MIG 21/10MA

Classification

ISO 14343-A : G Z 21 10 N

Description & Applications

High carbon content solid wire for GMAW of heat resisting stainless steels with similar chemical composition resisting to scaling and oxidation up to 1100°C. High creep resistance.

Main applications: Ovens, thermal equipment for heat treatment, chemical installations.

Base materials

Austenitic heat resisting steels

UNS	*Alloy*	*EN 10095*	*Material N°*
		X15CrNiSi20-12	1.4828
		X12CrNi22-12	1.4829
S30815	253MA	X8CrNiSiN21-11	1.4893
		X9CrNiSiNCe21-11-2	1.4835

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	Ce	N
Min													
Max	Not specified												
Type	0.08	1.5	0.50	21.0	10.0	0.10	0.10	0.01	0.020	0.005	0.05	0.04	0.15

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	-	-	-	-	-
Max	-	-	-	-	-
Type	450	650	38	+20°C	120

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.