

# ROALLOY-4043

ALUMINIUM FILLER WIRE WITH 5% SILICON FOR HIGHER STRENGTH WELDING

BASIC ALLOY: AL, SI, MN  
AWS/SFA-5.10: ER4043  
UNS A94043

## KEY FEATURES:

Roalloy-4043 is a 5% Silicon, all position aluminum welding wire. It is one of the oldest and most widely used welding and brazing alloys. Silicon with this alloy gives improved wetting action yielding a less crack sensitive bright weld bead.

## APPLICATIONS

- It can be used to weld heat treatable alloys such as the 6XXX base metals and cast alloys.
- It can be found in many common welding applications, such as bicycles, trucks, trailers, and automotive

## SHEILDING GAS:

- Welding with 100% Ar gas

## WELDING NOTE:

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded

## CHEMICAL COMPOSITION:

Si	Mn	Mg	Cr	Al	Others
4.50-6.00	0.05 max.	0.050 max	00.30 max	Balance	0.15
Fe	Zn	Ti			
0.80 max.	0.10 max	0.20 max			

## MECHANICAL PROPERTIES:

UTS (N/mm )	Proof strength (N/mm <sup>2</sup> )	EL % (l=5d)
15-23	7-19	5-12

## WELDING POSITION



## DIEMENSION, CURRENT CONDITION & PACKING DATA (FOR MIG WELDING)

Size (mm)	Size (inch)	Current Condition (DC+)	Voltage (V)	Gas Flow Rate L/min	Spool packing 12.5 kg	Spool packing 15 kg	Drum packing 100/200kg
0.80	0.031	70-220	16-24	10-20	✓	✓	X
1.20	0.047	150-300	24-34	15-25	✓	✓	✓
1.60	1/16"	150-350	28-36	15-30	✓	✓	✓

## DIEMENSION, CURRENT CONDITION & PACKING DATA ( FOR TIG WELDING)

Size (mm)	Size (inch)	Length (mm)	Length (Inch)	Current Condition (DC-)	Voltage (V)	Tube packing 5 kg	Box packing 20 kg
1.60	1/ 16"	1000	36"	40-80	10-16	✓	✓
2.0	5/ 64"	1000	36"	50-100	12-18	✓	✓
2.4/ 2.5	3/ 32"	1000	36"	60-120	14-20	✓	✓
3.2	1/ 8"	1000	36"	100-150	16-24	✓	✓