

ROYALFIL GS - 2553 (E2553T1-1)

AWS A / SFA 5.22 E2553T1-1 EN ISO 17633 A T2594CuNLRC1

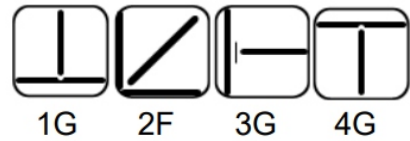
Applications

Royalfil GS- 2553 is used for welding of duplex stainless steels with 25% Chromium. Also used for joining of Duplex steels to mild steels, cladding of duplex stainless steel weld metal on carbon steel / low alloy steel. Used for piping in gas & oil industry, off-shore platforms, chemical and petrochemical plants, pulp/paper and textile industries, welding of duplex stainless steels 1.4417, 1.4460, 1.4462, 1.4515, 1.4517

Characteristics on Usage

Royalfil GS- 2553 is a Duplex stainless steel fluxcored welding wire for welding with Co₂ shielding gas. The nominal combination of the weld metal is 25.5% Cr, 9.5% Ni, 3.4% Moly, 2% Cu and 0.18% N. The microstructure of the weld deposit consists of a mixture of austenite and ferrite. Because of two phase microstructure, this alloy is one of the family of duplex stainless steel alloys. Addition of Copper improves corrosion resistance in sulphuric acid media and potentially increases strength and wear resistance. Welding of duplex stainless steel should be made with low heat input. Weld metal is of radiographic quality

Welding Positions



Recommended Stick Out

15-20mm

OutShielding Gas

Carbon Dioxide (CO₂) Shielding
Gas Flow : 15-20 Lit / Min

Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%
0.04 Max	0.5-1.50	0.75Max	0.030 Max	0.040 Max	24-27
Ni%	Mo%	Cu%	N%		
8.5-10.5	2.9-3.9	1.5-2.5	0.1-0.25		

Mechanical Properties Of Weld Metal

U.T.S. (N/mm ²)	ELONGATION. (L = 4d) %
760-850 Min	15-20 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

15 kgs. Vaccum packed plastic spool