## Dual Shield T-85-Ni3

AWS 45 29 FR0T5-NI3N

#### Flux CORED WIRES

#### Description

- Dual Shield T-85-Ni3 is a member of ESAB SeAH family of outstanding small diameter, basic slag, flux cored wires. The basic slag system assures optimum weld quality and resistance to cracking. The small diameters, with their favorable high current density, display deep penetration and high deposition rates.
- When the recommended welding parameters and shielding gas are used, a very smooth, low spatter, spray-type arc is attained. The deposited weld metal achieves as welded and stress relieved properties equal to or better than the corresponding low hydrogen electrodes.

Shielding Gas: 75%Argon/25%CO2 (CO2 is available for a small diameter.)

### Application

- To obtain a smooth spray transfer, minimal spatter and good wetting action, a mixture of 75%Argon/25%CO<sub>2</sub> shielding gas is recommended.
- Dual Shield T-85-Ni3 is designed for single and multi-pass welds in the flat and horizontal positions. It is alloyed to weld the 3%Ni steels which are used for low temperature applications.

# Typical Mechanical Properties of All Weld Metal (All weld Metal Using 75% Argon/25% CO<sub>2</sub>)

| Yield Point<br>N/mm²{kgf/mm²} | Tensile Strength<br>N/mm²{kgf/mm²} | Elongation<br>(%) | Impact Value<br>J(kgf ⋅ m)<br>-73°C | PWHT      |
|-------------------------------|------------------------------------|-------------------|-------------------------------------|-----------|
| 620 (63)                      | 710 {72}                           | 23                | 80 {8.1}                            | As-Welded |
| 539 {55}                      | 620 (63)                           | 26                | 95 {9.7}                            | 620℃×1hr  |

### Typical Undiluted Weld Metal Analysis %

| С     | Mn   | Si   | Р     | S     | Ni   | Cr    |
|-------|------|------|-------|-------|------|-------|
| 0.032 | 0.50 | 0.30 | 0.009 | 0.001 | 3.65 | 0.016 |