

SAIW 1100

GB/T 10858 SAI 1100(Al99.0Cu)
AWS A5.10 ER1100/R1100
EN ISO 18273 SAI 1100(Al99.0Cu)

Characteristics: SAIW 1100 is pure aluminum welding wire with an Al content of 99.0% or more. This wire has excellent welding performance. It has good bead shape, stable arc, low spatter, excellent electrical and thermal conductivity, machining property, corrosion resistance and crack resistance.

Application: widely used in aluminum alloy structure welding of power facilities, chemical equipment, pipelines, metallurgy and railway locomotives, etc.

Wire chemical composition

Element (wt%)	Si+Fe	Cu	Mn	Zn	Al
Standard value	0.95	0.05-0.20	0.05	0.10	99.0
Typical value	0.90	0.12	0.03	0.05	margin

Mechanical properties of deposited metal



Testing status	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)
Standard value	-	-	-
As-Welded condition	95	35	24

Note: welding method: MIG; shielding gas: 100%Ar

Physical properties of deposited metal

Melting temperature range (°C)	Density (g/mm ³)
643-657	2.70

Shielding gases, polarity and welding position

Gas composition	Power polarity	Welding position
99.99%Ar、75%Ar+25%He、 50%Ar+50%He	 DCEP	 RA PB PC PD PE PF PG

Recommended welding specifications

Welding method	Wire diameter (mm)	Arc voltage (V)	Welding current (A)	Wire stick-out (mm)	Gas flow rate (L/min)
MIG	1.2	18-26	180-300	15-25	20
	1.6	20-28	200-400	15-25	20
	2.0	22-32	240-450	15-25	20
TIG	1.6-2.5		150-250		20
	2.5-4.0		200-320		20
	4.0-5.0		220-400		20