

#### S Ρ R 0 D U TS т HE HARRI С GR 0 U Ρ LINCOLN ELECTRIC СОМРА Δ N Y 4501 Quality Place • Mason, OH 45040 U.S.A Tel: 513-754-2000 Fax: 513-754-6015 TECHNICAL SPECIFICATION SHEET

# E7018 COVERED ELECTRODE

ISO 9001 Cert. No. 31598

# STATEMENT OF LIABILITY- DISCLAIMER

Any suggestion of product applications or results is given without representation or warranty, either expressed or implied. Without exception or limitation, there are no warranties of merchantability or of fitness for particular purpose or application. The user must fully evaluate every process and application in all aspects, including suitability, compliance with applicable law and non-infringement of the rights of others. The Harris Products Group and its affiliates shall have no liability in respect thereof.

## NOMINAL COMPOSITION:

| Carbon    | 0.08% | Silicon    | .60%    |
|-----------|-------|------------|---------|
| Manganese | 1.00% | Phosphorus | .021%   |
| Sulfur    | .011% | Iron       | Balance |

## **TYPICAL MECHANICAL PROPERTIES AS WELDED**

| Tensile Strength (psi) | Up to 81,000 psi |  |
|------------------------|------------------|--|
| Yeild Strength (psi    | 71,000 psi       |  |
| Elongation in 2"       | 30.0             |  |
|                        |                  |  |

#### WELDING PROPERTIES:

E7018 is an all position iron powder, low hydrogen, efficient steel electrode that yields a high deposition rate, excellent properties and x-ray quality welds. E7018 exhibits a quiet, stable, crack resistance, spatter free arc with a moderately heavy slag that is easy to remove revealing a bead with distinct ripples. This electrode is recommended for areas such as low alloy structures, piping, pressure vessels, boilers, heavy-duty equipment, ship building, general maintenance and fabrication that operate with AC or DCEP.

Flat: Very short arc

Vertical up: Use weaving technique, but do not use a whipping motion Overhead: Use slight weaving motion within the puddle Vertical down: Generally not recommended

| • | RECOMMENDED | WELDING | PARAMETERS: |
|---|-------------|---------|-------------|
|---|-------------|---------|-------------|

| AMPS               | <u>3/32x12</u> | <u>1/8x12</u> | <u>5/32x12</u> |
|--------------------|----------------|---------------|----------------|
| Flat               | 65-85          | 90-130        | 130-180        |
| Vertical/ Overhead | 50-80          | 85-120        | 110-160        |
|                    |                |               |                |

\* All parameters are suggested as basic guidelines and will vary depending on joint design, number of passes and other factors.

#### SPECIFICATION COMPLIANCE: ANSI/AWS A5.1 & ASME SFA 5.1 E7018

All statements, information and data given are believed to be accurate and reliable but are presented without guarantee, warranty or responsibility of any kind, expressed or implied.



WARNING: PROTECT yourself and others. Read and understand this information. FUMES AND GASES can be hazardous to your health. ARC RAYS can injure eyes and burn skin.

ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, Safety in Welding, Cutting, and Allied Processes, published by the American Welding Society, 550
  N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402

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