



# KOBELCO FCW Data Sheet 3

## DW-308H

**Classification : AWS A5.22 E308HT0-1  
AWS A5.22 E308HTO-4**

Note : DW-308H is designed for use at service temperatures above 1200°F.

### All-Weld-Metal (100% CO<sub>2</sub>) 3-1, Chemical Composition

Unit : wt%

	C	Mn	Si	P	S	Ni	Cr	N
DW-308H	0.063	1.27	0.26	0.022	0.011	9.59	18.55	0.017
E308HTX-X	0.04/0.08	0.5/12.5	≤1.0	≤0.04	≤0.03	9/11	18/21	--

### 3-2. Ferrite Content

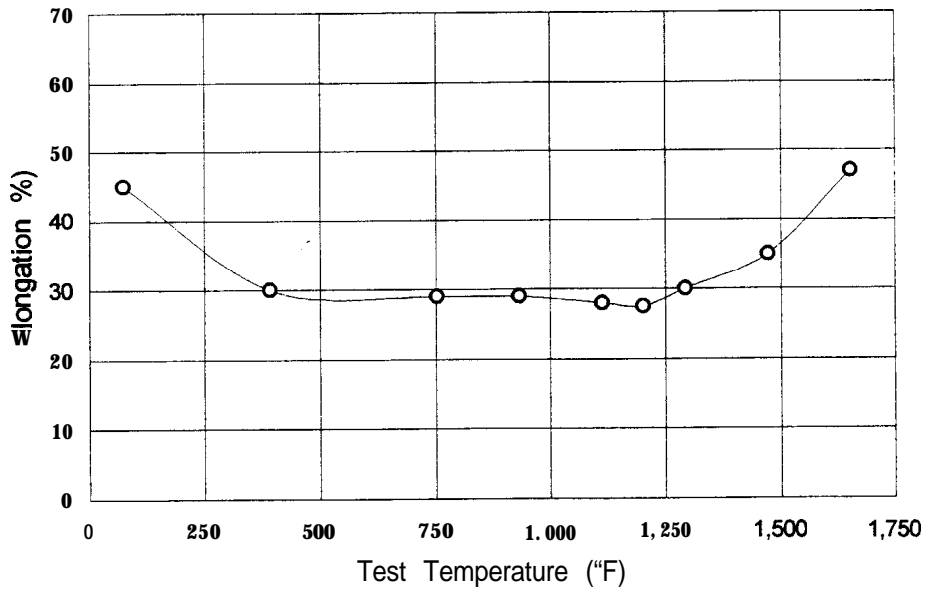
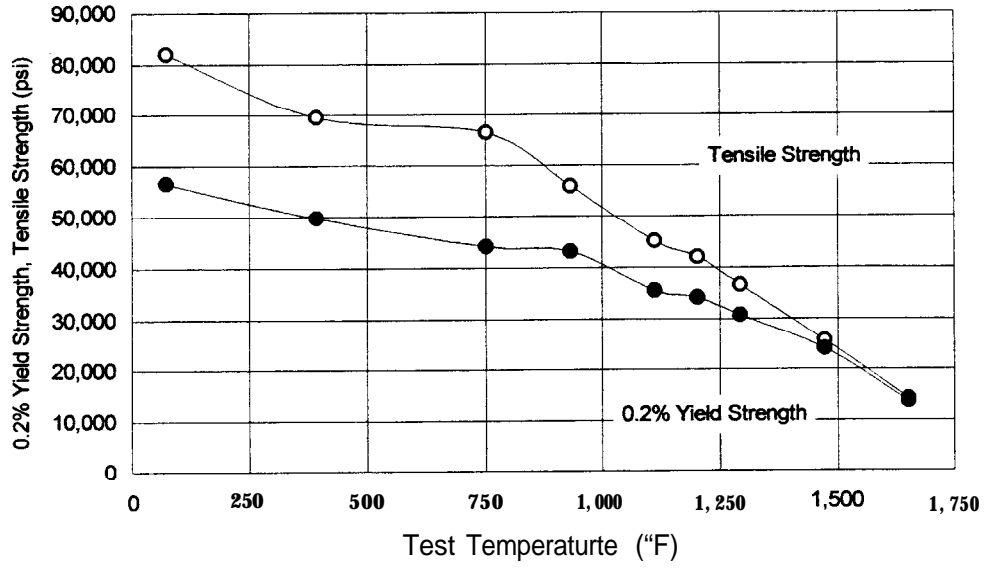
	Shaeffler Diagram %	Delong Diagram (FN)	1992-WRC Diagram (FN)
As Welded	2.2	3.6	3.1

### 3-3. Tensile Test

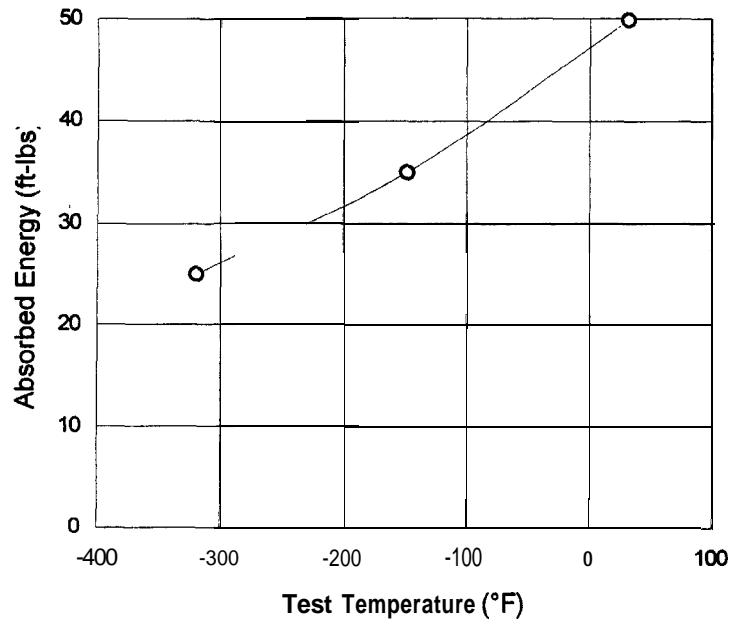
	0.2% Yield Strength (psi)	Tensile Strength (psi)	Elongation %	Reduction of Area %
DW-308H	56,626	82,008	45	54
E308HTX-X	—	≥80,000	≥35	—

Note: Test was completed in the as-welded condition at room temperature.

## 3-4. High Temperature Strength



### 3-5. Impact Test



### 3-6. Creep Rupture Test

Test Temperature (OF)	Stress (psi)	Time to Rupture (hr)	Elongation (%)	Reduction of Area (%)
1,200	22,800,	8.2	42	70
	21,300	660.0	30	62
1,290	15,700	200.0	25	25
	14,200	737.0	13	37