

SA 316L

CATEGORY SAW Arc Submerged

TYPE Solid stainless steel welding wire for submerged arc welding

APPLICATIONS The alloy is widely used in the chemical and food-processing industries, as well as in shipbuilding, vessel and various types of architectural structure. Suitable for welding corrosion-resistant Cr-Ni-Mo steels with extremely low C-content at working temperatures up to 350°C.

PROPERTIES SA 316L offers good general corrosion resistance, particularly to corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly recommended when there is a risk of intergranular corrosion. can be used with our fused flux [Ceweld FL 880](#) and [Ceweld FL 8111](#).

CLASSIFICATION

AWS	A 5.9: ER 316L
EN ISO	14343-A: S 19 12 3 L
DIN: W.Nr.	1.4430

SUITABLE FOR	1.4583	X102CrNiMoNb 18 12	316Cb	UNS S31640
	1.4435	X2CrNiMo 18 14 3 (TP)	316L	.
	1.4436	X4CrNiMo 17 13 3	-	.
	1.4404	X2CrNiMo 17 12 2 (TP)	316L	UNS S31603
	1.4406	-	316LN	UNS S31653
	1.4408	X 5 CrNiMo 19 11 2	316H	.
	1.4401	X4CrNiMo 17 12 2 (TP)	316	UNS S31600
	1.4571	X6CrNiMo 17 12 2	316 Ti	UNS S31635
	1.4580	X6CrNiMoNb 17 12 3	316Cb	.
	1.4406	X2CrNiMoN 17 12 3 (TP)	316LN	.

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT %

C	Mn	Si	Cr	Ni	Mo	Nb	Cu	Co
<0,02	1,5-2,0	0,3-0,6	18,0-19,2	12,0-13,0	2,5-3,0	<0,05	<0,3	<0,2

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	>370	>520	>33	>70			

AW: as welded

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters			Packing	
	Voltage (V)	Current (A)	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