

# OP 41TTW

## TOP FEATURES

- Generates a high purity weld metal chemistry
- Recommended with long post weld heat treatment
- Widely used in Nuclear industry

## CLASSIFICATION

Flux	EN SO 14174: SA FB 1 65 AC H5	
Flux/wire	AWS A5.17	AWS A5.23
OE-SD3	F7A8/F7P8-EH12K	
OE-SD3 Ni 1/4Mo		F9A8/F8P8-EG
OE-SD3 Ni 1/2Mo		F9A8/F9P8-EF3-F3
OE-S2 CrMo1		F8P6-EB2R-B2
OE-S1 CrMo2		F9P2-EB3R-B3

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

Wire grade	C	Mn	Si	Cr	Ni	Mo
OE-SD3	0.1	1.6	0.4			
OE-SD3 Ni 1/4Mo	0.1	1.35	0.35		0.9	0.25
OE-SD3 Ni 1/2Mo	0.1	1.5	0.4		0.95	0.5
OE-S2 CrMo1	0.1	0.8	0.3	1.1		0.5
OE-S1 CrMo2	0.1	0.6	0.3	2.1		1.0

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
					-40°C	-50°C	-60°C
OE-SD3	AW	≥460	480-660	≥22			≥47
OE-SD3	PWHT 620°C/12h	≥400	510-650	≥25			≥47
OE-SD3	PWHT 620°C/16h	≥400	500-650	≥25			≥47
OE-SD3 Ni 1/4Mo	AW	≥540	620-760	≥22		≥55	
OE-SD3 Ni 1/4Mo	PWHT 620°C/2h	≥510	590-720	≥22		≥55	
OE-SD3 Ni 1/2Mo	AW	≥600	650-760	≥20		≥47	
OE-SD3 Ni 1/2Mo	PWHT 690°C/2h	≥590	650-760	≥20		≥47	
OE-SD3 Ni 1/2Mo	PWHT 620°C/16h	≥540	620-760	≥20		≥47	
OE-S2 CrMo1	PWHT 690°C/1h	≥500	570-690	≥20	≥54	≥27	
OE-S2 CrMo1	PWHT 690°C/26h	≥485	550-690	≥22	≥54	≥47	
OE-S1 CrMo2	PWHT 690°C/8h	≥460	550-690	≥20	≥54		
OE-S1 CrMo2	PWHT 690°C/26h	≥450	540-690	≥20	≥54		

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

## FLUX CHARACTERISTICS

Current type	AC, DC+
Basicity (Boniszewski)	2.5
Grain size (EN ISO 14174)	2-20
Redrying	300-350°C x 2-4h

## PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
DRY BAG	25.0	W000374082

## 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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