

S-9016.B3

Type : Basic

Conformances

AWS A5.5/ ASME SFA5.5 E9016-B3

JIS Z3223 E6216-2C1M

EN 1599 - ECrMo2 B 1 2

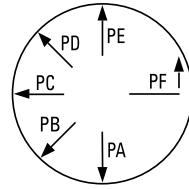
Applications

- Low alloy steel (2.25%Cr-1%Mo)
- Pressure vessels
- Power plant

Features

- Maximum service temperature at 600°C (1112°F)
- Good mechanical properties
- Good creep resistance

Welding Position



Current

AC, DC ±

Redrying Conditions

300~350°C (572~662°F) X

0.5~1hr

Diameter / Packaging

| Diameter mm (in) | Length mm (in) | Standard | |
|---------------------|-------------------|----------------------|-----------------------|
| | | packet 5kg(11lbs) | carton 20kg(44lbs) |
| 2.6 (3/32) | 350 (14) | | √ |
| 3.2 (1/8) | 350 (14) | | √ |
| 4.0 (5/32) | 400 (16) | | √ |
| 5.0 (3/16) | 400 (16) | | √ |
| 6.0 (15/64) | 450 (18) | | √ |

Typical Chemical Composition of All-Weld Metal (%)

| C | Si | Mn | P | S | Cr | Mo |
|------|------|------|-------|-------|------|------|
| 0.07 | 0.57 | 0.82 | 0.022 | 0.012 | 2.32 | 1.07 |

Typical Mechanical Properties of All-Weld Metal

| YS MPa(lbs/in ²) | TS MPa(lbs/in ²) | EL (%) | Heat Treatment |
|---------------------------------|---------------------------------|-----------|--------------------------|
| 554 (80,500) | 663 (96,300) | 25.6 | 690°C(1274°F) X 1hr. S.R |

Typical Welding Parameters / Amp.(A)

| Diameter mm (in) | 2.6 (3/32) | 3.2 (1/8) | 4.0 (5/32) | 5.0 (3/16) | 6.0 (15/64) |
|------------------|------------|-----------|------------|------------|-------------|
| Length mm (in) | 350 (14) | 350 (14) | 400 (16) | 400 (16) | 450 (18) |
| F & HF | 55~90 | 90~130 | 130~190 | 190~240 | 250~300 |
| V-up, OH | 50~80 | 80~120 | 120~170 | - | - |