

ER420

Wire for martensitic stainless steel

Product name	IABCO ER420
Classification EN ISO	14343-B: SS420
Material No.	-
Classification AWS	A5.9: ER420
Approvals	-
Applications	IABCO ER420 is a martensitic 12%Cr wire for welding matching base materials and also used for surfacing CMn steels. It is similar to the ER410 but with a higher carbon content and hence higher otential hardness but lower toughness.
Base materials	For matching martensitic stainless steels. ASTM: CA40, 420. EN: 1.4021, 1.4028, 1.4031, X20Cr13, X30Cr13, X39Cr13. UNS: S42000.
Typical analysis of wire, weight %	C: 0.35 Si: 0.4 Mn: 0.5 Cr: 13.3
Typical heat treatment ⁽¹⁾	Preheat-interpass temperature range: 250-350°C. PWHT: Following cooling to room temperature PWHT at 680-760°C.
Typical mechanical properties ⁽²⁾	0.2% proof stress, Rp0.2%: 700MPa. Tensile strength, Rm: 550MPa. Elongation, 4d/5d: 15%.
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.