

ROYALFIL GS - 413 (E410T0-1)

AWS A /SFA 5.22 E 410T0-1

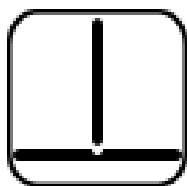
Applications

Welding of martensite stainless alloys of 13 % Cr type. It is used for surfacing of seraling faces of valves for gas, water & steam piping. Hard surfacing of continuous casting roll of steel plants, valves etc.

Characteristics on Usage

Royal Fil GS - 413 is a martensitic type Gas Shielded flux cored welding wire with 100% Co2 which are commonly used for hard surfacing of steel mill rolls, valve component of similar alloys. The weld metal is resist to corrosion, erosion or abrasion & resist to high temperature microstructure stability, thermal fatigue & cracking, eliminate ferrite in the microstructure.

Welding Positions



1G



2F

Chemical Composition Of Weld Metal

Element	C%	Mn%	Si%	S%	P%	Cr %	Ni
Typical Values	0.045	0.55	0.35	0.009	0.020	11.75	0.5
Spec. Req'd.	0.12 Max	1.20 Max	1.00 Max	0.030 Max	0.04 Max	11.00-13.50	0.60

Mechanical Properties Of Weld Metal

(After PWHT at 732-760°C for 1 Hr), Hardness on 2nd layer is 28-32 HRC.

Property	U.T.S. (N/mm ²)	ELONGATION (L = 4d) %
Typical Values	575	24.5
Spec. Req'd.	520 Min	20 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal (A)	Flat & Horizontal (V)
1.20	160-210	26-30
1.60	190-250	26-30

Packing

12.5 kgs. vacuum packed plastic spool.