

# ROYALFIL GS 106 (E312T1-1)

AWS A / SFA 5.22 E312T1-1 EN ISO 17633 A T299RC1

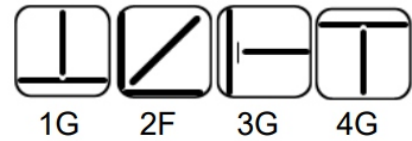
## Applications

Royalfil-GS-106 is suitable for the welding of difficult to weld steel like spring steels. Cast steels, tool steels, high speed steels, case hardening steels, manganese steels, steels of unknown chemical composition, dissimilar joints between stainless steel & high carbon steel, to weld cast alloys of similar composition. Also used for laying buffer before hardfacing

## Characteristics on Usage

Royalfil GS-106 a stainless steel flux core welding wire for all position welding with CO<sub>2</sub> gas shielding. It gives the 30% Cr and 9% Ni weld deposit which has excellent oxidation resistance. The weld metal has a two phase structure with substantial amount of ferrite in austenitic matrix. Deposited weld metal is highly resistance to cracks & fissures. Weld metal is of radiographic quality.

## Welding Positions



## Recommended Stick Out

15-20mm

## OutShielding Gas

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

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%
0.15 Max	0.5-2.5	1.0 Max	0.030 Max	0.040 Max	28.0-32.0
Ni%	Mo%	Cu%			
8.0-10.5	0.75 Max	0.75 Max			

## Mechanical Properties Of Weld Metal

U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )
660-750 Min	22-25 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	180-220	26-30
1.60	190-250	26-30	160-200	21-27	180-210	26-30

## Packing

15 kgs. Vacuum packed plastic spool