

I.A.Barnes & Co Ltd Unit 21, Gunnels Wood Park Gunnels Wood Road Stevenage, Hertfordshire SG1 2BH, UK

Tel: +44 (0)1438 354972 Fax: +44 (0)1438 741530 www.iabco.co.uk

ER347H / ER347HSi

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

Product name	IABCO ER347H / ER347HSi
Classification EN ISO	14343-A: G/W/S 19 9 Nb (G/W 19 9 Nb Si for the IABCO ER347HSi)
Material No.	-
Classification AWS	A5.9: ER347 (ER347Si for IABCO ER347HSi)
Approvals	-
Applications	For welding Nb and Ti stabilised high carbon 18%Cr-8%Ni austenitic stainless steel base materials. The alloy has good general corrosion resistance and high temperature strength and finds applications in the petrochemical, chemical and power generation industries. Typical service temperatures are up to ~800°C. For some applications the ER16-8-2 is an alternative filler wire that provides a more ductile and metallurgically stable weld metal at elevated temperatures.
Base materials	For stablised 18:8 austenitic stainless steels. ASTM: 321H, 347H. EN: 1.4941, 1.4961. UNS: S32109, S34709.
Typical analysis of wire, weight %	C: 0.05 Si: 0.40 (ER347HSi = 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.

Directors: I.A.Barnes, P.A.Barnes, A.C.Barnes Registered in Cardiff No: 1654903