



# Bi free type Stainless Flux Cored Wires

## H-Series for high temperature applications

**PREMIARC™**  
**DW-308H**

**PREMIARC™**  
**DW-308LH**

**PREMIARC™**  
**DW-316H**

**PREMIARC™**  
**DW-316LH**

**PREMIARC™**  
**DW-347H**

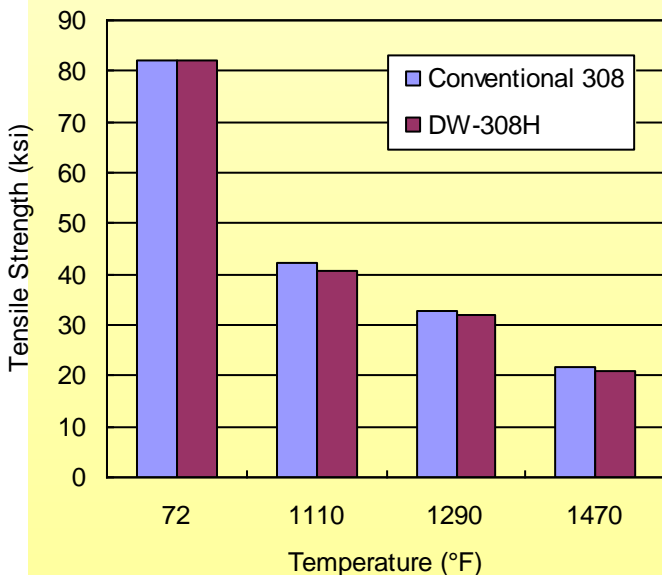
**PREMIARC™**  
**DW-309LH**

### Outstanding Features

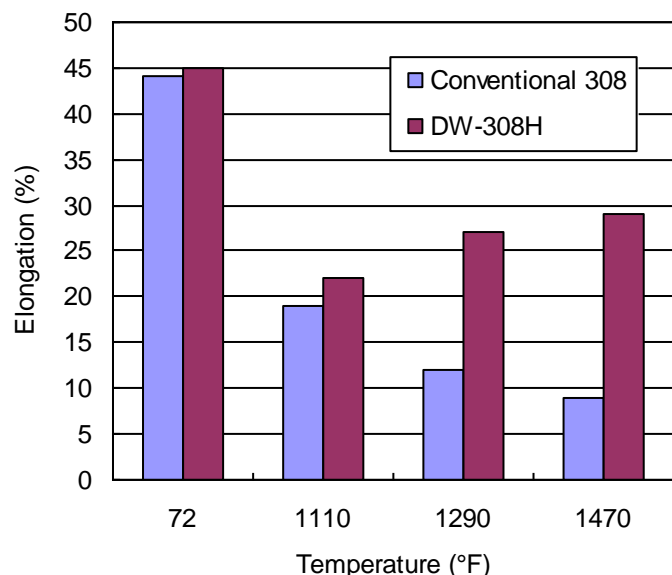
- H-series contains no bismuth in the weld metal. Consequently, the elongation of the weld metal at high temperatures is higher than that of conventional FCWs.
- Even with no bismuth, the slag removability is comparable to conventional FCWs.
- Excellent performance in vertical upward position with either 75%Ar-25%CO<sub>2</sub> gas mixture or 100%CO<sub>2</sub>.



Bead appearance of DW-308H



A comparison of high temperature tensile strength



A comparison of high temperature elongation



**PREMIARC™ DW-308H** AWS A5.22  
E308HT1-1, -4

**PREMIARC™ DW-308LH** AWS A5.22  
E308LT1-1, -4

**PREMIARC™ DW-316H** AWS A5.22  
E316T1-1, -4

**PREMIARC™ DW-316LH** AWS A5.22  
E316LT1-1, -4

**PREMIARC™ DW-347H** AWS A5.22  
E347T1-1, -4

**PREMIARC™ DW-309LH** AWS A5.22  
E309LT1-1, -4

**Typical chemistry of weld metal (0.045" Dia. 75%Ar-25%CO<sub>2</sub>)**

Alloy	C	Si	Mn	Cr	Ni	Mo	Bi	FN
DW-308H	0.06	0.45	1.36	18.97	9.42	-	<0.001	5.5
DW-308LH	0.02	0.46	1.25	18.93	9.68	-	<0.001	8.7
DW-316H	0.05	0.38	1.39	18.75	11.60	2.40	<0.001	6.0
DW-316LH	0.02	0.48	1.38	18.64	12.13	2.39	<0.001	7.5
DW-347H	0.05	0.47	1.65	19.17	9.65	-	<0.001	7.8
DW-309LH	0.03	0.51	1.32	24.34	12.59	-	<0.001	20.3

FN=Ferrite Number by WRC Diagram (1992)

**Typical mechanical property of weld metal (0.045" Dia. 75%Ar-25%CO<sub>2</sub>)**

Alloy	T.S (ksi)	Elongation (%)
DW-308H	86	43
DW-308LH	80	41
DW-316H	83	42
DW-316LH	80	40
DW-347H	94	38
DW-309LH	83	35

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



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).

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