

SC 312

Stainless steel electrode

Description and applications

Electrode for high strength joint welding and surfacings of similar and equal steels or cast steels, for joint welding tensile unalloyed steels, tempered and tool steels, high manganese steels, spring steels and joints between dissimilar steels with high alloyed stainless steels. Furthermore for crack proof tough inter-passes on hard surfacings and for abrasion resistant and warm hardened surfacings. The austenitic – ferritic weld metal is stainless & corrosion resistant. Due to enhanced delta –ferrite content, black – white joints are highly resistant against hot-cracking.

Applications: Dies, tools, spring steel, shaft repair....superior weld ability for all steels.

All weld metal mechanical properties (typical)

Yield strength Rp 0,2 % (N/mm2)	Tensile strength (N/mm2)	Elongation (%)
> 500	> 800	> 20

Typical weld metal chemical composition (%)

С	Si	Mn	Cr	Ni	Мо	S	Р
0.10	< 0.90	< 1.0	29.00	9.00		0.012	0.015

Amperes (A)

2.50	3.15	4.00	5.00
50-80	80-110	110-150	150-180

Heat treatment

Pre-heating depending on base material, low heat input required. Otherwise pre-heating not necessary. Interpass temperature max. 200 °C.

Welding instruction

= + ~ Re-drying: 300-350°C/2h

Welding positions





PB





