MIG 17/4CU

Classification

AWS A5.9 : ER630 ISO 14343-A : G Z 17 4 Cu

Description & Applications

Solid wire for GMAW of stainless steels with similar chemical compositions like 17-4PH, X5CrNiCuNb17-4-4, XAS.

Main applications: Aerospace, marine pump and turbine, Repairing of turbine discs, turbine blades.

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S
Min			0.25	16.00	4.5		3.25	0.15		
Max	0.05	0.75	0.75	16.75	5.0	0.75	4.00	0.30	0.03	0.03
Type	0.02	0.40	0.50	16.1	4.7	0.10	3.5	0.20	0.02	0.005

All Weld Metal Mechanical Properties*

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min		930	7	-	-
Max				-	-
Type	930	1030	10	-	-

* After PWHT at 1020-1050°C/1h, followed by a precipitation hardening at 610-630°C/4h

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