



PREMIARC DW-329AP

[AWS A5.22 E2209T1-1/4]

PREMIARC DW-2209

[AWS A5.22 E2209T1-1/4]

PREMIARC DW-2594

[AWS A5.22 E2594T1-1/4]

Features and typical fields of application

> Standard and super duplex stainless steel flux cored wires with high tensile strength and corrosion resistance compared to 308L/316L type austenitic stainless steel for petrochemical industry, chemical tanker or desalination process equipment as typical application.

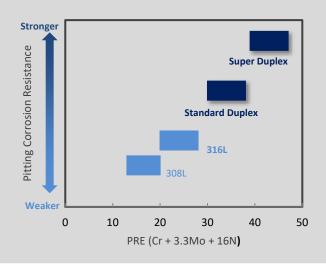
➤ All positional welding with either 75%Ar-25%CO₂ gas or 100%CO₂

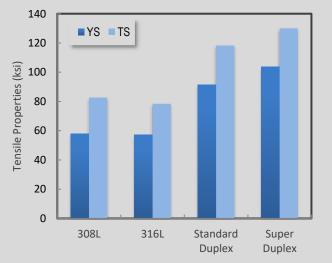
> Flat bead profile with easy mig-gun operation in the flat and horizontal positions as well as out of position contribute to productivity.

DW-329AP: Standard duplex 22Cr-9Ni-0.1N /S31803, S32205 etc. with excellent weldability in 3G

Standard duplex 22Cr-9Ni-0.1N /S31803, S32205 etc. with toughness down to -40°F DW-2209:

DW-2594: **Super duplex** 25Cr-9Ni-4Mo-0.2N/ S32750, S32760 etc.





Typical chemical composition of metal test per AWS A5.22

| | Shielding Gas | С | Si | Mn | Ni | Cr | Мо | N | PREN * | FNW ** |
|----------|------------------------------|------|-----|-----|-----|------|-----|------|-----------|-----------|
| DW-329AP | 75%Ar- 25%CO ₂ | 0.02 | 0.7 | 0.7 | 9.4 | 23.3 | 3.4 | 0.14 | 37 | 49 |
| DW-2209 | | 0.03 | 0.5 | 0.7 | 9.4 | 23.0 | 3.3 | 0.14 | 36 | 43 |
| DW-2594 | | 0.03 | 0.5 | 1.2 | 9.5 | 25.5 | 3.8 | 0.22 | 42 | 52 |





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Typical mechanical property of weld metal per AWS

| | Shielding | 0.2% PS | TS | El | CVN (ft-lbs) | | |
|----------|------------------------------|---------|-------|-----|--------------|------|--|
| | Gas | (ksi) | (ksi) | (%) | -40°F | 32°F | |
| DW-329AP | 75%Ar- 25%CO ₂ | 90 | 121 | 28 | - | 38 | |
| DW-2209 | | 91 | 118 | 28 | 44 | 54 | |
| DW-2594 | | 104 | 130 | 28 | 28 | 41 | |

Approval

LR, CWB (DW-329AP, DW-2209, DW-2594) ABS, DNV-GL (DW-329AP, DW-2594)

Recommended welding conditions and deposition rate

| Wire Dia. | Wire Feed Speed (in/min) | Welding Current (A) | Arc Voltage (V) | Deposition Rate (lbs/hr) | Wire Stick-Out | Shielding Gas Flow Rate (CFH) |
|-----------|--------------------------------|---------------------------|-----------------------|--------------------------------|-------------------|-------------------------------------|
| 0.045" | 210 | 130 | 24-26 | 5.0 | 5/8-3/4" | 40-50 |
| | 275 | 155 | 25-27 | 6.0 | | |
| | 330 | 175 | 26-28 | 6.8 | | |
| | 380 | 190 | 27-29 | 8.0 | | |
| | 440 | 210 | 28-30 | 9.5 | | |
| | 540 | 230 | 28-31 | 10.6 | | |
| | 610 | 250 | 30-33 | 12.0 | | |

Table shown are approximate values that will vary depending on welding conditions (WESO, Cable length etc.). Arc voltage shown are for straight CO₂ shielding gas. For 75%Ar-25%CO₂ use two volts less than shown.

Available Products

| Wire Dia. | 0.045" | Package | 28 lbs spool |
|-----------|--------|---------|--------------|
|-----------|--------|---------|--------------|

DISCLAIMER

- Information in this material, such as chemical compositions and mechanical properties, is typical or an example for explaining the features and performances of our products, and it does not mean guarantee unless otherwise it is specified.
- Information contained herein is subject to change without notice. Please kindly contact Kobelco for latest information.



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.





