MIG 20/10T

Classification

AWS A5.9 : ~ER321
DMR 34.276 : X6 CrNiTi18
ISO 14343-A : G Z 19 9 Ti
AMS : 5689

Description & Applications

Solid wire for GMAW of stabilised stainless steels with Titanium like 321 and low carbon content stainless steels like 304L used at high temperature up to 800°C. Good intergranular resistant corrosion.

Main applications: Aeronautical industry.

Base materials:

Stainless steels for high temperature applications:

UNS	*Alloy*	*EN 10088*	*Material N°*
S30409	304H	X6CrNi18-11	1.4948
S30400	304	X5CrNi18-10	1.4301
S32100	321	X6CrNiTi18-10	1.4541
		X10CrNiTi18-10	1.6903
		X10CrNi18-8	1.4310

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Ti	P	S	N
Min		0.40		17.00	8.00			5x(C+N)			
Max	0.08	1.00	2.00	19.00	12.00	0.75	0.75-	0.80	0.040	0.030	0.10
Type	0.02	0.50	1.5	18.0	10.5	0.30	0.30	0.20	0.030	0.010	0.01

Ferrite Delong : ~6%

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	-	-	-	-	-
Max				-	-
Type	460	630	35	+20°C	110

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8 1.0 1.2 1.6	70 - 180 80 - 220 150 - 320 220 - 380	18 - 26 18 - 28 22 - 32 24 - 34	ISO 14175: M12 (Ar+0.5-5%CO_2) M13 (Ar+0.5-3%O_2) 15-20 l/min

Back shielding with Argon or Nitrogen gas or with copper backing support to avoid “back end” rust phenomena.

FT En-MN07-191118

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