

# ROALLOY-5183

ALUMINIUM FILLER WIRE WITH 5% MAGNESSIUM  
FOR HIGHER STRENGHT WELDING

BASIC ALLOY: AL, MG, MN  
AWS/SFA-5.10: ER5183

## KEY FEATURES:

ROALLOY-5183 is similar to ER5356 with a 5% magnesium aluminum fillerly used on similar base metal as the ER5356, but may give higher strengths on such base metals like 5083 and other magnesium-containing base metals. with 0.5-1.0% manganese as well as chromium and titanium.

## APPLICATIONS

- Marine Components
- Drilling Rigs
- Cryogenics
- Railroad Carss
- Unfired Pressure /vessels

## 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
0.40	0.5-1.00	4.30-5.30	0.05-0.20	Balance	0.15
Fe	Zn	Ti	Cu		
0.40	0.25	0.15	0.10		

## MECHANICAL PROPERTIES:

UTS (N/mm )	Proof strength (N/mm <sup>2</sup> )	EL % (l=5d)
275-330	125-225	12-16

## 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	✓	✓