

# SELECTRODE 1166

**Deep Penetrating for Dirty Steels** 

#### INTERNATIONAL CLASSIFICATIONS

# NONE APPLICABLE TO THIS PROPRIETARY PRODUCT

#### **FEATURES & APPLICATIONS**

Ideally suited for difficult maintenance repairs. Easily welds steels that have been galvanized, painted, rusted, or otherwise contaminated in service. Misaligned parts or difficult to access areas are also easily remedied with this electrode.

Adverse conditions mild steel electrode. Excels on rusty, greasy, poor fitting joints in all positions.

- Can weld through 1/2 inch (12mm) of surface contamination without porosity.
- Can bridge gaps as wide as 3/8 inch (9mm).
- Electrode can be bent without flux chipping.
- Slag can be welded over without removal.

# ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Flux Color: Dark Brown

C	Mo	Mn	Cr	Si	Ni	V	Fe	
.09	.30	.59	.20	1.00	.30	.06	Bal.	

#### TYPICAL MECHANICAL PROPERTIES

#### **Undiluted Weld Metal**

Tensile Strength Yield Strength Elongation Impact Energy

#### **Maximum Value Up to:**

88,000psi (630 MPa) 80,000psi (570 MPa)

28%

70J: -4°F (-20°C)

#### **WELDING CURRENT & INSTRUCTIONS**

Recommended Current: DC Reverse (+), Straight (-), or AC

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	25	35	50	75
Maximum Amperage	75	125	160	200

**Welding Techniques:** Weld with a short-medium arc length at low amperage. When surface preparation is impractical, use a medium-long arc and favor high amperages. Multi-pass welds can be made without intermittent slag removal. Use any welding technique from stringer bead to wide weave.

Welding Positions: Flat, Vertical up, Vertical down, Horizontal, Overhead

### **Deposition Rates:**

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings
3/32 (2.5)	14" (350)	.27oz (7g)	45 (100)	37 (81)	50
1/8 (3.25)	14" (350)	.56oz (15g)	25 (56)	25 (56)	80
5/32 (4.0)	14" (350)	.9oz (25g)	17 (38)	20 (45)	105
3/16 (5.0)	14" (350)	1.35oz (38g)	12 (26)	15 (34)	140

## APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	14" (350)	14" (350)	14" (350)	14" (350)
Electrodes / lb	31	18	11	8
Electrodes / kg	68	40	24	18