

STAINLESS STEEL

GLST-316L ELECTRODE

Classification : AWS A5.4 E316L-16

EN E 19 12 3 LB 11

ISO 3581 B-ES316L-16

Characteristics and Application:

GLST-316L is a stainless stick electrode for all-position welding, containing low C-18Cr-12Ni-2% Mo in the deposited metal. It has a good impact toughness at -196°C. Its weldability is featured by stable arc, less spatter, smooth bead appearance, easy slag detachability and great radiographic test result. It is suitable for the welding of petroleum, chemical engineering and cryogenic temperature service, such as 00Cr17Ni14Mo2(SUS316L).

Welding Postion :



Chemical Composition of Deposited Metal :

Element wt%	C	Mn	Si	Cr	Ni	Mo	P	S	Cu
AWS	0.04	0.5-2.5	1.00	17.0-20.0	11.0-14.0	2.0-3.0	0.040	0.030	0.75
Type Value	0.04	1.48	0.70	19.10	11.15	2.58	0.014	0.012	0.23

Mechanical Property of Deposited Metal :

	Yield Stess MPa	Tensile Strength MPa	Elongation %	Charp V-notch J/°C
AWS	-	490	30	-
Typical	-	558	44	-

Notes on Usage:

1. Dry the stick electrodes at 300-350°C for one hour before welding. Do not dry them twice to avoid detachment of covering.
2. Be sure to remove moisture, oil and rust on the base metal.
3. Try to reduce heat input.
4. Choice of current: $I = (25 \sim 40) \times D$; D means diameter of stick electrode.
5. Keep short arc length when welding to prevent the crack.
6. Control interpass(layer) temperature to make it under 100°C.
7. Remove the slag after each welding process.
8. When using AC, the stick electrode will become hot easily and there will be more spatter during welding process. The situation can be improved by using

Sizes and Recommended Parameters:

Diameter and Length/mm		2.0×350	2.6×350	3.2×350	4.0×350	5.0×350
Current/Amp	F	30-55	50-85	80-120	100-150	140-180
	V, OH	20-50	45-80	70-110	90-135	-