



## Standard Arc<sup>®</sup> S-3 AWS ER70S-3, EM13K

### DESCRIPTION

Standard Arc<sup>®</sup> S-3 is a copper-coated mild steel solid filler metal designed to extract maximum weld quality and user appeal from ER70S-3 wire. Careful attention to the manganese and silicon contents assure maximum deoxidation, flat bead profiles and low-spatter welds.

### CHARACTERISTICS

Standard Arc<sup>®</sup> S-3 Copper-Coated Welding Wire supports your GMAW operations.

- Cast of 35" (.88m) to 55" (1.3m) and Helix below 1" (25.4mm) improve feedability and provide accurate wire positioning.
- Manufactured according to ISO9001:2008 quality standards
- Excellent arc starts, arc stability and feedability
- Minimal spatter and copper flaking
- Moderate de-oxidizers
- Excellent weld appearance and post weld cleaning

**PRODUCED IN:** Stillwater, Oklahoma

### SPECIFICATIONS

Meets or exceeds:

- AWS A5.18: ER70S-3, AWS A5.18M: ER48S-3
- AWS A5.17: EM13K (1/16" dia. only)
- ASME SFA-5.18: ER70S-3
- MIL-E-23765/1: MIL-70S-3
- CWB W48-01: ER49S-3

### APPLICATIONS

Well-suited for these applications:

- Low carbon killed and semi killed steel
- All metal transfer modes of GMAW
- Robotic, mechanized or semi-automatic welding
- Welding steel with light mill scale, light rust or thin oil
- Single and multi-pass weldments
- Pipe welding, structural steel and steel buildings
- Applications requiring a minimum 70,000 psi tensile strength

### SHIELDING GAS BLENDS

Typical Application Shielding Gas Blends:

- 100% CO<sub>2</sub>
- 75-95% Argon/Balance CO<sub>2</sub>
- 95-98% Argon/Balance O<sub>2</sub>
- Flow Rate: 35-50 CFH

### WELDING POSITIONS

All position welding is possible when using the correct shielding gas blends, welding process and welding parameters.

### STORAGE

Welding wire should be stored in a dry, enclosed environment and in its originally-sealed package.

*The information contained or otherwise referenced herein is presented only in "typical" without guarantee or warranty, and National Standard expressly disclaims any liability incurred from any reliance thereon. Typical data are obtained when welded and tested in accordance with AWS specifications. Specification, other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by National Standard LLC.*