

ER410

Wire for martensitic stainless steel

Product name	IABCO ER410
Classification EN ISO	14343-A: G/W 13
Material No.	-
Classification AWS	A5.9: ER410
Approvals	-
Applications	IABCO ER410 is a martensitic 12%Cr wire for welding matching base materials and also used for surfacing CMn steels. There are other ferritic 12%Cr alloys, including the utility ferritics, which are normally welded with IABCO ER309L/E309LSi. The ER309L/ER309LSi can also be used to weld 410 base material when it is not possible to carry out a PWHT. Used for a range of applications in furnaces, refineries, petro-chemical plant, steel mills and turbines.
Base materials	For matching martensitic stainless steels. ASTM: CA15, 410, 410S. EN: 1.4000, 1.4006, 1.4024, X6Cr13, X12Cr13, X15Cr13. UNS: S40300, S41000, S41008.
Typical analysis of wire, weight %	C: 0.09 Si: 0.4 Mn: 0.5 Cr: 12.2
Typical heat treatment ⁽¹⁾	Preheat-interpass temperature range: 150-300°C. PWHT: Following cooling to room temperature PWHT at 680-760°C.
Typical mechanical properties ⁽²⁾	0.2% proof stress, Rp0.2%: 675MPa. Tensile strength, Rm: 500MPa. Elongation, 4d/5d: 20%.
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.