



ADVANTAGE™ Solid Welding Wire



ADVANTAGE™ ER70S-6 solid welding wire is a solid, copper-coated welding wire for all position welding of carbon steel. Spools are level-wound and feature consistent feeding. The product is high in deoxidizers and is ideal for welding over moderate rust and mill-scale using Argon rich blends or 100% CO₂.

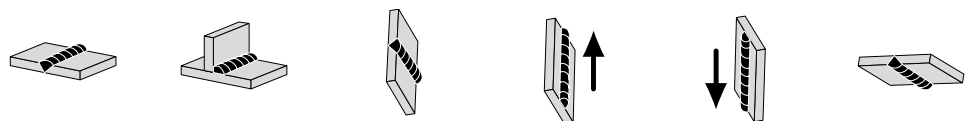
- Features and Benefits**
- Excellent feedability
 - Consistent feeding supports short circuit, globular, axial and pulsed spray transfer
 - Excellent wetting characteristics
 - High in deoxidizers
 - Smooth weld beads with uniform tie-in
 - Best choice for moderate rust and mill-scale

Classification	Specifications	Shielding gas
ER70S-6	A5.18/SFA5.18	STARGOLD™ family of gases and other argon rich welding blends. <ul style="list-style-type: none"> → STARGON CS gas blend → STARGON VS gas blend → 100% CO₂

Applications For single and multipass applications including:

- Machinery
- Shipbuilding
- Offshore Construction
- Bridges
- Trailers
- General Fabrication

Welding Positions



Typical Chemical Analysis
(As Welded)

Weld metal analysis	Filler metal	AWS specification
Carbon (C)	0.065	0.06-0.15
Manganese (Mn)	1.45	1.40-1.85
Silicon (Si)	0.83	0.80-1.15
Phosphorus (P)	0.012	0.025 Max
Sulphur (S)	0.013	0.025 Max
Copper (Cu)	0.011	0.50 Max

Typical Mechanical
Properties (As Welded)

Mechanical tests	Filler metal	AWS specification
Tensile Strength	83 ksi (575 Mpa)	73 ksi (500 Mpa Min)
Yield Strength	69 ksi (475 Mpa)	61 ksi (420 Mpa Min)
Elongation % in 2" (50 mm)	27%	22% Min

Typical Charpy V-Notch
Impact Test Results
(As Welded)

CVN Temperatures	Filler metal	AWS specification
Avg. at -20°F (-30°C)	60 ft-lbs (82 Joules)	20 ft-lbs (27 Joules Min)

Commonly Ordered
Part Numbers

Wire Type	Diameter (in.)	Packaging	Part number
ER70S-6	.035	44lb Spool	ADG035-E70S6-44
ER70S-6	.045	44lb Spool	ADG045-E70S6-44
ER70S-6	.052	44lb Spool	ADG052-E70S6-44
ER70S-6	.035	550lb Drum	ADG035-E70S6550
ER70S-6	.045	550lb Drum	ADG045-E70S6550

- Storage** → Store in a dry, enclosed environment
 → Store in its original, intact packaging

- Standard Diameters** → 0.035" (0.9 mm) – available in 44 lb box and 550 lb drum
 → 0.045" (1.2 mm) – available in 44 lb box and 550 lb drum
 → 0.052" (1.4 mm) – available in 44 lb box

Note: Other sizes available upon request.



ADVANTAGE™ solid welding wire is well protected against moisture – is paper lined and wrapped twice in plastic, with silica gel for moisture control.



Step 1
Opening the rugged, glued box



Step 2
Opening the outer plastic bag



Step 3
Opening the inner plastic wrap



Step 4
Opening the paper liner

Linde Inc.
 10 Riverview Dr, Danbury, CT 06810, USA
 Phone 800.225.8247, www.lindedirect.com