

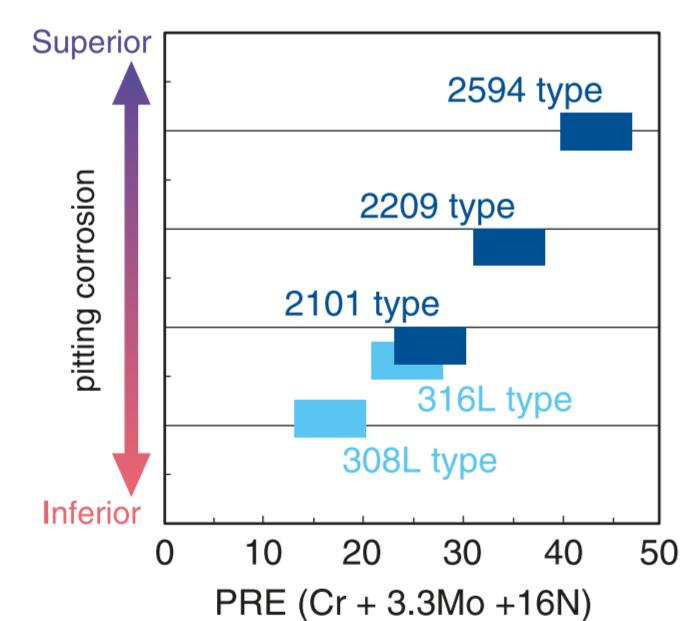
Flux Cored Wire Series for Duplex Stainless Steel & Nickel Alloy

Line-Up for Flux Cored Wire for Various Type of Duplex Stainless Steel

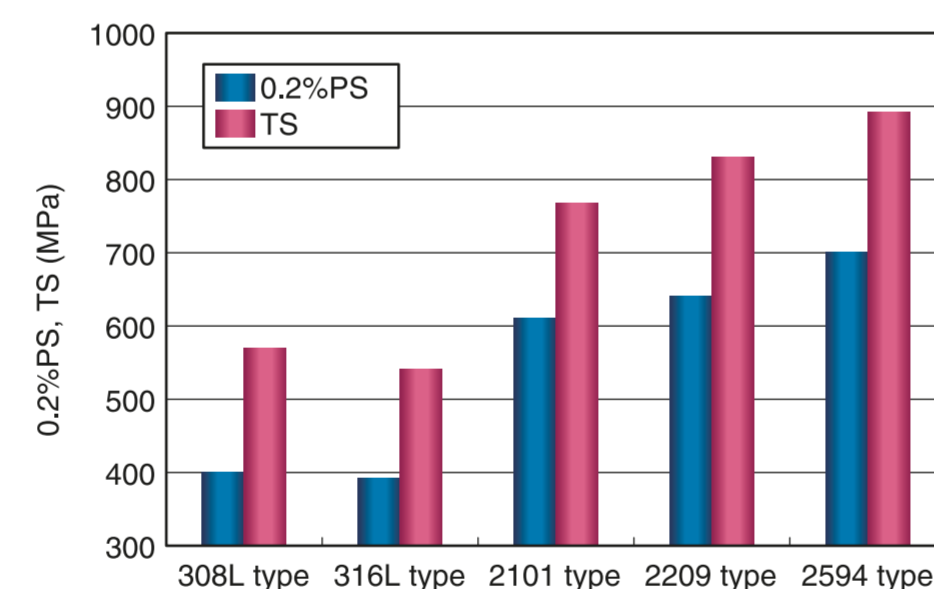
Class.	Trade designation	Welding process	AWS Class	Chemical composition (wt.%)							PRE	Mechanical properties			
				C	Si	Mn	Ni	Cr	Mo	N		0.2%PS (MPa)	TS (MPa)	EI (%)	vE0°C (J)
Standard Duplex Stainless Steel	PREMIARC TG-S2209	GTAW	A5.9/A5.9M ER2209	0.008	0.39	1.67	8.7	22.7	3.10	0.16	35.5	598	773	39	270
	PREMIARC NC-2209	SMAW	A5.4/A5.4M E2209-16	0.028	0.54	1.14	8.8	23.1	3.34	0.15	36.5	667	845	30	97
	PREMIARC DW-2209	FCAW	A5.22/A5.22M E2209T1-1/4	0.028	0.61	0.74	9.1	22.7	3.30	0.13	35.6	639	820	28	73
	PREMIARC US-2209/PF-S1D	SAW	A5.9/A5.9M ER2209	0.021	0.31	1.56	8.9	23.0	3.28	0.15	35.9	618	798	29	69
Super Duplex Stainless Steel	PREMIARC TG-S2594	GTAW	A5.9/A5.9M ER2594	0.019	0.44	0.57	9.3	25.0	3.82	0.28	42.0	721	870	31	286
	PREMIARC NC-2594	SMAW	A5.4/A5.4M E2594-16	0.035	0.55	0.66	9.8	26.6	3.86	0.25	43.3	750	935	28	55
	PREMIARC DW-2594	FCAW	A5.22/A5.22M E2594T1-1/4	0.026	0.50	1.18	9.6	25.7	3.79	0.24	42.0	712	905	27	55
Lean Duplex Stainless Steel	PREMIARC DW-2101	FCAW	—	0.025	0.64	1.41	8.3	24.6	0.01	0.13	26.7	590	754	29	38
Lean Duplex Stainless Steel	PREMIARC DW-2307	FCAW	A5.22/A5.22M E2307T1-1/4	0.026	0.45	1.26	7.9	24.6	0.025	0.15	27.1	571	750	29	58



Excellent Corrosion Resistance and Strength



■ PRE and pitting corrosion property



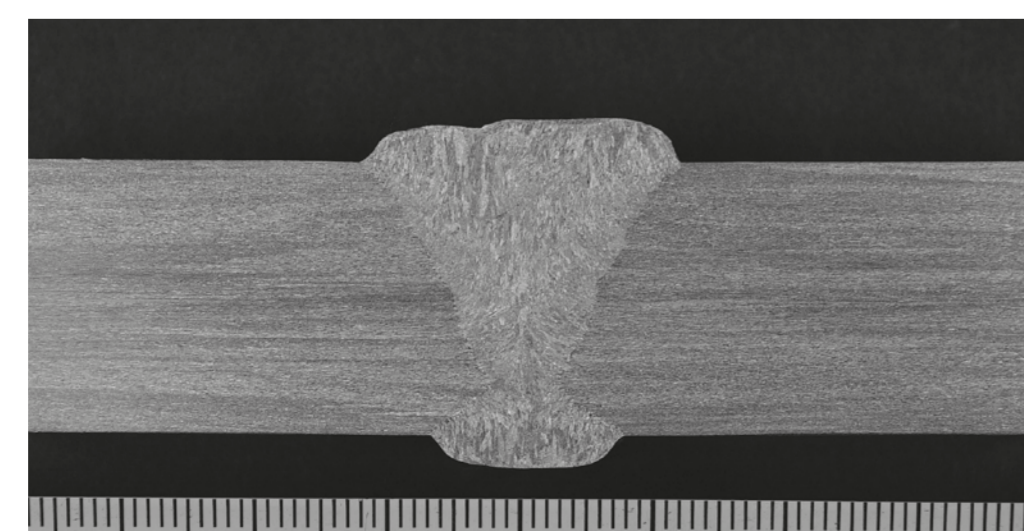
■ Tensile property

Excellent Weldability

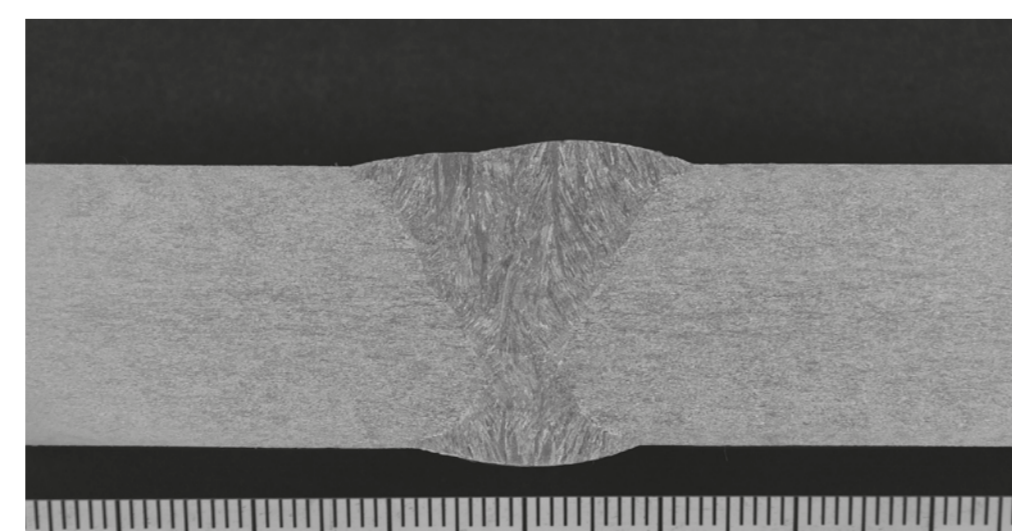
High porosity-resistant and sound weld joint



Wire : PREMIARC DW-2209
Base metal : S31803 (20t)
Welding position : Horizontal (2G)



Wire : PREMIARC DW-2594
Base metal : S32760 (20t)
Welding position : Vertical-up (3G)



Wire : PREMIARC DW-2101
Base metal : S32101 (20t)
Welding position : Flat (1G)

Nickel Alloy Flux Cored Wire

PREMIARC DW-N625 PREMIARC DW-NC276 PREMIARC DW-N82

- Applicable for Nickel Alloy, high corrosion-resistant super stainless steel, orbital welding of inner clad pipe & corrosion-resistance cladding on carbon steel.
- PREMIARC DW-N625, PREMIARC DW-NC276 are applicable for all position welding.

Product Line

Wire	AWS Specification A5.34	Application
PREMIARC DW-N625	ENICrMo3T1-4	Alloy 625, 825, 800(H), super stainless, dissimilar joint, cladding, corrosion resistance cladding
PREMIARC DW-NC276	ENICrMo4T1-4	Alloy C276, super stainless, dissimilar joint, cladding, corrosion resistance cladding
PREMIARC DW-N82	ENICr3T0-4	Alloy 600, 800(H), dissimilar joint, cladding, corrosion resistance cladding



Wire	Chemical composition of all weld metal (%)											
	C	Si	Mn	P	S	Ni	Cr	Mo	Fe	Nb	Ti	W
PREMIARC DW-N625	0.03	0.36	0.41	0.008	0.002	60.8	21.6	9.1	4.1	3.4	0.16	—
PREMIARC DW-NC276	0.02	0.16	0.74	0.009	0.004	57.5	15.5	15.9	6.2	—	—	3.6
PREMIARC DW-N82	0.04	0.26	3.22	0.004	0.004	70.2	20.9	—	2.2	2.6	0.28	—

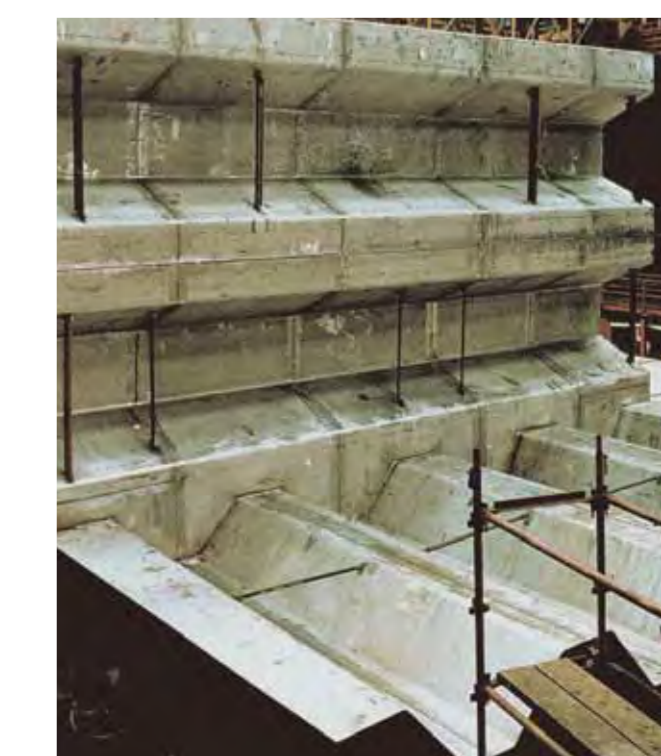
Wire : PREMIARC DW-N625 (1.2mm)
Base metal : Super stainless steel (12t)
Shielding gas : 80%Ar-20%CO₂
Welding position : Vertical

Application

Duplex stainless steel & Nickel Alloy are used for chemical plant, pipe for oil well, chemical tanker, disalination plant, and recently for steel construction such as bridges.



Chemical plant equipment



Chemical tanker corrugated wall



Bridge sustaining tower