

# DW-2594

**All positional flux cored wire  
for super duplex stainless**



## Code Data

**AWS A5.22 E2594T1-1, 4**

## Outstanding Features

- DW-2594 is an innovative rutile flux cored wire specially designed for welding super duplex stainless ASTM32750 grade and ASTM 32760 grade.
- DW-2594 operates with a very stable, spatter free arc producing a bright smooth weld bead surface and self releasing slag.
- DW-2594 has the option of being shielded by 75%Ar-25%CO<sub>2</sub> gas mixture or 100%CO<sub>2</sub> gas (75%Ar-25%CO<sub>2</sub> recommended).

### Typical chemistry of weld metal (75%Ar-25%CO<sub>2</sub>)

C	Si	Mn	Cr	Ni	Mo	Cu	N	PRE	FN
0.03	0.50	1.18	25.7	9.6	3.8	<0.1	0.24	41.8	49

PRE=Cr+3.3×Mo+16×N, FN=Ferrite Number by WRC Diagram(1992)

### Typical mechanical property of weld metal (75%Ar-25%CO<sub>2</sub>)

0.2%P.S (psi)	T.S (psi)	Elongation (%)	Impact value (ft-lbs)	
			-40 °F	0 °F
103,270	131,260	27	29 <15.7>	35 <22.8>

Test method: AWS A5.22, welding parameter: 200A-30V (0.045")

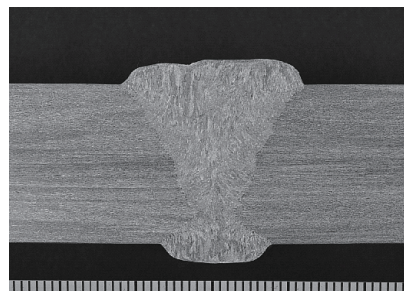
< >: Lateral expansion (unit=mils)

### Pitting Corrosion Property

Test Solution	Time of exposure	Critical Pitting Temperature (°F)
6%FeCl <sub>3</sub> +1%HCl solution aq.	24hrs	104

Test method: According ASTM G48 Practice E

### Macrostructure of butt joint (3G)



Base material:  
S32760  
Wall thickness: 3/4"  
Welding parameter:  
160A-26V  
Shielding gas:  
75%Ar-25%CO<sub>2</sub>



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.P65Warning.ca.gov](http://www.P65Warning.ca.gov).

July 2018