

# **DW-2209**

Classification: AWS A5.22 E2209T1-1 AWS A5.22 E2209T1-4

# All-Weld-Metal (75%Ar - 25%CO<sub>2</sub>)

## 1-1. Chemical Composition

[Unit: mass%]

|           | С                   | Mn                               | Si   | Р  | S     | Cr        | Ni       | Мо   | N         |
|-----------|---------------------|----------------------------------|------|--|-------|-----------|----------|------|-----------|
| DW-2209   | 0.02                | 0.89                             | 0.55 | 0.018  | 0.005 | 22.96     | 9.68     | 3.28 | 0.14      |
| E2209T1-X | <0.04               | 0.5~2.0                          | <1.0 | <0.04  | <0.03 | 21.0~24.0 | 7.5~10.0 | <0.5 | 0.08~0.20 |
|           | WRC <sub>-199</sub> | WRC <sub>-1992</sub> (FN) PRE *1 |      | *1) Pitting Resistance Equivalent = Cr + 3.3 X Mo + 16 X N |       |           |          |      |           |
| DW-2209   | 40                  | 40.5 36.0                        |      |  |       |           |          |      |           |
| E2209T1-X |                     |                                  |      |  |       |           |          |      |           |

## 1-2. Tensile Test

|           | 0.2% Proof stress<br>(psi) | Tensile strength<br>(psi) | Elongation<br>(%) | Reduction of Area<br>(%) |
|-----------|----------------------------|---------------------------|-------------------|--------------------------|
| DW-2209   | 89,490                     | 117,190                   | 31                | 48                       |
| E2209T1-X |                            | >100,000                  | >20               |                          |

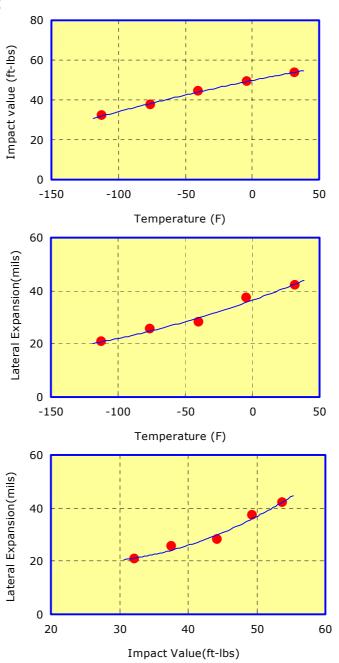
Note) Test was completed in the as welded condition and at room temperature

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# 1-3. Impact Test



## 1-4. Corrosion Test

| Test Condition | Corrosion Loss / g/m2·h | Judgment   |  |  |
|----------------|-------------------------|------------|--|--|
| 68°F-24hr      | 0.005                   | No Pitting |  |  |
| 77°F - 24hr    | 0.032                   | No Pitting |  |  |

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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.

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#### DISCLAIMER

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<sup>\*</sup> According to ASTM G48 Practice A