

## Shield-Bright 308H

FCAW wire for 18%Cr - 8%Ni stainless steel, For all-position welding. Shield-Bright 308H was developed for welding Type 304H stainless steel and can also be used for welding Type 301, 302, and 304 steels. It contains a higher carbon level than 308L filler metals to give greater high temperature strength. The ferrite content is also lower for high temperature service. It has greater ductility than 347 types at high temperatures and for that reason it is sometimes used to weld Types 321 and 347 for service above 750°F(399°C) coupled with high stress. Shield-Bright 308H was designed for welding in all positions and performs particularly well in the vertical position with excellent slag removal.

### Specifications

<b>Classifications</b>	SFA/AWS A5.22 : E308HT1-1 SFA/AWS A5.22 : E308HT1-4 JIS Z 3323 : YF 308C KS D 3612 : YF 308C EN ISO 17633-A : T 19 9 H P C1 2 EN ISO 17633-A : T 19 9 H P M21 2 JIS Z 3232 : TS308H-FB1
<b>Industry</b>	Power Generation Petrochemical Industrial and General Fabrication

<b>Welding Current</b>	DC+
<b>Alloy Type</b>	C Cr Ni
<b>Shielding Gas</b>	M21, C1 (EN ISO 14175)

### Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
<b>M21 Shielding Gas</b>			
As Welded	430 MPa	600 MPa	42 %
<b>C1 Shielding Gas</b>			
As Welded	392 MPa	578 MPa	44 %

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
<b>M21 Shielding Gas</b>		
As Welded	-29 °C	50 J
As Welded	-196 °C	28 J
<b>C1 Shielding Gas</b>		
As Welded	-29 °C	47 J
As Welded	-196 °C	26 J

### Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr
<b>M21 Shielding Gas</b>						
0.060	1.20	0.90	0.007	0.020	9.8	19.5
<b>C1 Shielding Gas</b>						
0.050	1.10	0.80	0.007	0.020	9.5	19.3

### Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm	130-220 A	24-29 V	5.8-14.4 m/min	1.9-4.6 kg/h