

Descriptions

MIG EQ316LSi is ideal for welding sheets and pipes of chemical vessels, such as AISI 316, 316L steel. Its weld metal is austenite structure with 18%Cr-12%Ni-2%Mo-Si. This product has superior corrosion resistance to acetic acid, phosphoric acid, acetate and phosphorite due to additional Mo content. It also has a better weldability and puddle fluidity than **MIG EQ316L**.

Shielding gas: Ar+1-2%O₂ or Ar+1-2%CO₂

Notes on usage:

1. Use Ar blend with 1~2%O₂ for high current, spray transfer welding .
2. Use Ar blend with 1~2%CO₂ for low current, short-circuit transfer welding.
3. For welding dissimilar metals, please refer “Table: Dissimilar Metal Welding”.

Classification

AWS A5.9 ER316LSi JIS Z3321 YS316LSi EN ISO 14343-A G19123LSi

Typical Chemical Composition (All Weld Metal), weight %

C	Si	Mn	P	S	Cr	Ni	Mo		
0.021	0.74	1.62	0.012	0.009	19.23	12.33	2.31		

Mechanical Properties (All Weld Metal, as welded)

Shielding gas: Ar+1%O₂

Yield Strength, N/mm²	400
Tensile Strength, N/mm²	580
Elongation, %	40
Charpy V-Notch @ 0°C, J	

Operating Data (DC+)

Diameter	Ar+1-2%CO ₂	Ar+1-2%O ₂
0.8 mm	40 – 120	160 – 210
0.9 mm	60 – 140	170 – 260
1.0 mm	80 – 160	180 – 280
1.2 mm	100 – 210	200 – 300
1.4 mm	-	210 – 320
1.6 mm	-	220 – 330