Stainless solid wire

Classification

EN 12072-99 : W 20 16 3 Mn L / G 20 16 3 Mn L

General description

Solid wire for welding fully austenitic CrNiMnMo stainless steels and low temperature steels
Not susceptible for hot cracking

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar (100%)
GMAW	M12	Mixed gas Ar+ >0-5% CO_2
GMAW	M13	Mixed gas Ar+ >0-3% 02

Approvals

	TÜV
GTAW	+
GMAW	+

Chemical composition (w%), typical, wire / rod

C	Mn	Si	Cr	Ni	Mo	N
0.015	7	0.35	20	16	2.8	0.15

Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm²)	Tensile strength (N/mm²)	Elongation (%)	Impact ISO-V(J) -196°C
Typical values	GTAW	I1	AW	430	650	35	75
	GMAW	M12	AW	400	600	30	50

Materials to be welded

Steel grades			W.Nr.	ASTM/ACI	UNS
N-alloyed	EN 10088-1/-2	X2 CrNiN 18-10	1.4311	(TP)304LN	S30453
stainless		X2 CrNiMoN 17-11-2	1.4406	(TP)316LN	S31653
CrNi-and		X2 CrNiMoN 17-13-3	1.4429		
CrNiMo-steels		X2 CrNiMoN 17-13-5	1.4439	317LN	S31726
Austenitic	SEW 390	X2 CrNiMoN 22-15	1.3951		
anti-magnetic		X2 CrNiMoN18-14-3	1.3952		
steels		X2 CrNiMo 18-15	1.3953		
		X8 CrMnNi 18-8	1.3965		
Low temperature	SEW 685	GX6 CrNi 18-10	1.6902		
steels		GX5 CrNiNb 18-10	1.6905		
	EN 10028-4	12 Ni 14	1.5637		
		X12 Ni 5	1.5680		

Packaging

		Sizes (mm)	1.2	1.6	2.0	2.4
Process	Unit					
GTAW	2 and 10 kg tube				X	X
GMAW	15 kg spool BS300		X	X		

Other sizes and packaging on request