



DW-310

**Classification: AWS A5.22 E310T0-1
AWS A5.22 E310T0-4**

All-Weld-Metal (100%CO₂)

1-1. Chemical Composition

[Unit: mass%]

	C	Mn	Si	P	S	Ni	Cr	Mo
DW-310	0.18	2.08	0.60	0.014	0.002	20.21	25.21	0.04
E310T0-X	<0.20	1.0~2.5	<1.0	<0.03	<0.03	20.0~22.5	25.0~28.0	<0.5
	WRC-1992 (FN)		Shaeffler Diagram (%)			Delong Diagram (FN)		
DW-310	0.0		0.0			0.0		
E310T0-X	-----		-----			-----		

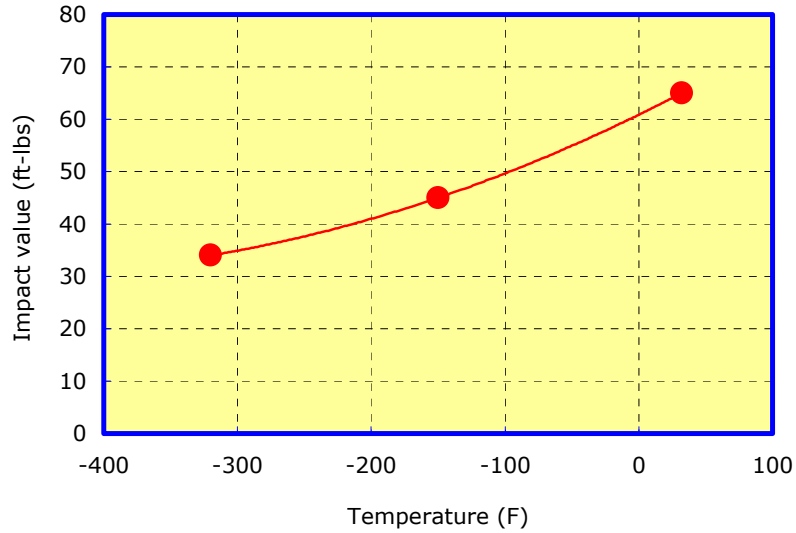
1-2. Tensile Test

	0.2% Proof stress (psi)	Tensile strength (psi)	Elongation (%)	Reduction of Area (%)
DW-310	62,076	88,618	42	54
E310T0-X	---	>80,000	>30	---

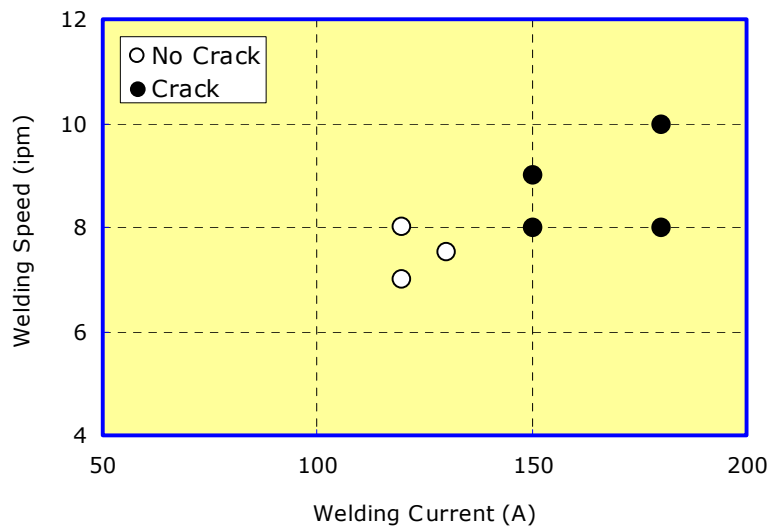
Note) Test was completed in the as welded condition and at room temperature

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1-3. Impact Test



1-4. Crack Susceptibility in Root Pass



The weld metal composition of DW-310 is of the 25%Cr-20%Ni type, and has a fully austenitic structure. Due to the nature of austenitic materials, great care must be taken to prevent cracking. It is recommended that DW-310 be used with the welding current of 150A or less. In first pass welding of a narrow V-groove joint or large stress concentrated joint, a welding current of 140Ams or less is recommended. This will increase the weldments crack resistibility.



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.P65Warnings.ca.gov.

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