HTS-316L

Austenite/Mixed gas

Conform to GB/T 17853 TS 316L-F M21 1
Equal with AWS A5.22 E316LT1-4
A5.22M E316LT1-4
EN ISO 17633-A:T 19 12 3 L P M21 1
EN ISO 17633-B:TS 316L-F M21 1

Description: Mo content is higher and corrosion resistance is excellent. There is an appropriate amount of ferrite in the weld metal, and the crack sensitivity is low. Excellent welding performance, stable arc, less spatter, good deslagging, show excellent welding performance.

Application: Applicable to petrochemical industry, pressure vessel, food machinery, medical machinery, fertilizer and other related industries, 18% 12% Cr - Ni - 2% Mo stainless steel welding (SUS316, SUS316L), etc.

Chemical composition of deposited metal（Mass fraction）

Alloy	C	Mn	Si	Cr	Ni	Mo	P	S	Cu
GB	0.04	0.5-2.5	1.0	17.0-20.0	11.0-14.0	2.0-3.0	0.04	0.03	0.50
AWS	0.04	0.5-2.5	1.0	17.0-20.0	11.0-14.0	2.0-3.0	0.04	0.03	0.75

Mechanical properties of deposited metal: （Heat treatment 605℃X1h）

Mechanical property	Yield/MPa	Tensile/MPa	Elongation %	Impact J/℃
GB	-	≥485	≥30	-
AWS	-	≥485	≥30	-

Recommended welding parameters （DC^+）（All-position welding）

Size/mm	1.2	1.6
Voltage V	20-34	24-36
Current A	120-260	200-300
Dry extension/mm	15-20	18-25
Gas flow l/min	15-25	15-25

Notices:

1.Rust, oil, water and other impurities must be removed from the weldment before welding;

2.Shielding gas: 75-80%Ar+CO_2;

3.Pre-heat and Interpass temp: 16-100℃;

4When welding in a windy place, a wind barrier should be used to avoid the generation of pores when the wind is strong.