

Technical data sheet

011121MBA

Cored welding wire
TETRA V 317L-G**CLASSIFICATION**

| | |
|---------------------------------|--|
| ASME IIC SFA 5.22 / AWS A 5.22: | E317LT1-4 - E317LT1-1 |
| EN ISO 17633-A: | T Z 19 13 4 L P M21 1 / T Z 19 13 4 L P C1 1 |
| EN ISO 17633-B : | TS317L-F M21 1 / TS317L-F C1 1 |
| Equivalent Material number : | 1.4438 |
| ASME IX Qualification | QW432 F-N° 6 QW442 A-N° 8 |

DESCRIPTION

- Rutile flux cored stainless steel wire for gas shielded arc welding
- 19% chromium - 12% nickel - 3.5% molybdenum - low carbon deposit
- Attractive bead appearance, very good penetration and high productivity
- Excellent X-ray soundness
- Specifically designed for out-of-position welding
- Maximum productivity for completion of vertical welds
- Welded with classical economic Ar-CO₂ mixtures or CO₂

APPLICATIONS

TETRA V 317L-G is suitable for welding stainless steels with an alloy content between 16 to 21% Cr, 10 to 15% Ni and up to 3% Mo, stabilised and unstabilised types where enhanced resistance to pitting and acid corrosion is required.

Examples:

| AISI | UNS | Material number | EN Symbol |
|-------|--------|-----------------|---------------------|
| 316 | S31600 | 1.4401 | X5 CrNiMo 17-12-2 |
| 316L | S31603 | 1.4404 | X2 CrNiMo 17-13-2 |
| 316Ti | S31635 | 1.4571 | X6 CrNiMoTi 17-12-2 |
| 317 | S31700 | 1.4449 | X3 CrNiMo 18-12-3 |
| 317L | S31703 | 1.4438 | X2 CrNiMo 18-15-4 |
| 318 | S31640 | 1.4583 | X10CrNiMoNb 18-12 |

TYPICAL ALL-WELD METAL ANALYSIS

| C | Mn | Si | Cr | Ni | Mo | S | P |
|------|------|------|------|------|------|-------|-------|
| 0.03 | 1.40 | 0.80 | 19.5 | 13.0 | 3.50 | 0.008 | 0.020 |

Typical ferrite level: 7 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

| Rm [MPa] | Rp0.2% [MPa] | As [%] | CVN [J] |
|----------|--------------|--------|-----------|
| 520 | 350 | 20 | -60°C: 27 |

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

| Rm [MPa] | Rp0.2% [MPa] | As [%] | CVN [J] |
|----------|--------------|--------|-----------|
| 620 | 510 | 30 | -60°C: 40 |

SHIELDING GAS

M21 (Ar + 15 - 25% CO₂), M20 (Ar + 5% < CO₂ ≤ 15%) gas mixtures or C1 (CO₂) according to EN ISO 14175

OPERATING CONDITIONS

| Diameter [mm] | Current type | Current [A] | Voltage [V] | Stick-out [mm] | Gas flow rate |
|---------------|--------------|-------------|-------------|----------------|----------------|
| 1.2 | DC+ | 100 - 270 | 22 - 35 | 12 - 25 | 10 - 20 l/min. |

WELDING POSITIONS

All positions

PACKAGING

| Diameter | 1.2 mm | |
|------------|---------------------------------|-------|
| | EN ISO 544 – ASME IIC SFA-5.2 M | |
| Spool type | S200 | BS300 |
| Weight | 5 kg | 15 kg |

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.