



STRATA INTERNATIONAL LTD.

SUPERIOR PRODUCTS FOR MAINTENANCE AND REPAIR

STRATA 553 – Easy to use electrode for Inconel and other nickel alloys

FEATURES & APPLICATIONS

For dissimilar welds on nickel base alloys to themselves, to alloyed steels or to stainless steels.

A Niobium bearing, all position Inconel electrode for joining high temperature and cryogenic steels and nickels

- Excellent out of position
- Phenomenal physical properties
- Extremely easy slag removal
- Performs unusually well on AC current
- Also available in TIG form as product code 6082

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: In the as welded condition this nickel base weld metal consists of austenite with a few carbides.

Flux Colour: Grey-Tan

C	Mn	Si	S	P	Cr	Nb	Fe	Co	Cu	Ta	Ti	Ni
.04	6.0	.40	.005	.01	16.5	2.0	6.0	.12	.1	1.3	.1	bal

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal

Tensile Strength
Yield Strength
Elongation

Maximum Value Up To

100,000 PSI (700 MPa)
60,000 PSI (420 MPa)
43%

PROLINE

professional welding supplies

Ph: 0800 699 353
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WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Positive (+) or AC

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	50	70	90
Maximum Amperage	70	95	120

Welding Techniques: Weld at minimum amperage to maintain low heat input

Welding Positions: Flat, Horizontal, Vertical up, Overhead

Deposition Rates:

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings	Recovery Rate
3/32 (2.5)	12" (300)	.37oz (10.5g)	43 (95)	37 (82)	60	105%
1/8 (3.25)	14" (350)	.76oz (22g)	21 (47)	24 (53)	90	105%
5/32 (4.0)	14" (350)	1.14oz (32g)	14 (31)	17 (38)	105	105%

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Length (mm)	12" (300)	14" (350)	14" (350)
Electrodes/lb	24	13	9
Electrodes/kg	53	28	19