| Standard: AWS A 5.9 YB/T5092 | Chemical Composition % | | | | | | | | | | | |
|------------------------------------|---|----------|--------------|--------|------|---------------------------------|-----------|-------|-----------|-----|----------------------|-------|
| | С | Mn | Si | Cr | | Ni | i | P | S M | | [o | Cu |
| Grade ER316LSi | ≤ 0.03 | 1.0-2.5 | 0.65 – 1.0 | 18 – 2 | 20 | 11 – | 14 | ≤0.03 | ≤0.03 | 2 - | - 3 | ≤0.75 |
| Туре | Spool (MIG) | | | | | Tube (TIG) | | | | | | |
| Specification (MM) | 0.8, 0.9, 1.0, 1.2, 1.6, 2.0 | | | | | 1.6、2.0、2.4、3.2、4.0、5.0 | | | | | | |
| Package | S100/1kg S200/5kg S270,S300/15kg-20kg | | | | | 5kg/box 10kg/box length:1000MM | | | | | | |
| Mechanical | Tensile Strength Mpa | | | | | Elongation after fracture A (%) | | | | | | |
| Properties | ≥ 530 | | | | | ≥ 30 | | | | | | |
| Diameter (MM) | 0.8 | 1.0 | 1.2 | | | 1.6 | 2.0 | | 2.5 | | 3.2 | |
| Current (A) | 70 ~ 150 | 100 ~ 20 | 00 140 ~ 2 | 220 | 50 - | ~ 100 | 100 ~ 200 | | 200 ~ 300 | | 300 ~ 400 | |
| Application | ER316LSi, also known as H03Cr19Ni12Mo2Si1 stainless steel wire, is an ultra-low of stainless steel MIG welding material, and its deposited metal is ultra low carbon type. Becaute addition of Si, the fluidity is better, the shape is more beautiful, the arc is stable, the spalittle, and the excellent comprehensive mechanical properties are obtained. Welding 18Cr-12Ni-Mo2 ultra-low carbon stainless steel has good welding process and resistance to intergranular corrosion. Because of the increase of Si content, welding operation fluidity of molten gold are better. | | | | | | | | | | scause of spatter is | |
| Notice | Oil, dirt and rust on the welding wire surface should be removed before welding. Surface impurities such as oil, rust and water should be thoroughly removed in the welding place, so as to prevent blowhole, crack and so on during welding. The surface of the groove and its surroundings should be polished with metallic gloss. In order to obtain good mechanical properties of welding seam, suggest protect gas Ar+2%O2 and shield gas flow rate 20-25 L/min for MIG welding. For TIG welding,suggest protect gas pure Ar and shield gas flow rate 8-15 L/min ,Arc length 1~3 mm; Length of the tungsten pole is about 3~5 mm; wind speed limit ≤ 1.0 m/s, argon protection at the back of welding area . In the welding process, the welding line energy directly affects the mechanical properties and crack resistance of weld metal, and should be paid more attention to. The above welding methods, conditions and specifications are for reference only. Users should | | | | | | | | | | | |
| | evaluate the welding process according to their own welding characteristics before using the welding wire for the formal product welding. | | | | | | | | | | | |