

Classification: BS EN 14343: 2009 – G 18 8 Mn

Approvals: TUV, DB, CE Marking

Typical Applications:

Proweld 307Si is primarily used for welding stainless steel mild or medium carbon steels. Also used to joining and surfacing hardenable steels. Used in Automotive exhausts for dissimilar joining.

This is a high manganese steel gives pure austenitic weld metal, exhibits good ductility.

Wire Composition: (%)

	С	Mn	Si	Cr	Ni	S	P	Mo
min	-	5.0	0.65	17.0	7.5	-	-	
max	0.12	8.0	1.00	20.0	9.0	0.03	0.03	0.30

Mechanical properties (Typical as Weld):

Tensile Strength	600N/mm ²
Yield Strength	400 N/mm ²
Elongation A5	35%
Impact energy(20° C)	120J
Hardness	190 BHN

Ferrite content:

Ferrite Number about 5 WRC-92.

Welding Parameter:

Diameter	Current	Voltage
(mm/in.)	(A)	(V)
0.80 / 0.030"	100-160	18-22
1.00 / 0.040"	140-200	18-24
1.20 / 0.045"	170-260	20-28
1.60 /0.060"	220-350	24-36

Welding parameters such as Current, Voltage are just guidelines to users because it depends on application, section thickness of job, design of joints, arc travel speed etc.

Shielding Gas:

M12 Argon+2% CO₂,14-20 LPM M13 Argon+1-3% O₂,14-20 LPM

Corrosion resistance:

As this material primarily used for welding stainless steel mild or medium carbon steels joining. The corrosion resistance of weld nearest to AISI 304.

Packaging Detail:

Diameter: 0.80, 1.00, 1.20, 1.60 mm

Packing **: 12.5Kg (25 lbs), 15Kg (30 – 33lbs)

Layer wound plastic spools i.e. SD300, Metallic basket (BS300). 5Kg (10lbs) layer wound plastic

spools i.e. SD200.

1Kg (2lbs) layer wound plastic

spools i.e. SD100.

Drum pack 100 kgs and 250 kgs

(0.80, 1.00, 1.20mm)

*Also available in AWS standard diameters.

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