

SAIW 5356

GB/T 10858 SAI 5356[AlMg5Cr(A)]
AWS A5.10 ER5356/R5356
EN ISO 18273 SAI 5356[AlMg5Cr(A)]

Characteristics: SAIW 5356 is an aluminum magnesium alloy welding wire with a magnesium content of not more than 5%. It has excellent stress corrosion resistance, high strength and good forgability, which makes it suitable for welding or surfacing. It has excellent welding performance, beautiful and delicate weld, stable arc, and low spatter.

Application: Widely used in the welding of aluminum alloys related to sports equipment, locomotive cabinets, chemical equipment, military production, shipbuilding, aviation and other industries.

Wire chemical composition

Element (wt%)	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Standard value	0.25	0.4	0.10	0.05-0.20	4.5-5.5	0.05-0.20	0.10	0.06-0.20	margin
Typical value	0.20	0.4	0.08	0.12	4.8	0.07	0.08	0.10	margin

Mechanical properties of deposited metal



Testing status	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)
Standard value	-	-	-
As-Welded condition	265	150	20

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

Physical properties of deposited metal

Melting temperature range (°C)	Density (g/mm ³)
571-635	2.64

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