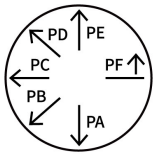


# S-7016.G

## Classification

**AWS** A5.1/ASME SFA-5.1 E7016  
**JIS** Z 3211 E4916  
**EN** ISO 2560-A E42 3 B 1 2  
**KS** D7006 E5316

## Welding Positions



## Features

- Suitable for butt and fillet welding of heavy structure
- Good crack resistance and X-ray performance
- Good mechanical properties.

## Polarity

AC or DC +

## Application Areas

- Heavy steel fabrication
- Shipbuilding
- Pressure vessels

## Redrying Conditions

300~350°C (572~662°F) X 0.5~1hr

## Typical Chemical Composition of All-Weld Metal (wt%)

| C    | Si   | Mn   | P     | S     |
|------|------|------|-------|-------|
| 0.07 | 0.45 | 1.15 | 0.016 | 0.006 |

## Typical Mechanical Properties of All-Weld Metal

| Yield Strength<br>MPa(ksi) | Tensile Strength<br>MPa(ksi) | Elongation<br>(%) | Temperature<br>°C (°F) | Impact Toughness<br>J (ft·lbs) |
|----------------------------|------------------------------|-------------------|------------------------|--------------------------------|
| 515(75)                    | 588(85)                      | 27                | -30(-20)               | 75 (55)                        |

## Diameter / Welding Parameters / Packaging

| Diameter<br>mm(in) | Length<br>mm(in) | F & HF  | V-up, OH | Packaging                                                 |
|--------------------|------------------|---------|----------|-----------------------------------------------------------|
| 2.6(3/32)          | 350(14)          | 55-85   | 50-80    | Standard/Vacuum - Packet 5kg (11lbs), Carton 20kg (44lbs) |
| 3.2(1/8)           | 350(14)          | 90-130  | 80-120   |                                                           |
| 4.0(5/32)          | 400(16)          | 130-180 | 110-170  |                                                           |
| 5.0(3/16)          | 400(16)          | 180-240 | 150-200  |                                                           |
| 6.0(15/64)         | 400(18)          | 250-310 | -        |                                                           |

SMAW

GMAW

GTAW

FCAW

Metal-cored Wire

SAW Wire

SAW Flux