



AKZ

ALUMINIUM KOOHRANG ZAGROS

SECTION CATALOGUE



02

Aluminium welding wire — ER4043

سیم جوش آلومینیوم

AWS A5.10

EN ISO 18273

JIS Z 3232

OVERVIEW

AlSi5 filler wire for MIG & TIG.

Aluminium-silicon (AlSi5) solid filler wire for welding the heat-treatable 6000-series, the 3000-series and Al-Si cast alloys, drawn from our own alloy rod and supplied on spools and in cut lengths. The 5% silicon gives a fluid weld pool, low shrinkage and low crack sensitivity.

Classified to AWS A5.10 (ER4043), EN ISO 18273 (S Al 4043) and JIS Z 3232 (A4043); recommended welding parameters are grouped by wire diameter below.



APPLICATIONS


MIG / TIG welding
6000-series alloys
Castings & automotive
General fabrication

STANDARDS

AWS A5.10

EN ISO 18273

JIS Z 3232

2.1 · Classification & composition

AlSi 5 filler wire.

CLASSIFICATIONS

Specification	Designation
SFA / AWS A5.10	ER4043
EN ISO 18273	S Al 4043 (AlSi5)
JIS Z 3232	A4043

TYPICAL WIRE COMPOSITION (%)

Al	Si	Fe	Cu	Mn	Ti	Zn
94.81	5.00	0.14	0.02	0.01	0.01	0.01

Balance aluminium; single representative heat.

TYPICAL AS-WELDED PROPERTIES

Tensile MPa	Yield MPa	Elong. %
124	55	18

Typical as-welded values.

2.2 · Recommended welding parameters

Spray-transfer MIG; grouped by wire diameter.

Wire diameter	Current A	Voltage V
0.8 mm (0.030 in)	60–170	13–24
0.8 mm (0.030 in)	100–130	18–22
0.8 mm (0.030 in)	125–150	20–24
0.9 mm (0.035 in)	60–170	13–24
0.9 mm (0.035 in)	85–120	20–23
0.9 mm (0.035 in)	125–150	20–24
0.9 mm (0.035 in)	170–190	21–26
1.0 mm (0.040 in)	90–210	15–26
1.2 mm (0.047 in)	125–150	20–24
1.2 mm (0.047 in)	140–260	20–29
1.2 mm (0.047 in)	170–240	24–28
1.2 mm (0.047 in)	180–210	22–26
1.6 mm (1/16 in)	190–260	21–26
1.6 mm (1/16 in)	190–350	25–30
1.6 mm (1/16 in)	240–300	22–27
1.6 mm (1/16 in)	260–310	22–27
1.6 mm (1/16 in)	280–320	24–28
1.6 mm (1/16 in)	290–340	26–30
2.4 mm (3/32 in)	280–360	26–30
2.4 mm (3/32 in)	280–400	26–31
2.4 mm (3/32 in)	300–400	26–32
2.0 mm (5/64 in)	TK	TK

2.0 mm (5/64 in) size supplied without listed parameters in the source.

EXPLORE THE FULL RANGE

01 **Aluminium & alloy rod** مفتول آلومینیوم و آلیاژی

04 **AAAC** هادی تمام آلومینیومی آلیاژی

06 **ACSR-AW** هادی با مغز فولادی روکش آلومینیوم

08 **Messenger** (مسنجر) هادی مهار آلیاژی

03 **AAC** هادی تمام آلومینیوم

05 **ACSR** هادی آلومینیوم با مغز فولادی

07 **OPGW** سیم محافظ نوری

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