



# STRATA INTERNATIONAL LTD.

SUPERIOR PRODUCTS FOR MAINTENANCE AND REPAIR

## STRATA 570 – Electrode for welding high sulphur and high tensile steels. Also for T.1 steels

### FEATURES & APPLICATIONS

Structural and repair welds on high strength fine grained steels.

Low alloy, high strength AC/DC electrode for joining low and medium alloy construction steels

- Extra low moisture content is below .14%
- Smooth running AC/DC coating operates in all positions
- Low spatter yield, self releasing slag and uniform rippled deposit

### ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** In the as welded condition, the microstructure is ferritic/bainitic with a proportion of acicular ferrite.

**Flux Colour:** Grey

C	Mn	S	Si	P	Cr	Ni	Mo	Fe
.059	1.3	.006	.5	.012	.32	1.91	.37	Bal

### TYPICAL MECHANICAL PROPERTIES

#### Undiluted Weld Metal

Tensile Strength  
Yield Strength  
Elongation  
Impact Energy

#### Maximum Value Up To

120,000 PSI (845 MPa)  
96,000 PSI (665 MPa)  
23%  
82J (60ft. lbs.): 68°F (20°C)  
50J (36ft. lbs.): -60°F (-51°C)



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## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC Reverse (+) or AC

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	65	100	140	190
Maximum Amperage	100	140	190	250

**Welding Techniques:** For the majority of materials to be welded with these electrodes, minimum preheats between 212°F (100°C) and 392°F (200°C) are required to avoid hydrogen induced “cold” cracking. Remove all surface contaminants. Maintain a short arc gap and use a stringer or slight weave technique. Chip slag thoroughly between passes.

**Welding Positions:** Flat, Vertical up, Vertical down, Horizontal, 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)	14" (350)	.42oz (12g)	38 (83)	38 (84)	80	115%
1/8 (3.25)	14" (350)	.59oz (17g)	27 (60)	21 (47)	115	115%
5/32 (4.0)	14" (350)	1.1oz (30g)	15 (32)	18 (39)	175	115%
3/16 (5.0)	14" (350)	1.8oz (50g)	9 (20)	13 (28)	220	115%

## APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	14" (350)	14" (350)	14" (350)	14" (350)
Electrodes/lb	21	12	8	6
Electrodes/kg	46	26	18	13