Shield-Bright 309L X-tra

Description and Application

• Shield-Bright 309L X-tra was developed for the welding of stainless steels to carbon or low alloy steels and for the first layer cladding of carbon and low alloy steels. Shield-Bright 309L X-tra was developed for welding in the flat position and for horizontal fillet welds with flat to concave beads with excellent slag removal. For joining thick sections, it is preferred the non-stainless steel be buttered with a layer of Shield-Bright 309L X-tra and the joint completed with Shield-Bright 316L X-tra or 308L X-tra.

The service temperature should not exceed approximately 750 °F (399 °C).

Shielding Gas: 100%CO2 or 75%Ar/25%CO2

Typical Mechanical Properties of All Weld Metal

Shielding gas	Yield Point N/mm²{kgf/mm²}	Tensile Strength N/mm²{kgf/mm²}	Elongation (%)		
100%CO ₂	410 {42}	546 {55}	38		
75%Ar/25%CO ₂	480 {49}	600 {61}	35		

Typical Undiluted Weld Metal Analysis %

Shielding gas	С	Mn	Si	Р	S	Cr	Ni	Ferrite No.
100%CO ₂	0.032	1.46	0.66	0.021	0.004	24.50	12.8	20~30
75%Ar/25%CO ₂	0.030	1.44	0.80	0.020	0.004	24.50	13.0	20~30

Approvals ABS, DNV, TUV, JIS