

AMTEC 277 ALLOY STEEL
AC/DC REVERSE ELECTRODE

General Characteristics

Amtec 277 is a special electrode with 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. Amtec 277 has a deposit similar to the 207 CNMG, however it is not a jet type electrode, and has a fully alloyed core wire, that allow for out of position welding.

Procedure

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

Amtec 277 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.

Tensile Strength	85 ,000 PSI
Yield Strength	72,000 PSI
Elongation	40%
Hardness (H.B.) Brinell	Approx. 200
Hardness (H.B.) Brinell (Work Hardened)	Approx. 520

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

Amps (approx.)	65-80	85-110	110-150
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CONFIDENTIAL INFORMATION
Subject to change without notice

Tip Color – Red
277 Imprint