

# Felix 680 (AWS-10018G)

Premium Basic Coated Iron Powder Low Hydrogen Type Electrode  
For Welding Of Fine Grained High Strength Steels .



## Special Features

- \* Balanced Alloying Elements Provide High Tensile Strength With Good Notch Toughness .
- \* Good Resistance To Cracking In Conditions Of Impact , Vibration At Service Temperatures Between -60° C To +450° C .
- \* Low Hydrogen X - Ray Quality Weld Deposits With High Metallurgical Purity .
- \* Easy Slag Removal , Easy Restrike And Excellent Weld Appearance .

## Typical Properties

Tensile Strength	108000 PSI
Yield Strength	93000 PSI
Elongation	23%
Impact Energy ISO-V	Min 60 J At -60° C

## Applications

- \* Typical Applications Include Offshore Constructions , Process Piping , Storage Tanks , Nickel Molybdenum Steels , Heavy Structures , Pressure Vessels , Bridges , Heavy Machinery , Penstocks And Fabrication Of Quenched And Tempered Low Alloy High Strength Steels .

## International Specifications

AWS/ASME A5.5: E10018-G

## Recommended Amperage Settings

Diameter (mm)	3/32 (2.5)	1/8 (3.15)	5/32 (4.0)	3/16 (5.0)
Length	350	350	350	450
Minimum Amperage	60	90	130	180
Maximum Amperage	85	130	180	230

## Welding Techniques

Clean Weld Area . Keep Electrodes Dry And Re-Dry The Electrodes If Necessary At 300° C For 2 Hour .  
Stringer Beads Or Weaving Technique Can Be Used . Maintain Short Arc For Best Mechanical Properties .  
For Best Results DC Reverse Polarity .



**FELIX**  
Innovative Metallurgy

A Quality Product From Ferrite