



CHG-308L/ER308L

Stainless Steel TIG Rod

AWS A5.9 ER308L

BS EN ISO 14343-A-W (19 9 L)

BS EN ISO 14343-B-SS308L

JIS Z3321 Y308L

GB/T 4241 H03Cr21Ni10Si

Welding Position: F, H, HF, OH, V

Type of Current: DCEP

Features & Applications

CHG-308L is an extra-low carbon stainless steel TIG rod and its weld metal has excellent performance of resistance to intercrystalline corrosion. It is widely used for welding structures of facilities of synthetic fibre industry, fertilizer industry and petrochemical industry that fabricated by 00Cr19Ni10 stainless steel. Also it can be used for welding 0Cr18Ni10Ti stainless steel structures, which work temperature below 300°C.

Chemical Composition of the Wire (%)

| | C | Mn | Si | S | P | Ni | Cr | Mo | Cu |
|----------|-------|---------|-----------|-------|-------|----------|-----------|-------|-------|
| Standard | ≤0.03 | 1.0-2.5 | 0.30-0.65 | ≤0.03 | ≤0.03 | 9.0-11.0 | 19.5-22.0 | ≤0.75 | ≤0.75 |
| Typical | 0.024 | 1.72 | 0.48 | 0.010 | 0.018 | 9.83 | 19.76 | 0.006 | 0.06 |

Mechanical properties of Deposited Metal (AW)

| | Tensile Strength Rm (MPa) | Elongation A4 (%) | Shield Gas |
|----------|------------------------------|----------------------|----------------|
| | | | 100%Ar |
| Standard | ≥520 | ≥35 | Purity ≥99.99% |
| Typical | 560 | 45 | |

Notice:

- 1) Keeping the package of the wire in good condition before welding.
- 2) To avoid welding defect the shield gas should be pure particularly no moisture in it.
- 3) The surfaces to be welded must be cleaned away impurities of oil contamination, moisture and so on.
- 4) The flow rate of the shield gas should be 9L-14L/minute when the current is 100A-120A and it should be 14L-18L/minute when the current is 200A-300A. The extension of tungsten electrode should be 3mm-5mm and arc length 1mm-3mm. wind speed ≤1.0m/s. It is better to fill shield gas on the backside of welded joint in welding.
- 5) Mechanical properties, crack resistance and appearance of the weld metal are affected by heat input in welding so should pay more attention to it.
- 6) The welding conditions mentioned above for reference only and it is better to do a welding procedure qualification according to project before put it into formal welding.