

WELDTECH STAINLESS STEEL – 316L

Specification

AWS Specification: AWS A5.4 E316L-16

JIS Specification: D316L-16

Other Specification: DIN ETi1912326

Description

- Weldtech WEL316 is designed for welding 18/8 Mo stainless steels and AISI types 316, 316L, and 317 austenitic stainless steel
- Austenitic and corrosion-resistant weld deposit of low carbon ensures intergranular carbide precipitation.
- Good resistance to pitting and crevice corrosion.
- High deposition rate and efficiency.
- Self-peeling slag.
- Finished welds exhibit a slightly concave shape with good cosmetic appearance that requires little to no post weld dressing.
- Ideal for both fillet and butt-welding applications.

Application

- General stainless-steel fabrication
- Repair of textile and other dyeing equipment
- Paper tanks, chemical tanks, pickling tanks, salt processing equipment, and alkali tanks

Remarks

- Clean the joints of all foreign material.
- Proceed with the lowest current possible and a short arc without allowing coating to touch molten spool.
- Short and intermittent welding is preferred to avoid overheating and distortion.
- Avoid excessive weaving.
- Use dry electrodes to prevent blow holes in deposit.
- If necessary, re-dry at 200°C for two hours before use.

Technical Data

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL DEPOSITS (%):

| C | Si | Mn | P | S | Ni | Cr | Mo |
|------|------|------|-------|-------|-------|-------|------|
| 0.02 | 0.68 | 1.67 | 0.022 | 0.010 | 12.25 | 19.12 | 2.27 |

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL DEPOSITS:

| Yield Point N/mm ² (KSI) | Tensile Strength N/mm ² (KSI) | Elongation % |
|-------------------------------------|--|--------------|
| 441 (64) | 567 (82) | 45 |

SIZE AND RECOMMENDED CURRENT RANGE: AC, DC (+)

| ORDER CODE | | WEL316-25 | WEL316-32 |
|------------------------|---------------------|-----------|-----------|
| DIAMETER x LENGTH (mm) | | 2.5 x 300 | 3.2 x 350 |
| Current Amp | Flat | 40 - 80 | 60 - 130 |
| | Vertical & Overhead | 40 - 80 | 60 - 130 |

Welding Positions: ALL POSITIONS EXCEPT VERTICAL DOWN

Approvals: ABS, CE