



MIG 11/3M

Classification

ISO 14343-A : G Z 12 3 MoV

AIR 9117 : Z12 CNDV12

Description & Applications

Solid wire for GMAW and repairing of steels with similar chemical composition like Z12CNDV12.

Main applications: Repairing of turbine blades.

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	V	P	S	N
Min	0.08		0.50	11.00	2.00	1.50	-	0.25			0.020
Max	0.15	0.35	0.90	12.50	3.00	2.00	-	0.40	0.035	0.025	0.040
Type	0.12	0.30	0.70	11.8	2.7	1.7	0.10	0.30	0.020	0.005	0.030

All Weld Metal Mechanical Properties*

	R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	Hardness (HB)
Min	780	930	14	286
Max		1130		331
Type	840	1020	19.5	295

* After PWHT at 1050°C/0h30/Air + 650°C/1h/Air

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8	70 - 180	18 - 26	ISO 14175: M12 (Ar+0.5-5%CO ₂) M13 (Ar+0.5-3%O ₂) 15-20 l/min
	1.0	80 - 220	18 - 28	
	1.2	150 - 320	22 - 32	
	1.6	220 - 380	24 - 34	