MIG 29/9

Classification

AWS A5.9 : ER312 ISO 14343-A : G 29 9

Description & Applications

High ferrite content solid wire for GMAW of dissimilar steels with an austenitic-ferritic stainless steel deposit. Well adapted for steels difficult to weld as tool steels, Mn steels, spring steels… Metal deposit highly resistant to cracks and easily machinable. Also suitable for buffer layers before hardfacing and for building up cutting tools.

Main applications: Heterogenous assemblies, buffer layer before hardfacing…

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co
Min		0.30	1.0	28.0	8.0			-			-
Max	0.15	0.65	2.5	32.0	10.5	0.5	0.5	-	0.03	0.02	-
Type	0.10	0.40	1.8	30.2	9.3	0.15	0.10	0.01	0.02	0.01	0.05

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	450	660	22	-	-
Max				-	-
Type	520	730	25	+20°C	80

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.