

ROYALFIL GS 317L (E317LT1-1)

AWS A / SFA 5.22 E 317LT1-1

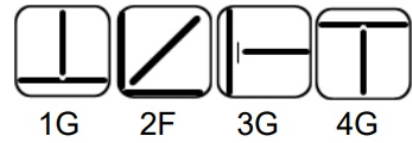
Applications

It is used for welding alloys of similar composition i.e E317 / E317L SS grades. Also suitable for welding of E316 / E316L SS grades to get benefits of higher Molybdenum to improve pitting resistance. Finds applications in chemical plant, paint, pulp paper, textile Industries, ship-building, nuclear plant & food processing.

Characteristics on Usage

Royalfil GS – 317L is an extra low carbon rutile coated all position stainless steel flux core welding wire with CO₂ gas shielding. It gives the weld deposit of 19% Cr, 13% Ni & 3.5% Mo etc. It contains higher level of Molybdenum for increased corrosion resistance compared to E316LT1-1 grade in high chloride environments. It runs smoothly & gives uniform weld metal deposit with easily slag removal. The weld metal is highly resistance to Inter-Granular Corrosion & is of radiographic quality with easy slag removal and low spatters.

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% |
|-----------|-----------|---------|-----------|-----------|-------|
| 0.040 Max | 0.50-2.50 | 1.0 Max | 0.030 Max | 0.040 Max | 18-21 |

| Ni% | Mo% | Cu% |
|-------|---------|----------|
| 12-14 | 3.0-4.0 | 0.75 max |

Mechanical Properties Of Weld Metal

| U.T.S. (N/mm ²) | ELONGATION. (L = 4d) % |
|--------------------------------|-----------------------------|
| 520-620 Min | 20-35 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