

Applications

Royalfil GS-42B is designed for welding of high strength, fine grained quenched & tempered steel like N-A-XTRA 70, USS T1, T1B etc. to meet low temperature toughness as well as down to - 50°C. It is also used for fabrication of earthmoving equipments, steel construction, crane plates and other similar application suitable for joining steels conforming to ASTM Grade C,D of SA-225/SA-225M, Grade A,B,C of SA-738/SA738M, all thickness range OF SA-612/612m ETC.

Characteristics on Usage

Royalfil GS-42B is low alloy basic flux cored wire depositing 2% Ni, 0.25% Cr & 0.5% Mo weld metal. The weld deposit is of radiographic quality with very low diffusible hydrogen and stable and smooth arc with good slag detachability. It is used for flat & horizontal welding with CO2 shield

Welding Positions

1G 2F

Recommended Stick Out

15 - 20mm

Shielding GasCarbon Dioxide (CO₂) shielding
Gas Flow :20-25 Lit / Min**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	P%	Cr %	Ni %	Mo %
Typical Values	0.05	1.75	0.45	0.018	0.25	2.00	0.50
Spec. Reqd.	0.15 Max	1.20-2.25	0.80 Max	0.030 Max	0.20-0.60	1.75 -2.60	0.20-0.65

Mechanical Properties Of Weld Metal

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	IMPACT (CVN) AT - 50 ° C (J)
Typical Values	820	730	20	50
Spec. Reqd.	760-900	680 Min	15 Min	27 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal	
	(A)	(V)
1.20	180-210	26-30
1.60	210-250	26-30

Packing

15 kgs. vaccum packed plastic spool.