

Atom Arc 4340

Atom Arc 4340 is an all-position, iron powder, low hydrogen electrode developed for the welding of heat-treatable, high strength steels such as SAE 4130, 4330, 4340 and steel castings with similar hardening properties. Weld metal responds to heat treatment similar to 4340 base metal and is intended for use only in postweld heat treated applications.

Specifications

Classifications	No AWS Classification
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Welding Current	AC, DC+
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Low alloyed (0.8% Cr - 1.8% Ni - 0.25% Mo)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	951 MPa (138 ksi)	1040 MPa (151 ksi)	15 %
As Welded	1179 MPa (171 ksi)	1303 MPa (189 ksi)	12 %

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo
0.35	0.85	0.50	0.014	0.011	1.80	0.80	0.25

Deposition Data

Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
4.8 x 356.0 mm (3/16 x 14.0 in.)	200-300 A	24.3 V	71.04 %	74 sec	2.53 kg/h (5.6 lbs/h)