

ROYALFIL GS 18.8.5

Applications :

For joining Manganese steel to dis-similar steels like stainless steels, carbon steel, alloy steel, difficult to weld steels & high alloys like Armour plates. Very good for repairing cracks in austenitic manganese steel casting, for laying buffer before hardfacing, surfacing manganese steel rails etc.

Characteristics on Usage :

Royalfil GS 18.8.5 is a Gas shielded Stainless Steel flux cord wire for all position welding with CO₂ shielding gas depositing radiographic quality weld metal with 18%Cr, 8%Ni, 5% Mn composition. Weld metal has excellent crack resistance, corrosion resistance, easily machinable & has excellent heat resisting properties up to 900°C

Welding Positions

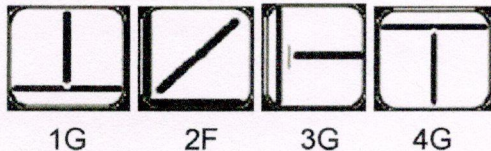
Recommended stick out

15-20 mm

Shielding Gas

Carbon Dioxide Co₂ shielding

Gas flow : 15-20 Lit / Min



Chemical Composition Of Weld Metal :

Element	C	Mn	Si	S	P	Cr	Ni	Mo
Typical Values	0.040	6.00	0.50	0.010	0.025	18.5	8.5	0.050
Spec. Reqd.	0.20 Max	5.0 – 8.0	0.90 Max	0.030 Max	0.040 Max	17.0 – 20.0	7.0 – 10.0	0.50 Max

Mechanical Properties Of Weld Metal :

Properties	UTS (N/mm ²)	Elongation (L=4d) %
Typical Values	620	42
Spec. Reqd.	560-670	40 min.

WELDING PARAMETERS: (DC + VE)

Diameter in mm	Flat & Horizontal		Vertical-Up		Overhead	
	A	V	A	V	A	V
1.20	160-210	26-30	120-210	22-26	180-220	26-30
1.60	190-250	26-30	160-250	21-27	210-270	26-30

Packing

15 Kgs. Vacuum packed plastic spool