

Descriptions

MIG EQ309LSi is ideal for welding dissimilar metals (carbon steel and stainless steel). Its weld metal is austenite structure with low carbon 24%Cr-13%Ni. It has smooth beads, better weldability and puddle fluidity than **MIG EQ309L**. Also has superior crack and corrosion resistance due to moderate ferrite content.

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 ER309LSi

JIS Z3321 YS309LSi

EN ISO 14343-A G2312LSi

Typical Chemical Composition (All Weld Metal), weight %

C	Si	Mn	P	S	Cr	Ni			
0.021	0.76	2.35	0.012	0.010	23.88	13.76			

Mechanical Properties (All Weld Metal, as welded)

Shielding gas: Ar+1%O₂

Yield Strength, N/mm²	410
Tensile Strength, N/mm²	570
Elongation, %	39
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