



# STRATA INTERNATIONAL LTD.

SUPERIOR PRODUCTS FOR MAINTENANCE AND REPAIR

**STRATA 192 – Nickel manganese electrode resists extreme abrasion. Welds manganese steel**

## FEATURES & APPLICATIONS

For joining and repairing steel and manganese steel parts used throughout the railroad, construction and related industries.

Impact resistant electrode for joining and surfacing steels

- Extra high strength welds
- Welds do not spall
- Outwears ordinary hardfacing alloys in impact conditions as much as 10 to 1

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** Austenite plus ferrite

**Flux Colour:** Grey

C	P	S	Mn	Si	Cr	Ni	Mo	Fe
.09	.03	.01	4.3	.3	21.5	9.8	1	bal

## TYPICAL MECHANICAL PROPERTIES

### Undiluted Weld Metal

Tensile Strength  
Yield Strength  
Elongation  
Hardness  
Work Hardness

### Maximum Value Up To

119,000 PSI (830 MPa)  
72,000 PSI (500 MPa)  
41%  
Brinell 200, Rockwell C10  
Brinell 520, Rockwell C50



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## WELDING CURRENT & INSTRUCTIONS

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

Diameter (mm)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	90	120	165
Maximum Amperage	150	210	270

**Welding Techniques:** Do not pre-heat. Use the lowest possible amperage and move the electrode as quickly as feasible. Allow to cool slowly.

**Welding Positions:** Flat, Horizontal, Vertical up

**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
1/8 (3.25)	14" (350)	.94oz (26g)	17 (37)	22 (49)	115	160%
5/32 (4.0)	14" (350)	1.8oz (50g)	9 (19)	16 (35)	150	160%
3/16 (5.0)	14" (350)	2.7oz (75g)	6 (14)	11 (25)	210	160%

## APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Length (mm)	14" (350)	14" (350)	14" (350)
Electrodes/lb	9	6	4
Electrodes/kg	20	13	9