

## D&H 2595 (NS)

**CODIFICATION :**                      AWS    :    SFA 5.4 E2595-16

### CHARACTERISTICS AND APPLICATIONS :

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. A soft and smooth arc, which is easy to strike and re-strike. Easy slag detachability and well-rippled weld beads. The weld metal is of radiographic quality. These electrodes used primarily to weld duplex and super duplex stainless steels which contain approximately 25% Cr. Examples of application areas are:

- Oil and gas industry   ● Oil country tubular   ● Food processing   ● Valves and fittings
- Flue gas de-sulfurizers   ● Off shore plat forms   ● Petrochemical plants
- Mechanical and structural components.

### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL :

Element :	C	Mn	Si	Cr	Ni	Mo	N	P	S	Cu	W
Percent :	0.035	0.80	0.42	25.0	9.3	4.0	0.20	0.020	0.020	0.70	0.70

### TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

UTS	Elongation
(MPa)	(L=4d)%
775	23.0

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

**CORROSION PROPERTY :** Weld metal meets ASTM A262 Practice C requirements in as welded condition.

### CURRENT AND PACKING DATA : AC / DC (+)

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

### PRECAUTIONS :

1. The electrodes should be dry. In case of moisture pick up re-dry 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. No preheat and post weld heat treatment is required.
5. For better results solution annealing at 1080-1120°C is required.

**Note:** D&H 2595-15 (NS) conforming to AWS E2595-15 is also available.