

# TENALLOY 16 SPL

AWS A/SFA 5.1 E7016-1

C-Mn STEEL (Low Hydrogen)

## CLASSIFICATION:

ISO 2560-A  
E 42 5 B 12 H5

## KEY FEATURES:

- Medium coated basic electrode
- Moisture resistant coating
- Weld metal resistant to cold and hot cracking and tri-axial stressings
- Positional welding characteristics with medium coating ideal for full penetration root run in pipe welding
- DCEN preferred for root run welding of pipes

**APPROVALS:** - CE/LRA

## TYPICAL APPLICATIONS:

- Root welding of pipes in 6G position
- Horton spheres, Penstocks
- Carbon steel and low alloy steel pressure vessels fabrications and where severe service conditions exists
- For NACE quality carbon steel pipes
- Off-shore process platform structures
- Medium, high tensile structural steels
- Heavy sections and restrained joints in high tensile structural steels

## TYPICAL CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt %:

| C    | Mn  | Si  |
|------|-----|-----|
| 0.06 | 1.2 | 0.3 |



## MECHANICAL PROPERTIES OF ALL WELD METAL:

|               | Condition | UTS, MPa | YS at 0.2% offset, MPa | EL%    | CVN Impact at -46°C, J |
|---------------|-----------|----------|------------------------|--------|------------------------|
| Typical       | As Welded | 570      | 490                    | 25     | 100                    |
| Specification |           | 490 min  | 400 min                | 22 min | 80 min                 |

**Hardness (3 Layer):** 200BHN max

**Diffusible H2 Content:** <5 ml/100 gm

## PARAMETERS - PACKING DATA:

| Ø x L, mm  | Amperage, A |  |   |
|------------|-------------|--|---|
| 2.5 x 350  | 60-90       |  AC (60 OCV)/ DCEP / DCEN | All Positions, Except Vertical Down:<br> |
| 3.15 x 450 | 90-140      |  |   |
| 4.0 x 450  | 140-180     |  |   |
| 5.0 x 450  | 180-250     |  |   |
|            |             | <b>REDRYING CONDITION:</b><br>250-300°C for minimum 1 hr.  |   |

Available in Standard carton packing of 20 kg box containing 4 cartons of 5 kgs each. Also available in vacuum packing