MIG 25/20

Classification

AWS A5.9 : ER310 ISO 14343-A : G 25 20

Description & Applications

Solid wire for GMAW of similar austenitic stainless steels like 310. Also well adapted for welding of dissimilar steels like high temperature resistant steels and austenitic stainless steels. Good resistance against oxidation at high temperature up to 1000°C.

Main applications: Petrochemical industry, papers factory, ovens, boilers…

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co
Min	0.08	0.30	1.0	25.0	20.0			-			-
Max	0.15	0.65	2.5	27.0	22.0	0.5	0.5	-	0.03	0.02	-
Type	0.10	0.45	1.7	26.0	20.5	0.10	0.10	0.01	0.02	0.01	0.06

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	350	550	30	-	-
Max				-	-
Type	380	580	40	+20°C	170

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.