17	EN ISO 14171-A
OE-S1	F7A0/F7PZ-EL12	S 42 0 AR S1
OE-S2	F7A0/F7PZ-EM12K	S 42 2 AR S2
OE-S2Mo		S 46 0 AR S2Mo

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

Wire grade	C	Mn	Si	Mo
OE-S1	0.03	1.1	0.6	
OE-S2	0.04	1.3	0.6	
OE-S2Mo	0.04	1.3	0.6	0.5

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
					0 °C	-20 °C
OE-S1	AW	≥420	520-620	≥22	≥47	
OE-S2	AW	≥450	560-660	≥22		≥47
OE-S2Mo	AW	≥490	610-710	≥18	≥47	

\* AW = As welded

## FLUX CHARACTERISTICS

Basicity (Boniszewski)	0.4
Grain size (EN ISO 14174)	2-16
Redrying	300-350 °C x 2-4h

## PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
DRY BAG	25.0	W000280009

## 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.  
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