

# ROYALFIL GS 307 (E307T1-1)

AWS A/ SFA 5.22 E307 T1-1 EN ISO 17633 A T189MnMoRC1

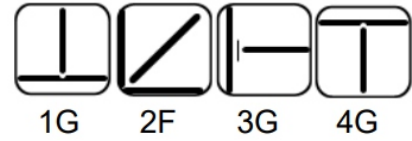
## Applications

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 Co<sub>2</sub> 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



## Recommended Stick Out

15-20mm

## OutShielding Gas

Carbon Dioxide (CO<sub>2</sub>) Shielding  
Gas Flow : 15-20 Lit / Min

FLUX CORED WIRE : STAINLESS STEEL

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%
0.13 Max	3.0-4.75	1.0 Max	0.030 Max	0.040 Max	18-20.5
NI%	Mo%	Cu%			
9-10.5	0.5-1.5	0.75 max			

## Mechanical Properties Of Weld Metal

U.T.S. (N/mm <sup>2</sup> )	ELONGATION. ( L = 4d ) %
590-650 Min	30-36 Min

## Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal (A)	Flat & Horizontal (V)	Vertical - Up (V)	Vertical - Up (V)	Overhead (V)	Overhead (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

15 kgs. Vacuum packed plastic spool