

SA 317L

CATEGORY SAW Arc Submerged

TYPE Stainless steel SAW welding wire with excellent corrosion properties against acid chloride containing environments.

APPLICATIONS For SAW welding stabilized and un-stabilized CrNiMo(N) type of steels with high corrosion resistance. Also suitable for dissimilar welds between steel and stainless steel or dissimilar stainless steels. 317L has good resistance to general corrosion and pitting due to its high content of molybdenum. The alloy is used in severe corrosion conditions such as in the petrochemical, pulp, cotton and paper industries.

PROPERTIES Austenitic, non magnetic stainless steel alloy with high mechanical properties and excellent weldability, corrosion resistance is better than AISI 316 due to the high Mo. content and also offers excellent corrosion resistance against dilute hot acids. Suitable for use up to 400°C. SA 317L is best to be used in combination with [FL 838](#)

CLASSIFICATION

AWS	A 5.9: ER 317L
EN ISO	14343-A: S 19 14 4 L
DIN: W.Nr.	1.4453

SUITABLE FOR 1.4439, 1.4429, 1.4438, 1.4583, X2CrNiMoN 17 13 5, X2CrNiMoN 17 13 3, X2CrNiMo 18 15 4, X10CrNiMoNb 18 12, 317LN, (TP)316LN, 317L, non magnetic, ferrite free. ASTM 317LMN, SS 2367.

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT % (ACC. AWS)

C	Mn	Si	Cr	Ni	Mo	Cu	P	S
<0.03	1,5-2,5	0,3-0,65	18,5-20.0	13.0-15.0	3.0-4.0	<0,3	<0.030	<0.020

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				20°C	-40°C	-60°C	
AW	>390	>520	>33	>70			

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) (DC+)	spool type	kg / spool	kg / pallet
1,6	27-30	200-300	K-415	25	1050
2,4	29-33	300-400	K-415	25	1050
3,2	29-33	350-500	K-415	25	1050
4,0	30-36	400-600	K-415	25	1050

REDRYING TEMPERATURE Not required