

**PREMIARC DW-2307** [AWS A5.22 E2307T1-1/4] **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

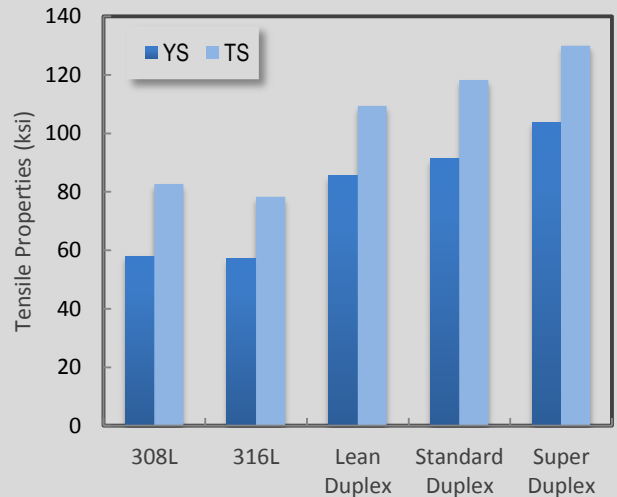
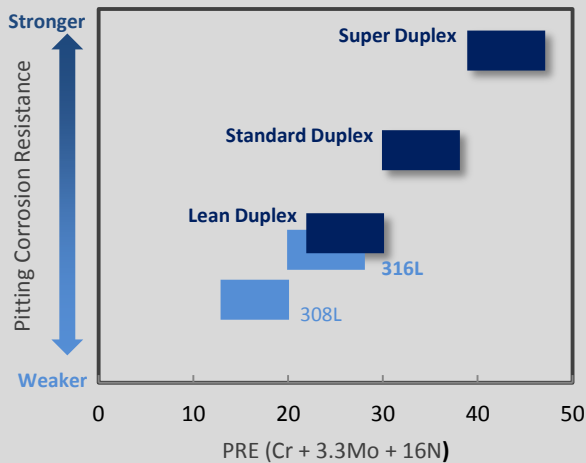
- Lean, standard and super duplex stainless steel flux cored wires with high tensile strength and corrosion resistance compared to 308L/316L type austenitic stainless steel for petrochemical industry, chemical tanker or desalination process equipment as typical application.
- All positional welding with either 75%Ar-25%CO<sub>2</sub> gas or 100%CO<sub>2</sub>
- Flat bead profile with easy mig-gun operation in the flat and horizontal positions as well as out of position contribute to productivity.

**DW-2307:** **Lean duplex** 24Cr-8Ni-0.1N/S32101, S32304 etc.

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

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

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



## Typical chemical composition of metal test per AWS A5.22 w/75%Ar-25%CO<sub>2</sub>

	C	Si	Mn	Ni	Cr	Mo	N	PRE**	FN***
DW-2307	0.02	0.6	1.4	8.3	24.6	0.05	0.13	27	46
DW-2209	0.03	0.5	0.7	9.4	23.0	3.3	0.14	36	43
DW-329AP*	0.02	0.7	0.7	9.4	23.3	3.4	0.14	37	49
DW-2594	0.03	0.5	1.2	9.5	25.5	3.8	0.22	42	52

\* Welded with 80%Ar-20%CO<sub>2</sub> \*\* PRE: Cr+3.3Mo+16N mass% \*\*\* WRC Diagram (1992)

**PREMIARC DW-2307** [AWS A5.22 E2307T1-1/4] **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]



**Typical mechanical property of weld metal per AWS w/75%Ar-25%CO<sub>2</sub>**

	0.2% P.S. (psi)	T.S. (psi)	EL (%)	CVN (ft-lbs)	
				-40F	32F
DW-2307	85,600	109,400	29	33	38
DW-2209	91,400	118,200	28	44	54
DW-329AP*	89,500	120,800	28	-	38
DW-2594	103,600	130,000	28	28	41

\* Welded with 80%Ar-20%CO<sub>2</sub>

Packages		Approval
Wire Dia.	0.045"	CWB (DW-2209, DW-329AP, DW-2594)
Package	28Lbs plastic spool	

**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 CO<sub>2</sub> shielding gas. For 75%Ar-25%CO<sub>2</sub> use two volts less than shown.

**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](http://www.P65Warnings.ca.gov).

