

ER309L / ER309LSi

MIG/GMAW and TIG/GTAW wire for austenitic stainless steel

Product name	IABCO ER309L / ER309LSi
Classification EN ISO	14343-A: G/W 23 12 L (G/W 23 12 L for IABCO ER309LSi)
Material No.	1.4332
Classification AWS	A5.9: ER309L (ER309LSi for IABCO ER309LSi)
Approvals	CE.
Applications	IABCO ER309L is used for buffer layers, clad steels, dissimilar joints and 12%Cr utility ferritic steels. When producing weld overlays the first layer, buffer layer, is deposited using IABCO ER309L if the final deposit chemistry required is 304L; subsequent layers being deposited using ER308L. IABCO ER309L is also used for dissimilar joints between austenitic stainless steels (eg. 304L, 316L) and CMn or low alloy steels. Normal range of service temperatures -75 to +400°C.
Base materials	The wire is used on a variety of base materials for the applications described above.
Typical analysis of wire, weight %	C: 0.02 Si: 0.4 (ER309LSi = 0.7%) Mn: 2.0 Cr: 23.1 Ni: 13.5
Typical heat treatment ⁽¹⁾	Preheat, interpass temperature and PWHT will be dependent on application and base material.
Mechanical properties of weld deposit ⁽²⁾	0.2% proof stress, Rp0.2%: ≥350MPa. Tensile strength, Rm: ≥550MPa. Elongation, 4d/5d: ≥25%.
Other products	-

Notes (1) Application codes and project specifications should always be referred to for specific requirements.

(2) Actual mechanical properties will be dependent on specific welding procedure (including shielding gas, flux, PWHT etc) and should always be confirmed by approval of an appropriate welding procedure.