



D&H 2594 (NS)

CODIFICATION : AWS : SFA 5.4 E2594-16
EN ISO : 3581-A E Z R 3 2

CHARACTERISTICS AND APPLICATIONS :

D&H 2594(NS) is a non-synthetic electrode depositing super duplex stainless steel weld metal. The weld metal exhibits high strength, high impact energy, and resistance to stress corrosion cracking, pitting, and crevice corrosion. The weld metal possesses excellent corrosion resistance in marine & paper environments. Examples of application areas are: Oil and gas industry, Off shore plat forms, Petrochemical plants, Mechanical and structural components. It is suitable for welding

- ASTM A890/A995 Gr. 5A, CE3Mn, UNS J93404
- Super Duplex 2507, UNS S32750, EN 1.4410, NF Z3 CND 25-06AZ, SS2328

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element :	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	N
Percent :	0.026	1.45	0.42	0.023	0.009	25.0	9.0	4.0	0.20	0.22

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS	Elongation	CVN Impact (Joules)
(MPa)	(L= 5d)%	at 20°C
790	23.0	60

PITTING RESISTANCE NUMBER: Meets the requirement of PREN \geq 40

CORROSION PROPERTY: Weld metal meets ASTM A 262 Practice C and ASTM G-48A.

FERRITE (FN) : 30-60

CURRENT AND PACKING DATA: AC / DC(+)

Size (mm)	:	5x350	4x350	3.15x350	2.5x350
Dia x Length					
Current Range(Amps) :		150-180	110-140	80-100	60-80
Weight/Carton (kgs) :		2.5	2.5	2.5	2.5

APPROVAL: CE

PRECAUTIONS:

1. Ensure the electrodes are dry. Re-dry the electrodes at 250-300°C for one hour.
2. The heat input should be in the range of 0.5-1.5 KJ/mm.
3. Please ensure inter pass temperature is less than 150°C and better less than 102°C.
4. For better results solution annealing at 1080-1120°C is required.