CEWELD 316LMn Tig

certilas® THE FILLER METAL SPECIALIST

TYPE

Tig filler metal for welding fully austenitic CrNiMnMo stainless steels and low temperature steels. (Type 19 12 3Mn, 1.4455)

APPLICATIONS

Particularly suited for corrosion conditions in urea synthesis plants for welding work on steel X 2 CrNiMo 18 12 and for over-lay claddings of Type 1.4455.. Well suited for joining and cladding applications with matching and similar austenitic CrNi(N) and CrNiMo(Mn,N) steels/cast steel grades.

PROPERTIES

Stainless steel with excelent resistance to intercrystalline corrosion and wet corrosion up to 350°C (662 °F). Corrosion-resistance is similar to low-carbon CrNiMo(Mn,N) steels/cast steel grades.Seawater resistant, good resistance to nitric acid, selective attack max. 200 µm.Non magnetic (permeability in field of 8000 A/m 1.01 max.).

CLASSIFICATION

AWS	A 5.9: ER316LMn
EN ISO	14343-A: W 20 16 3 Mn N L
W.Nr.	1.4455
F-nr	6
FM	5

SUITABLE FOR

ISO 15608: 8.1 Austenitic ≤ 19 % Cr
1.3941, 1.3945, 1.3948, 1.3951, 1.3952, 1.3953, 1.3955, 1.3964, 1.3965, 1.4315, 1.4401, 1.4404, 1.4411, 1.4429, 1.4435, 1.4438, 1.4439, 1.4449, 1.4561, 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

APPROVALS

CE

WELDING POSITIONS

TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo	N
0.02	0.55	7.5	0.01	0.01	20	16	3	0.01

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V	Hardness
				RT	
As Welded	440	620	35	120	HRc

REDRYING

Not required

GAS ACC. EN ISO 14175

I1

CEWELD 316LMn Tig

316LMN TIG 1,6 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663414984

316LMN TIG 2,0 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663415028

316LMN TIG 2,4 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663415066