

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

ER316H

MIG and TIG wire for austenitic stainless steel

Product name	IABCO ER316H
Classification EN ISO	14343-A: G/W 19 12 3 H
Material No.	-
Classification AWS	A5.9: ER316H
Approvals	-
Applications	For welding nominally 17%Cr-12%Ni-2.2%Mo high carbon austenitic stainless steel base materials. The alloy has good high temperature performance with excellent long term creep properties and finds uses in the petro-chemical, and power generation industries. Typical service temperatures are in the range 500-800°C.
Base materials	For Mo bearing high carbon austenitic stainless steels: ASTM: 316, 316H, CF10M. EN: 1.4919. UNS: S31609. Also suitable for: 321H, S32109, 1.4940 and 347H, S34709, 1.4912.
Typical analysis of wire, weight %	C: 0.05 Si: 0.40 Mn: 1.80 Cr: 18.5 Ni: 11.5 Mo: 2.20
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%: ≥320MPa. Tensile strength, Rm: ≥520MPa. Elongation, 4d/5d: ≥30%.
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