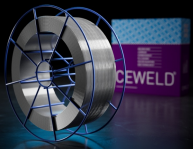
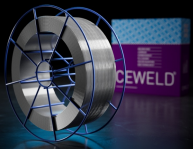


CEWELD 316LMn

TYPE	Solid welding wire for welding fully austenitic CrNiMnMo stainless steels and low temperature steels.(Type 19 12 3Mn, 1.4455)																					
APPLICATIONS	CEWELD® 316LMn is designed for joining and surfacing of similar and matching austenitic CrNi(N) and CrNiMo(Mn,N) steels / cast steel grades with 16 - 21% Cr, 6 - 13% Ni, and 3% Mo. It is particularly suitable for corrosion conditions in urea synthesis plants.																					
PROPERTIES	<p>CEWELD® 316LMn offers excellent resistance to intergranular and wet corrosion at temperatures up to 350°C. Its corrosion resistance is comparable to low-carbon CrNiMo(Mn,N) steels and cast steel grades. The material is seawater resistant and exhibits good resistance to nitric acid, with a maximum selective attack of 200 µm. The weld metal is non-magnetic (Permeability in a field of 8000 A/m is 1.01 max.).</p> <p>To ensure the integrity of the weld and material properties, the following parameters must be observed:</p> <ul style="list-style-type: none"> ● Heat Input: Maximum 1.5 kJ/mm. ● Interpass Temperature: Maximum 100°C. ● Preheating: For surfacing (cladding), preheat to 150°C in accordance with the base material requirements. ● Stress Relieving: Can be performed at 510°C for up to 20 hours. ● Tempering: Before the final layer, tempering can be done at a maximum of 530°C. 																					
CLASSIFICATION	AWS	A 5.9: ER316LMn																				
	EN ISO	14343-A: G 20 16 3 Mn N L																				
	W.Nr.	1.3954 (~1.4455)																				
	F-nr	6																				
	FM	5																				
SUITABLE FOR	<p>ISO 15608: 8.1 Austenitic ≤ 19 % Cr 1.3941, 1.3945, 1.3948, 1.3951, 1.3952, 1.3953, 1.3954, 1.3955, 1.3964, 1.3965, 1.4315, 1.4401, 1.4404, 1.4411, 1.4429, 1.4435, 1.4438, 1.4439, 1.4449, 1.4455, 1.4561, 1.4571, 1.6902, 1.6903, 1.6905, 1.5662, X5 CrNiMo 17-12-2, X2CrNiMoN 22-15, X2CrNiMoN 18-14-3, X2CrNiMo 18-15, X8 CrMnNi 18-8, X2 CrNiMo 17-13-2, X2 CrNiMo 18-14-3, X2CrNiMoN 17-13-3, X6 CrNiMoTi 17-12-2, X2 CrNiMoN 17-13-5, X3 CrNiMo 18-12-3, X2 CrNiMo 18-15-4, X2 CrNiN 18-10, GX6 CrNi 18-10, GX5 CrNiNb 18-10, X5CrNiN19-9, X1CrNiMoTi18-13-2, 10CrNiTi18-10, (G)X4CrNi18-3, X2CrNiN18-13, X4CrNiMnMoN19-13-8, UNS S31600, S31603, S31635, S31700, S31703, S30453 AISI 316, 316L, 316Ti, 317, 317L, 304LN 3,5 – 5% Ni-Steel</p>																					
APPROVALS	CE																					
WELDING POSITIONS																						
TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>0.015</td> <td>0.5</td> <td>7</td> <td>20</td> <td>17</td> <td>3</td> <td>0.01</td> </tr> </tbody> </table>						C	Si	Mn	Cr	Ni	Mo	N	0.015	0.5	7	20	17	3	0.01		
C	Si	Mn	Cr	Ni	Mo	N																
0.015	0.5	7	20	17	3	0.01																
MECHANICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R_{P0,2} (MPa)</th> <th rowspan="2">R_m (MPa)</th> <th rowspan="2">A₅ (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th colspan="2">-196°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>430</td> <td>650</td> <td>35</td> <td colspan="2">50</td> <td>HRC</td> </tr> </tbody> </table>						Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness	-196°C		As Welded	430	650	35	50		HRC
Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness																
				-196°C																		
As Welded	430	650	35	50		HRC																
REDRYING	Not required																					
GAS ACC. EN ISO 14175	M11, M13, M12																					



CEWELD 316LMn



CEWELD 316LMn

316LMN 1,2MM

Packaging	KG/unit	EanCode
BS-300	15	8720663424587