TS-317/317L

AWS A5.4 E317/317L-16
EN ISO 3581-B-ES317-16/
EN ISO 3581-B-ES317L-16
JIS Z 3221 ES317L-16

Characteristics and Applications:

The weld metal of TS-317/317L is a 19%Cr-12%Ni-3%Mo stainless steel containing proper quantity of ferrite. It provides good corrosion resistance to sulfuric acid or organic acid due to its Mo content. also In addition, low content of carbon enhances the resistance of inter-granular corrosion. It is suitable for welding of chemical vessels, seamless pipe, steel tube, steel strip, casting and AISI 317/317L steel.

Notes on usage:

1. Clean up the contaminations on the base metal, groove and pass to pass with stainless steel brush.
2. Maintain short arc length. Moving range should be controlled within 2.5 times of the wire's dia when you are welding with weave method.
3. Dry the electrodes at 250~300℃ for 60 minutes before using. Take out consumables for half day consumption and keep in the environment at 100~150℃ during welding process.
4. Use lower current to prevent from cracking and minimize base metal dilution.

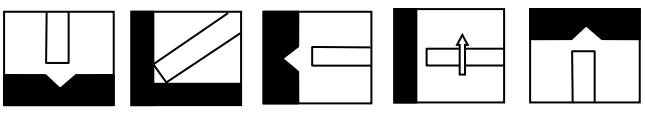
Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Cr	Ni	Mo
AWS	≦0.04	0.5-2.5	≦1.00	≦0.04	≦0.03	18.0-21.0	12.0-14.0	3.0-4.0
EN ISO	≦0.04	0.5-2.5	≦1.00	≦0.04	≦0.03	18.0-21.0	12.0-14.0	3.0-4.0
Typical value	0.03	1.30	0.42	0.035	0.010	19.60	12.5	3.8

Typical mechanical properties of weld metal:

	Tensile strength MPa(ksi)	Elongation %
AWS	≧520(75)	≧30
EN ISO	≧520(75)	≧25
Typical value	580(84)	40

Welding position:



Sizes and recommended current range (AC or DC＜+＞):

Diameter (mm)		2.6	3.2	4.0	4.8
Length (mm)		300	350	350	350
Amps	F	60-90	80-130	130-170	180-210
	V&OH	50-70	70-110	100-130	-

COVERED ELECTRODES

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