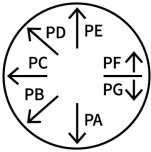


SC-460

Classification

**AWS** AWS A5.29 / ASME SFA-5.29 E81T1-K2C  
**JIS** Z 3313 T55 6 T1-1 C A-N3  
**EN** ISO 17632-A T46 6 1.5Ni P C1 1 H5  
**KS** D7104 YFL-C506R

Welding Positions



Features

- Designed for welding with 100%CO2 shielding gas
- Good impact value at low temperature service steel
- High tensile steel (EH47 Grade)

Polarity

DC +

Application Areas

- Shipbuilding
- Offshore structure

Shielding Gas

100% CO2

Approvals

|     |    |     |    |    |    |
|-----|----|-----|----|----|----|
| ABS | BV | DNV | KR | LR | NK |
| ✓   | ✓  | ✓   | ✓  | ✓  | ✓  |

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

|               |      |      |      |       |       |      |
|---------------|------|------|------|-------|-------|------|
| Shielding Gas | C    | Si   | Mn   | P     | S     | Ni   |
| 100% CO2      | 0.06 | 0.35 | 1.20 | 0.010 | 0.010 | 1.50 |

Typical Mechanical Properties of All-Weld Metal

|               |                            |                              |                   |                        |                                |
|---------------|----------------------------|------------------------------|-------------------|------------------------|--------------------------------|
| Shielding Gas | Yield Strength<br>MPa(ksi) | Tensile Strength<br>MPa(ksi) | Elongation<br>(%) | Temperature<br>°C (°F) | Impact Toughness<br>J (ft·lbs) |
| 100% CO2      | 580(84)                    | 630(91)                      | 26                | -30 (-20)<br>-60 (-75) | 125(92)<br>60(44)              |

Diameter / Welding Parameters / Packaging

|                         |                |                                                                                                                      |
|-------------------------|----------------|----------------------------------------------------------------------------------------------------------------------|
| Wire Diameter<br>mm(in) | Current<br>(A) | Packaging                                                                                                            |
| 1.2 (0.045)             | 110~280        | Spool 5kg (11lbs), 12.5kg (28lbs), 15kg (33lbs), 20kg (44lbs)<br>Drum 100kg (221lbs), 200kg (441lbs), 250kg (551lbs) |
| 1.4 (0.052)             | 110~280        |                                                                                                                      |

SMW

GMW

GTW

FCW

Metal-cored Wire

SAW Wire

SAW Flux