


CATEGORY	GMAW Solid wires				
TYPE	Solid stainless steel wire for dissimilar welding and cladding.				
APPLICATIONS	CEWELD 309MoL is used for build-up welding of non-alloy and low-alloy steels and for welding of dissimilar steels, such as non-alloy and low-alloy steels to high-alloy steels, when Mo plays an essential role. Buffer layers before hard facing, dissimilar joints between ferritic and austenitic steels and or other stainless steel types to standard carbon steel. Recommended for cladding on low alloyed steel in case AISI 316 is required as first layer.				
PROPERTIES	Excelent corrosion resistance against oxidising air upto 950°C. Good resistance against hot cracking due to the high Mo content. During build-up welding, the weld metal already achieves approximately the composition of ASTM 316 in the 1st layer.				
CLASSIFICATION	AWS	A 5.9: ER309LMo			
	EN ISO	14343-A: G 23 12 2 L			
	F-nr	6			
	FM	5			
	W.Nr.	1.4459			
SUITABLE FOR	ISO 15608: 8.1 Austenit ≤ 19 % Cr , TÜV 1000: Gr. 21-30, 1.4583, 1.4435, 1.4436, 1.4404, 1.4406, 1.4408, 1.4401, 1.4571, 1.4580, 1.4406, 1.4521, 1.4301, 1.4306, X102CrNiMoNb 18 12, X2CrNiMo 18 14 3 (TP), X4CrNiMo 17 13 3, X2CrNiMo 17 12 2 (TP), X 5CrNiMo 19 11 2, X4CrNiMo 17 12 2 (TP), X6CrNiMo 17 12 2, X6CrNiMoNb 17 12 3, X2CrNiMoN 17 12 3 (TP), X2CrMoTi18-2 316Cb, 316L, 316L, 316LN, 316H, 316, 316Ti, 316Cb, 316LN, 444 S31640, S31603, S31653, S31600, S31630, S44400				
APPROVALS	CE				
WELDING POSITIONS:					
TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)					
C	Si	Mn	Cr	Ni	Mo
0.02	0.5	1.4	24	13	2.5
ALL WELD MECHANICAL PROPERTIES					
Heat Treatment	R _{p0,2}	R _m	A ₅	RT	Impact Energy (J) ISO-V
As Welded /	400	600	31	110	-40°C 60
WELDING PARAMETERS / PACKING					
WELDING PARAMETERS	WELDING PARAMETERS	WELDING PARAMETERS	PACKING	PACKING	PACKING
D (MM)	VOLTAGE (V)	CURRENT (A) DC+	SPOOL TYPE	KG / SPOOL / DRUM	KG / PALLET
0.8	16-22	50-140	K-300 / DRUM	15 / 250	1080 / 1000
1.0	16-24	80-190	K-300 / DRUM	15 / 250	1080 / 1000
1.2	20-28	180-280	K-300 / DRUM	15 / 250	1080 / 1000
1.6	24-28	230-350	K-300 / DRUM	15 / 250	1080 / 1000
REDRYING TEMPERATURE	Not required				
GAS ACCORDING EN 14175	M13, M12				