

ROYALFIL GS 307 (E307T1-1)

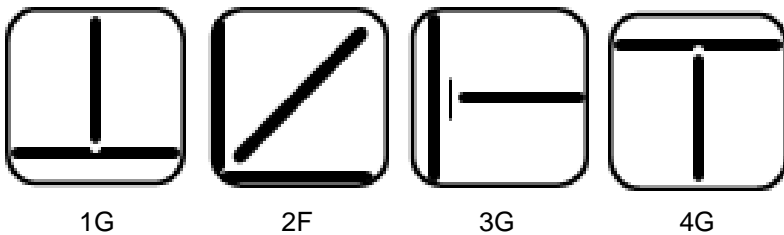
AWS A/ SFA 5.22 E307 T1-1

Applications

For joining Manganese steel to dissimilar steels like stainless steel, 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 – 307 is a Gas Shielded Steel flux cored wire for all position welding with Co2 shielding gas depositing radiographic quality weld metal with 19% Cr.,9.7% Ni.,4.0 Mn, 1 Mo composition. Weld metal has excellent crack resistance, corrosion resistance, easily machinable.

Welding Positions

1G

2F

3G

4G

Chemical Composition Of Weld Metal

Element	C%	Mn%	Si%	S%	P%	Cr %	Ni %
Typical Values	0.040	4.00	0.60	0.010	0.030	19.0	9.7
Spec. Reqd.ues	0.13 Max	3.0-4.75	1.0 Max	0.03 Max	0.04 Max	18-20.5	9-10

Mechanical Properties Of Weld Metal

Property	U.T.S. (N/mm ²)	ELONGATION (L = 4d) %
Typical Values	650	36
Spec. Reqd.	590 Min	30 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal	Flat & Horizontal	Vertical - Up	Vertical - Up	Overhead	Overhead
	(A)	(V)	(A)	(V)	(A)	(V)
1.20	160-210	26-30	120-160	22-26	150-180	26-30
1.60	190-250	26-30	160-200	22-27	180-210	26-30

Packing

12.5 kgs. vacuum packed plastic spool.