

# S-8018.W

Type : Basic

## Conformances

AWS A5.5/ ASME SFA5.5 E8018-W2

JIS Z3214 DA5826W

EN ISO 2560-A-E50 2 B 3 2

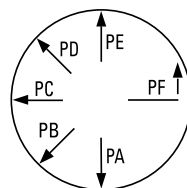
## Applications

- High tensile weathering steel

## Features

- Suitable for off- and on-shore construction
- High resistance to corrosion caused by seawater or combinations of oil, gas and seawater
- Contains Cu, Ni and Cr (All-weld metal)

## Welding Position



## Current

AC or DC +

## Redrying Conditions

300~350°C (572~662°F) X

0.5~1hr

## Diameter / Packaging

| Diameter<br>mm (in) | Length<br>mm (in) | Standard             |                       |
|---------------------|-------------------|----------------------|-----------------------|
|                     |                   | packet<br>5kg(11lbs) | carton<br>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   | Ni   | Cu   |
|------|------|------|-------|-------|------|------|------|
| 0.06 | 0.54 | 0.95 | 0.014 | 0.011 | 0.56 | 0.57 | 0.38 |

## Typical Mechanical Properties of All-Weld Metal

| YS<br>MPa(lbs/in <sup>2</sup> ) | TS<br>MPa(lbs/in <sup>2</sup> ) | EL<br>(%) | Temp<br>°C(°F) | CVN-Impact Value<br>J (ft·lbs) |
|---------------------------------|---------------------------------|-----------|----------------|--------------------------------|
| 604 (87,700)                    | 648 (94,100)                    | 27.4      | -20 (-4)       | 117 (87)                       |

## 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                | 60~90      | 90~140    | 130~190    | 180~240    | 250~300     |
| V-up, OH         | 50~80      | 80~120    | 120~170    | 150~200    | -           |

SMW

SAW

GMW

GTAW

FCAW

Non-FERROUS

APPENDIX