# Silver-Glide™ NS-115US CopperFree™ Welding Wire

AWS ER70S-6

Silver-Glide™ NS-115US CopperFree™ Welding Wire is a mild steel solid filler wire that features a unique composition, high levels of manganese and silicon, and copper-free formulation.

It delivers exceptional performance and flexibility for GMAW operations with ER70S-6 wire. The welding wire contains higher silicon content that reduces molten metal surface tension, resulting in flatter bead profiles.



## Manufacturing Advantages

- All metal transfer modes of GMAW
- Robotic, mechanized, or semi-automatic welding
- Welding steel with medium to heavy mill scale, light rust, or thin oil
- Single and multi-pass weldments
- Applications requiring a minimum 70,000 psi tensile strength
- Compatible with variety of low-alloy steels and other similar base metals
- Minimized contamination for cleaner welds

#### Welding Positions

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

#### Shielding Gas Blends

- 100% CO<sub>3</sub>: Ideal for ER80S-D2
- 75-95% Argon/Balance CO,
- 95-98% Argon/Balance O<sub>2</sub>: Suitable for ER90S-D2
- Flow rate of 35-50 CFH



### **Applications**

- Agricultural Equipment
- Auto Body
- General Fabrication
- · Pipe Welding

#### **Specifications**

Meets or Exceeds:

- AWS A5.18/A5.18M: ER70S-6 H4, ER48S-6
- ASME SFA-5.18: ER70S-6
- AWS A5.17: EH11K
- MIL-E-273765/1: MIL-70S-6
- CWB W48: B-G 49A 3 C1 S6
- ABS
- ✓ Made in the USA

#### Storage

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



3602 North Perkins Road Stillwater, OK 74075 Customer Service: 1-800-777-1618 www.NSARC.com









## Silver-Glide™NS-115US CopperFree™ Welding Wire

## **AWS ER70S-6**

## Typical Mechanical Properties (as welded)

Certified As	TENSILE STRENGTH PSI	YIELD STRENGTH PSI	MINIMUM ELONGATION %	CVN IMPACT VALUES @ 20° F	
NS Plus -115	82,200	65,200	29	60 ft-lbf	
NS 115 CopperFree™	88,800	73,500	27	39 ft-lbf	
AWS MINIMUM	70,000	58,000	22	20 ft-lbf	

### Typical Wire Chemistry Percentages (as required per AWS)

Certified As	С	Mn	Si	P	s	Cu	Ni	Cr	Мо	v
NS Plus <sup>®</sup> -115 Typ.	0.08	1.49	0.9	0.01	0.01	0.14	0.05	0.04	0.008	0.006
NS 115 CopperFree™ Typ.	0.09	1.52	0.91	0.011	0.011	0.07	0.06	0.06	0.01	0.01
AWS A5.18/A5.18M	0.06/0.15	1.40/1.85	0.80/1.15	0.025 (max.)	0.035 (max.)	0.50 (max.)	0.15 (max.)	0.15 (max.)	0.15 (max.)	0.03 (max.)
AWS A5.17/A5.17M	0.06/0.15	1.40/1.85	0.80/1.15	0.030 (max.)	0.030 (max.)	0.35(max.)				







