

# M-316L

For austenite stainless steel (Low carbon, 18%Cr-8%Ni STS))

## Classifications

EN ISO 14343-B:2009	: SS 316L
AWS A5.9-2012	: ER316L
JIS Z 3321:2013	: YS316L
KS D 3696:2006	: STSY316L

## Approvals – M13 (Mix Gas)

BV	: UP
DNV	: NV 316 L
KR	: RY316LG(M1)
Other	: TUV

## Description

- MIG welding of 18%Cr-12%Ni-2%Mo austenite stainless steels (AISI STS 316)
- Various applications of petrochemical industrial apparatus
- WRC 1992 FN 3-8 (Chemical composition of wire)

## Welding positions



## Polarity & shielding gas

- DCEP (DC+)
- Ar + 1-3% O<sub>2</sub> (15 – 25 l/min)
- Ar + 1-5% CO<sub>2</sub> (15 – 25 l/min)

## Typical chemical composition of all-weld metal (%)

C	Si	Mn	Ni	Cr	Mo
0.02	0.51	1.61	11.81	18.78	2.49

## Typical mechanical properties of all-weld metal

	Yield Strength	Tensile Strength	Elongation	Impact Value (J)	
	(MPa)	(MPa)	(%)	0 °C	-196 °C
AWS A5.9		Min. 490	Min. 30		
EN ISO 14343	Min. 320	Min. 510	Min. 25		
Example	394	556	41	113	62