STRATA INTERNATIONAL LTD.
SUPERIOR PRODUCTS FOR MAINTENANCE AND REPAIR

STRATA 507U – Super strength ultra low input electrode

FEATURES & APPLICATIONS

Due to exceptional strength and crack resistance, it is ideal for repairing tools, dies, spring steel and any dissimilar metal combinations, except for the aluminium and copper alloys. It is also recommended for repairing worn parts and as an underlay for hardfacing.

The ultimate electrode for welding all types of steels, without any damage of cracking or breakage. Special "FERRITE BALANCED" Chemistry also serves as a "STUD PULL" electrode.

- An engineered deposit chemistry that has the perfect ratio of metallic to offer crack resistance far superior to any other brand
- Special flux formulation eliminates slag interference in horizontal fillets
- Slag is designed to turn to powder making this electrode ideal for "STUD PULL" application.
- Special specification exceeding chemistry for extreme crack resistance

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: A duplex austenite/delta ferrite structure with a Shaeffler ferrite value below 35%.

Type	Cu	C	Mn	Cr	Si	S	Ni	P	Mo	Fe
Special Proprietary Non-Conforming Chemistry										

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal	**Maximum Value Up To**
Tensile Strength as Welded	128,000 PSI (880 MPa)
Work Hardened	186,000 PSI (1280 MPa)
Elongation	32%, 36%, 17 coatings
Reduction of area	25%
Impact Energy	50J: 68°F (20°C)
Hardness	Brinell 225

Welding Techniques: The area in which the weld is to be made should be free of rust, grease, paint and other materials which cause weld contamination. A 90° vee joint should be used when joining heavy sections. Maintain a short arc length and use stringer beads.

Welding Positions: Flat, Horizontal, Vertical up, Overhead

PROLINE
professional welding supplies

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC reverse polarity (Electrode +) or AC

Diameter (mm)	1/16 (1.6)	5/64 (2.0)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	25	30	35	60	75	130
Maximum Amperage	35	55	70	110	140	200

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
1/16 (1.6)	12” (300)	.13oz (4g)	120 (264)	59 (129)	25	100%
5/64 (2.0)	12” (300)	.14oz (4g)	114 (251)	47 (103)	40	100%
3/32 (2.5)	12” (300)	.38oz (11g)	40 (88)	37 (82)	65	100%
1/8 (3.25)	14” (350)	.64oz (18g)	25 (55)	26 (58)	100	100%
5/32 (4.0)	14” (350)	1oz (28g)	16 (36)	21 (46)	130	100%
3/16 (5.0)	14” (350)	1.6oz (45g)	10 (23)	14 (30)	170	100%

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	1/16 (1.6)	5/64 (2.0)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	12” (300)	12” (300)	12” (300)	14” (350)	14” (350)	14” (350)
Electrodes/lb	54	42	26	14	9	7
Electrodes/kg	119	92	58	31	20	15