# **OP 33**

## **TOP FEATURES**

- Neutral flux for stainless steel application
- No chromium lost in weld metal despite no chromium compensation from flux
- Ideal for fillet welds

## CLASSIFICATION

Flux	EN ISO 14174: SA AF 2
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## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

Wire grade	С	Mn	Si	Cr	Ni	Мо	Nb
0E-308L	≤0.03	1.5		18	9		
OE-309LMo	≤0.03	1.8		21	15	3	
0E-316L	≤0.03	1.6		18	10	2.7	
0E-318	≤0.07	1.3		18	10	2.7	0.05
OE-347	≤0.07	1.6		18	9		0.05
OE-317L	≤0.03	1.5		20	13	3.5	
OE-20 16 L	≤0.015	7		20	16	3	
0E-S 22 09	≤0.03	1.8		23	9	3	
OE-410 NiMo	0.010	0.6	0.05	12.2	4.0	0.05	

## **MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL**

\\\!:	Constitution A	Yield strength	Tensile strength	Elongation	Impact ISO-V (J)		
Wire grade	Condition*	(MPa)	(MPa)	(%)	+20°C	-60°C	-196°C
0E-308L	AW	≥350	≥500	≥35	≥75	60	
OE-309LMo	AW	≥420	≥600	≥25	≥80		
0E-316L	AW	≥350	≥525	≥30	≥75	60	
0E-318	AW	≥370	≥600	≥30	≥65		
OE-347	AW	≥370	≥575	≥30	≥65		
0E-317L	AW	≥350	≥550	≥30	≥75	60	
OE-20 16 L	AW	≥390	≥570	≥35	≥70		≥30
OE-S 22 09	AW	≥550	≥750	≥25		70	
OE-410 NiMo	PWHT 590°C/2h	≥800	≥850	≥15	≥50		

<sup>\*</sup> AW = As welded, PWHT = Post Weld Heat Treatment

## **FLUX CHARACTERISTICS**

Current type	AC, DC+
Basicity (Boniszewski)	1.8
Grain size (EN ISO 14174)	2-20
Redrying	300-350°C x min. 2h

#### **PACKAGING AND AVAILABLE SIZES**

Packaging	Weight (kg)	Item number
DRY BAG	25.0	W000380038



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#### **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 <a href="www.lincolnelectric.eu">www.lincolnelectric.eu</a> for any updated information.

