

GRITINOX 308

IDENTIFICATION

GRITINOX 308 E 308-17

CLASSIFICATION

AWS/SFA 5.4 E308-17

BS 2926 E19.9.R DIN 8556 E199R26

DESCRIPTION

A rutile flux coated electrode designed for welding of low carbon 18% Cr / 10% Ni, type 304 austenitic stainless steel. Operability is excellent with a low spatter arc, producing a smooth weld bead surface and self-releasing slag. The deposited weld metal is of X-ray quality.

WELD METAL ANALYSIS (RANGE) %

| C | Mn | Si | Cr | Ni | Cu | Mo | S | P |
|----------|-----------|-------------|---------|--------|----------|----------|----------|----------|
| 0.08 max | 0.5 - 2.5 | 0.35 - 0.90 | 18 - 21 | 09-Nov | 0.75 max | 0.75 max | 0.03 max | 0.04 max |

MECHANICAL PROPERTIES (RANGE)

| TS (MPa) | EL (%) (L=4D) | CVN Impact Value | |
|-----------|------------------|------------------|----------|
| | | Temp | Joules |
| 525 - 630 | 35 - 45 | 0°C | 60 - 100 |

TYPICAL APPLICATIONS

For welding ASTM/ASME 304, Cast CF3, CF8, food brewery and chemical process vessels, pipelines and nuclear engineering. Type 301, 302 and 303. Also suitable for welding petrochemical, power and pharmaceutical industries, paper processing plant.

CORROSION RESISTANCE

Good resistance to general and intergranular corrosion. Good resistance to oxidising acids.

MICROSTRUCTURE : Austenite with 3 to 9 FN (3-8% Ferrite) Typical 6FN.

ASME IX QUALIFICATION : QW-432 F-NUMBER 5, QW-442 A-NUMBER 8

REDRYING : 300°C / 2 hrs, max 5 cycles, 10 hr. total.

WELDING POSITION :



1G 2F 2G 3G 4G 5G

PACKING PARAMETERS

GWELD

| Size (mm) | Length (mm) | AMPS AC / DC (+) | Packing / Box (kg) | Packing / Box (Pcs) |
|-------------|-------------|------------------|--------------------|---------------------|
| 2.5 | 350 | 50 - 75 | 2 x 5 = 10 | 94 x 5 = 470 |
| 3.15 / 3.20 | 350 | 80 - 120 | 2 x 5 = 10 | 60 x 5 = 300 |
| 4 | 350 | 100 - 160 | 2 x 5 = 10 | 38 x 5 = 190 |
| 5 | 350 | 130 - 210 | 2 x 5 = 10 | 24 x 5 = 120 |