

KOBELCO

FAMILIARC™

DW-A55EH

Rutile-based

Flux Cord Wire



Code Data

AWS A5.20 E71T-12MJ H8

ASME SFA-5.20 E71T-12MJ H8

Outstanding Features

- Meets AWS A5.20 E71T-12MJ. Excellent impact value at low temperature down to -40°F can be obtained.
- Produces weld metal with less than 0.5%Ni. This Ni composition allows this wire to conform to the A-1 composition in QW-440, section IX in the ASME standard.
- Excellent weldability not only in horizontal but also in vertical and overhead welding position with 75-80%Ar - Bal.CO2.
- All position welding can be achieved with good bead appearance, negligible spatter, and easy slag removal.

Typical chemistry of all weld metal (%) and Diffusible hydrogen content (mL/100g)

| | C | Si | Mn | P | S | Ni | [H] _d |
|-----------|-------|-------|-------|-------|-------|-------|------------------|
| Example | 0.05 | 0.63 | 1.17 | 0.010 | 0.007 | 0.38 | 6.9 |
| AWS Spec. | ≤0.12 | ≤0.90 | ≤1.60 | ≤0.03 | ≤0.03 | ≤0.50 | ≤8.0 |

Shielding gas: 75%Ar-25%CO₂, As welded

Typical mechanical property of weld metal

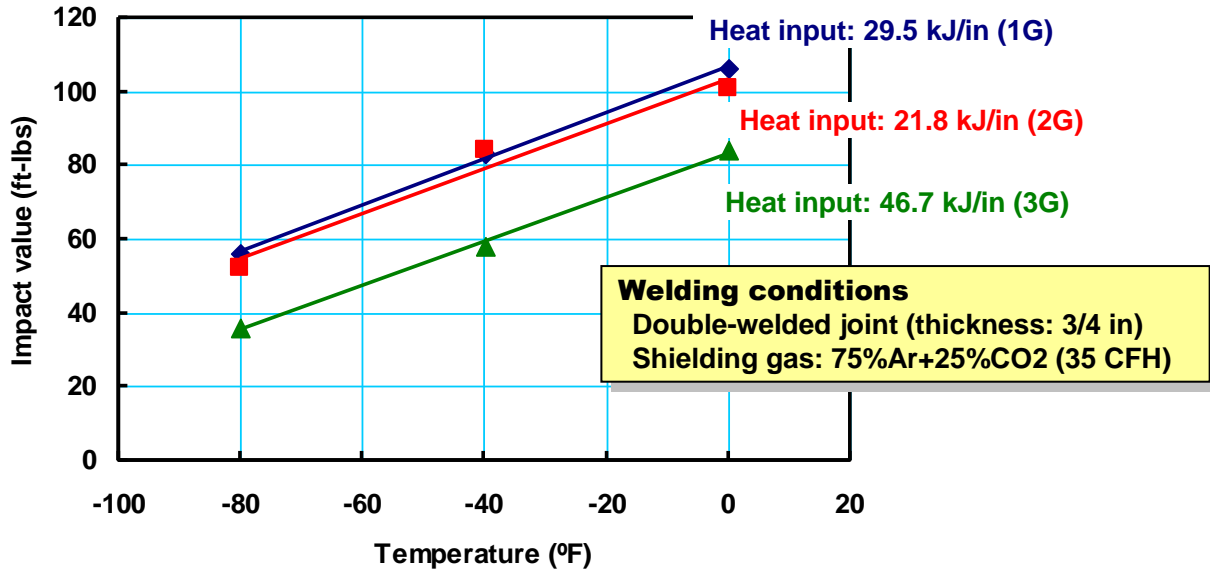
| | 0.2%P.S (ksi) | T.S (ksi) | Elongation (%) | Impact value (ft-lbf) | |
|-----------|------------------|--------------|-------------------|-----------------------|--------|
| | | | | -50 °F | -40 °F |
| Example | 81 | 87 | 29 | 93 | 98 |
| AWS Spec. | ≥58 | 70 - 90 | ≥22 | Not specified | ≥20 |

Test method: AWS A5.20, Welding parameter: 250A-29V, Shielding gas: 75%Ar-25%CO₂, As welded

Diameters: 0.045"

Spool size: 28lbs, 44lbs

Relationship between temperature and impact value



Recommended welding conditions and deposition rate

| Wire size (in.) | Wire feed speed (in./min) | Current* (A) | Arc Voltage** (V) | Deposition rate (lbs/hr) | Wire stick-out (in.) |
|-----------------|---------------------------|--------------|-------------------|--------------------------|----------------------|
| 0.045 | 140 | 120 | 21-24 | 4.0 | 3/4 |
| | 180 | 140 | 22-25 | 5.0 | |
| | 200 | 160 | 23-26 | 6.0 | |
| | 245 | 180 | 24- 27 | 7.0 | |
| | 290 | 200 | 25-28 | 8.0 | |
| | 330 | 220 | 25-28 | 9.0 | |
| | 380 | 240 | 26-29 | 10.0 | |
| | 400 | 250 | 26-29 | 10.5 | |

Tables shown are approximate values that will vary with changes in welding conditions.

*DC-Electrode positive

**Arc voltage is measured at wire feeder.



WARNING: This product can expose you to chemicals including Nickel and Titanium Dioxide, which are known to the State of California to cause cancer, and Chromium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.