

ER347 / ER347Si

MIG/GMAW, TIG/GTAW and sub-arc wire for austenitic stainless steel

Product name	IABCO ER347 / ER347Si
Classification EN ISO	14343-A: G/W/S 19 9 Nb (G/W 19 9 Nb Si for the IABCO ER347Si)
Material No.	1.4551
Classification AWS	A5.9: ER347 (ER347Si for IABCO ER347Si)
Approvals	CE.
Applications	For welding Nb and Ti stabilised 18%Cr-8%Ni austenitic stainless steel base materials. The alloy has good general corrosion resistance and finds applications in the chemical, petro-chemical, food, brewery and nuclear industries; as well as many other general fabrication applications. Typical service temperatures are in the range -100°C up to 400°C, although higher carbon batches (>0.04%C) are suitable for use above 400°C.
Base materials	For stabilised 18:8 austenitic stainless steels. ASTM: 321, 347, CF8C. EN: 1.4541, 1.4550. UNS: S32100, S34700. Also suitable for standard unstabilised grades 304/304L.
Typical analysis of wire, weight %	C: 0.04 Si: 0.40 (ER347Si = 0.70%) Mn: 1.40 Cr: 19.2 Ni: 9.5 Nb: 0.6
Typical heat treatment ⁽¹⁾	Preheat: Not required. Interpass temperature: 250°C. PWHT: Not required.
Mechanical properties of weld deposit ⁽²⁾	0.2% proof stress, Rp0.2%: ≥350MPa. Tensile strength, Rm: ≥560MPa. Elongation, 4d/5d: ≥30/25%.
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.