EXECUTIVE 2594

STAINLESS STEEL
SOLID WIRE TECHNICAL DATA SHEET

DESCRIPTION

Executive 2594 Super Duplex welding wire is designed to provide clean and consistent welds with excellent feedability and minimal clean-up. By maintaining tight control from the country of melt to the design of the spool Executive wire provides welders with the highest quality stainless bare wire.

Executive 2594 is over-alloyed 2-3% in nickel to provide optimum ferrite-austenite ratio in the finished weld.

Executive 2594 provides matching chemistry and mechanical property characteristics to wrought super-duplex alloys such as 2507 and Zeron 100 as well as super-duplex casting alloys.

APPLICATIONS & FEATURES

Executive 2594 has high tensile and yield strength with superior resistance to stress corrosion, cracking (SCC) and pitting corrosion. It is suitable for pumps and valves, pressure vessels and process pipework.

Executive 2594 is also used in aeronautic manufacturing, pressure piping, pumps and valves, vessel manufacturing, cladding, and general manufacturing and fabrication.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	N	W	Fe
0.015	25.12	9.21	3.91	0.64	0.43	0.013	<0.001	0.05	0.30	0.015	bal

Tensile Strength: 122,000 PSI min **Elongation:** 22%

TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Gas Flow	Shielding Gas / Flux
GMAW - Short	.035"	21-22	160-200	30 to 50 CFH	90% He/7.5% Ar/2.5% CO_2 or 1%-5% O_2/Balance Ar
	.045"	22-23	180-210		
	.062"	23-24	200-220		
- Spray	.035"	23-25	190-260		
	.045"	25-28	250-330		
	.062"	28-31	310-350		
GTAW	.062" to .125"	Direct Current; Electrode -		30 to 40 CFH	100% Ar
SAW	.093"	29-32	300-350		Record IND 24 or Record IN
	.125"	29-32	400-550		

STANDARD PACKAGING

GMAW (MIG)	33-lb wire baskets	1,980-lb pallet
	11-lb plastic spools	11-lb box
	2-lb plastic spools	8-lb box
GTAW (TIG)	10-lb plastic tube	40-lb box
SAW	60-lb wire coil	1,200-lb pallet

CLASSIFICATION

AWS/SFA 5.9, Class **ER2594**
Certified by the Canadian Welding Bureau (CWB) to AWS A5.9.