

# Atom Arc 9015-B91



Atom Arc 9015-B91 is designed to weld martensitic 95% Cr & 1% Mo-V steels known by the designations T91, P91 or Grade 91. These steels are designed to provide improved creep strength, fatigue, oxidation, and corrosion resistance at elevated temperatures. It also provides good weld metal ductility and high charpy values at room temperature.

This product is optimized to meet the requirements for Mn + Ni contents <1.0 wt %.

<b>Classifications</b>	AWS A5.5 : : E9015-B91-H4R ASME SFA 5.5
<b>Industry</b>	Petrochemical Pipeline Power Generation

<b>Welding Current</b>	AC or DC+
<b>Coating Type</b>	Low-hydrogen

## Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
Stress Relieved 2hr 760°C (1400°F)	21 °C (70 °F)	84 J (63 ft-lb)

## Deposition Data

Diameter	Optimal Amps	Current	Deposition Rate	Deposition Efficiency %
4.0 mm (5/32 in.)	170 A	130-220 A	1.7 kg/h (3.8 lb/h)	73.5 %
4.0 mm (5/32 in.)	140 A	130-220 A	1.4 kg/h (3.1 lb/h)	75.0 %
3.2 mm (1/8 in.)	140 A	90-160 A	1.2 kg/h (2.7 lb/h)	70.9 %
3.2 mm (1/8 in.)	120 A	90-160 A	1.2 kg/h (2.6 lb/h)	71.6 %
4.8 mm (3/16 in.)	250 A	200-300 A	2.4 kg/h (5.4 lb/h)	74.6 %
4.8 mm (3/16 in.)	200 A	200-300 A	2.2 kg/h (4.9 lb/h)	76.4 %
2.4 mm (3/32 in.)	90 A	70-100 A	0.8 kg/h (1.7 lb/h)	66.3 %