

Cryo-Shield 316L

Cryo-Shield 316L is all position flux cored wire adaptable to a variety of shop and field erection applications. Designed for cryogenic applications where good weld metal toughness is required. Cryo-Shield 316L was developed for the welding of type 316, 316L austenitic stainless steels for the low temperatures. It contains molybdenum which resists pitting corrosion induced by sulphuric and sulphurous acids, chlorides and cellulose solutions. Cryo-Shield 316L was designed titania based slag system with excellent slag removal so they can have high welding speeds because of possible welding in all position in high current area.

Specifications

Classifications	JIS Z3323 : TS316L-FB1 AWS A5.22 : E316LT1-1(4)
Approvals	JIS NK LR BV DNV KR

Approvals are based on factory location. Please contact ESAB for more information.

Typical Tensile Properties

Yield Strength	Tensile Strength	Elongation
100% CO₂		
392 MPa (57 ksi)	529 MPa (77 ksi)	50 %

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
100% CO₂	
-196 °C	40 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Ferrite FN
100% CO₂								
0.026	1.50	0.70	0.008	0.025	12.4	17.5	2.20	3-8