

# spark 309

Rutile based 23/12 type Stainless Steel Electrodes  
for joining AISI 309 type grades and welding dissimilar alloys

**Classifications:** AWS A 5.4: E 309-16 || IS 5206: E 23.12 R26

**Descriptions:** Spark 309 is a medium coated, rutile based Stainless Steel, all position electrode with 23% Cr and 12 % Ni composition. The weld metal exhibits radiographic quality with excellent resistance to corrosion and oxidation up to 1100°C. Spark 309 has smooth and stable arc, excellent slag detachability, low spatter, fine weld beads and operates well in both AC

**Applications:**

- Ideal for Welding dissimilar metal joints between carbon & low alloy steels and stainless steelsuch as cleats for superheaters, anchors for castable.
- Intermediate welds in clad steels of 18/8 type.
- Welding all 309 grades in cast or wrought form.

**Welding Parameters:**

Size (mm X mm)	Current (Amps)
2.50 x 350	60 – 80 A
3.15 x 350	75 – 100 A
4.00 x 350	90 – 130 A

**Typical Mechanical Properties:**

UTS	620 N/mm <sup>2</sup>
Elongation	38%
Yield Strength	410N/mm <sup>2</sup>

**Typical All weld metal composition (%):**

C	Mn	Si	Cr	Ni	S	P
0.07	1.25	0.7	24.2	13.1	0.014	0.03