



## NITHERME-2.5 (SPL)

**CODIFICATION :** AWS : SFA 5.5 E8018-C1

### CHARACTERISTICS AND APPLICATIONS :

A low hydrogen iron powder electrode depositing 2.5% Ni steel weld metal. Easy to operate in all conventional welding positions. Radiographic quality welds possess excellent toughness even at minus 60°C. Ideal for welding fine grained and Nickel steels. Typical applications include containers and piping systems and tanks used for storage, transportation of liquefied propane and butane, A&P brackets etc.

### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL :

|           |      |      |      |      |     |      |       |       |
|-----------|------|------|------|------|-----|------|-------|-------|
| Element : | C    | Mn   | Si   | Cr   | Ni  | Ti   | P     | S     |
| Percent : | 0.08 | 0.80 | 0.20 | 0.30 | 2.2 | 0.03 | 0.015 | 0.012 |

### TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

(PWHT: 605°C FOR 1 HR)

|              |             |                        |   |
|--------------|-------------|------------------------|---|
| UTS<br>(MPa) | YS<br>(MPa) | Elongation<br>(L= 4d)% | CVN Impact Strength at<br>minus 60°C (Joules) |
| 683          | 584         | 21.0                   | 50  |

### CURRENT AND PACKING DATA: DC(+)

|                         |           |         |          |         |
|-------------------------|-----------|---------|----------|---------|
| Size (mm)               | : 5x450   | 4x350   | 3.15x350 | 2.5x350 |
| Dia x Length            |           |         |          |         |
| Current Range<br>(Amps) | : 210-270 | 150-190 | 100-135  | 80-100  |
| Qty.(Pcs./Carton)       | : 35      | 55      | 75       | 125     |

### PRECAUTIONS:

- For best impact properties, accomplish minimum heat input by:
  - \* Using smallest size of electrode possible.
  - \* Minimum weaving.
  - \* Proper control over interpass temperatures.
  - \* Maximum number of layers.
  - \* Welding in down hand position wherever possible.
- For best results, re-dry the electrodes at 250-300°C for one hour.