

# SuperArc® Orbital TIG L-56® N

Mild Steel • AWS ER70S-6

## Key Features

- ▶ Q2 Lot® - Certificate showing actual wire composition available online
- ▶ Available as Batch Managed Inventory
- ▶ “N” Designator - design modified to meet properties after stress relief
- ▶ A PLW product which has been treated to minimize weld defects that can be seen in the use of MIG wires for the automatic TIG process.
- ▶ Provides a consistent and exceptionally stable arc for automatic TIG welding
- ▶ High levels of manganese and silicon deoxidizers tolerate medium to heavy mill scale surfaces
- ▶ Excellent toe-wetting provides optimal bead appearance
- ▶ Each spool is identified with AWS classification and LOT number

## Typical Applications

- ▶ Nuclear power plant construction and maintenance
- ▶ Power and process industry related piping
- ▶ Medium to heavy mill scale base material
- ▶ Robotic or hard automation

## Welding Positions

All

## ASME IX Qualification

ASME IX Qualification: QW432 F-No 6,  
QW442 A-No 1

## Conformances

AWS A5.18/A5.18M: 2005: ER70S-6  
ASME SFA-A5.18: ER70S-6

## DIAMETERS / PACKAGING

Diameter in (mm)	2 lb (1 kg) Plastic Spool 8 lb (3.6 kg) Master Carton	10 lb (4.5 kg) Plastic Spool
0.035 (0.9)	ED033840	ED033841

## WIRE COMPOSITION – As Required per AWS A5.18/A5.18M: 2005

	%C	%Mn	%Si	%S	%P
Requirements - AWS ER70S-6	0.06-0.15	1.40-1.85	0.80-1.15	0.035 max.	0.025 max.
Typical Results <sup>(3)</sup>	0.08-0.09	1.42-1.60	0.81-0.87	0.006-0.010	0.004-0.010
	%Cr	%Ni	%Mo	%V	%Cu (Total) <sup>(4)</sup>
Requirements - AWS ER70S-6	0.15 max.	0.15 max.	0.15 max.	0.03 max.	0.50 max.
Typical Results <sup>(3)</sup>	0.01-0.05	≤ 0.04	≤ 0.01	< 0.01	0.17-0.22

<sup>(1)</sup>Typical all weld metal. <sup>(2)</sup>Measured with 0.2% offset. <sup>(3)</sup>See test results disclaimer on pg. 12. <sup>(4)</sup>Copper due to any coating on the electrode plus the copper content of the filler metal itself, shall not exceed the stated 0.50% max. <sup>(5)</sup>CTWD (Contact Tip to Work Distance). Subtract 1/4 in (6.4 mm) to calculate Electrical Stickout. <sup>(6)</sup>Procedures in these areas are procedures for short circuiting mode using 100% CO<sub>2</sub>. When using 75% Argon, 25% CO<sub>2</sub> for short circuit transfer, reduce voltage by 1 to 2 volts.