

# NOUVE<sup>®</sup> 9018-B3

Designation

**AWS A5.5 E9018-B3**  
**UNS No. W53018**

Welding Positions



## Features

- Excellent arc characteristics
- Low spatter level
- Quick and easy slag removal
- Low moisture re-absorption
- Low smoke level
- Radiography quality

## Applications

Designed for all-position welding of 2.25% chromium, 1% molybdenum low alloy steels

## Type of Current

Direct Current Electrode Positive (DCEP)

## Recommended Welding Techniques

- GENERAL : Electrode positive, work negative (DCEP)  
 ARC LENGTH : Short arc  
 STORAGE : Re-dry electrodes to 300°C for 2 hours before use.  
 PRE HEAT : 160°C to 190°C for 1 hour

## Weld Metal Chemistry

|         | Carbon    | Manganese | Silicon | Phosphorous | Sulphur | Nickel | Chromium | Molybdenum |
|---------|-----------|-----------|---------|-------------|---------|--------|----------|------------|
| Spec    | 0.05-0.12 | 0.9       | 0.80    | 0.03        | 0.03    | -      | 2.0-2.5  | 0.9-1.2    |
| Typical | 0.072     | 0.76      | 0.66    | 0.028       | 0.027   | -      | 2.24     | 1.08       |

## Mechanical Properties (as welded)

| MECHANICAL TESTS | Tensile Strength | Yield Strength | Elongation % | Impact Energy | PWHT   |
|------------------|------------------|----------------|--------------|---------------|--------|
| AWS SPEC         | 620              | 530            | 17           | NA at NA      | 690±15 |
| TYPICAL          | 650              | 19             | 19           | NA            | 700    |