

# Shield-Bright 309L

AWS A5.22 E309LT1-1(4) / JIS Z3323 TS309L-FB1

Flux  
CORED  
WIRES

## Description and Application

- Shield-Bright 309L was developed for welding stainless steel to carbon or low alloy steels and for the first layer cladding of carbon and low alloy steels. It was designed for welding in all positions and performs particularly well in the vertical position with excellent slag removal.

For joining thick sections, it is preferred the non-stainless steel be buttered with a layer of Shield-Bright 309L and the joint completed with Shield-Bright 316L or 308L. The service temperature should not exceed approximately 750°F (399 °C).

## 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>	392 {40}	539 {55}	51
75%Ar/25%CO <sub>2</sub>	480 {49}	600 {61}	35

## Typical Undiluted Weld Metal Analysis %

Shielding gas	C	Mn	Si	P	S	Cr	Ni	Ferrite No.
100%CO <sub>2</sub>	0.029	1.10	0.80	0.024	0.007	23.1	12.4	15-25
75%Ar/25%CO <sub>2</sub>	0.030	1.30	0.90	0.024	0.007	23.5	12.5	15-25

## Approvals

ABS, BV, DNV, GL, KR, LR, NK, JIS