

# Shield-Bright 309H

AWS A5.22 E309T1-1(4) / JIS Z3323 TS309-FB1

## Description and Application

- Shield-Bright 309H was developed for the welding of type 309 and similar stainless steels. Its ferrite content, which is lower than Shield-Bright 309L, allows for joining carbon and low alloy steels provided the dilution is not too great and the service temperature is above 750°F (399°C) where creep strength properties are necessary. Shield-Bright 309H was designed for welding in all positions and performs particularly well in the vertical position with excellent slag removal.

Flux  
CORED  
WIRES

## Shielding Gas : 100%CO<sub>2</sub> or 75%Ar/25%CO<sub>2</sub>

### Typical Mechanical Properties of All Weld Metal

Shielding gas	Yield Point N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	Tensile Strength N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	Elongation (%)
100%CO <sub>2</sub>	450 {46}	590 {60}	35
75%Ar/25%CO <sub>2</sub>	480 {49}	620 {63}	35

### Typical Undiluted Weld Metal Analysis %

Shielding gas	C	Mn	Si	P	S	Cr	Ni	Ferrite No.
100%CO <sub>2</sub>	0.060	1.20	0.70	0.019	0.010	23.4	12.1	8~15
75%Ar/25%CO <sub>2</sub>	0.060	1.30	0.90	0.019	0.010	24.0	12.5	8~15

### Approvals

JIS