



## HH 277 MANG ALLOY STEEL

AC/DC REVERSE ELECTRODE

### General Characteristics

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HH 277 MANG is a special electrode with an excellent wear resistance and strain hardening properties. The austenitic weld deposit is highly ductile and practically non-embrittling, even in the 650° - 750° C (1200° - 1400° F) temperature range, with good crack resistance on parts that vary in analysis. Wear resistance is outstanding and almost equals that of common hard manganese steel. It has a deposit similar to the HH 207 MANG, however it is not a jet type electrode, and has a fully alloyed core wire, that allow for out of positioning welding.

### Procedure

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Clean weld zone. Remove all dirt, scale, rust, grease, etc. Follow usual joint preparation. Bevel heavy sections to 60-90° including angle. Use a short arc, and run stringer beads. Intermittent welding may be used, to prevent local heat build-up. All slag should be removed prior to applying multiple passes. Allow weldment to cool slowly.

### Application

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HH 277 MANG can be used for railroad frog points, rail ends, machinery and car parts, bloom and billet rolls, hot dies, reconditioning of cavitated water turbines. For applying tough intermediate layers when building up on hard manganese steel parts.

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Tensile Strength	85,000 PSI
Yield Strength	89,000 PSI
Elongation	40%
Hardness (HB) Brinell	Approx. 200
Hardness (HB) Brinell (Work Hardening)	Approx. 520

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Diameter (Inch)	3/32	1/8	5/32
(mm)	2.5	3.25	4.0

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Amps (approx.)	65-80	85-110	110-150
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