

## ER309LMo

### MIG, TIG and sub-arc wire for austenitic stainless steel

Product name	IABCO ER309LMo
Classification EN ISO	14343-A: G/W/S 23 12 2 L
Material No.	1.4459
Classification AWS	A5.9: ~ER309LMo (nearest classification)
Approvals	-
Applications	<p>IABCO ER309LMo is used for buffer layers, dissimilar joints and difficult to weld steels.</p> <p>When producing weld overlays the first layer, buffer layer, is deposited using IABCO ER309LMo if the final deposit chemistry required is 316L; subsequent layers being deposited using ER316L.</p> <p>IABCO ER309LMo is also used for dissimilar joints between austenitic stainless steels (eg. 304L, 316L) and CMn or low alloy steels.</p> <p>IABCO ER309LMo is also used for welding difficult to weld steels such as hardenable or heat treatable steels.</p>
Base materials	<p>There are no matching base materials for IABCO ER309LMo.</p> <p>The wire is used on a variety of base materials for the applications described above.</p>
Typical analysis of wire, weight %	<p>C: 0.01 Si: 0.4 Mn: 1.5 Cr: 21.5 Ni: 14.7 Mo: 2.6</p>
Typical heat treatment <sup>(1)</sup>	Preheat, interpass temperature and PWHT will be dependent on application and base material.
Mechanical properties of weld deposit <sup>(2)</sup>	<p>0.2% proof stress, Rp0.2%: ≥350MPa. Tensile strength, Rm: ≥550MPa. Elongation, 4d/5d: ≥25%.</p>
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.