

CAPABILITY SHEET

P91/P22 power piping inspection, fitness-for-service assessment, and repair execution

High Energy Piping (HEP) systems — main steam, hot reheat, cold reheat, and feedwater piping operating above 750°F or 1025 psi — present the most significant risk of catastrophic failure in a power plant. MAC Industrial provides comprehensive HEP inspection and repair services in compliance with ASME B31.1 Mandatory Appendix V / CPS Chapter VII requirements.

Our NDE team employs PAUT, TOFD, conventional UT, radiography, and creep replication to characterize damage before our qualified welding crews execute code-compliant repairs.

- ASME B31.1 CPS-compliant HEP inspection program management
 - P91, P22, P9, and P11 pipe repair and replacement
 - Type IV weld cracking assessment and repair
 - Creep damage replication and metallurgical sampling
 - PAUT and TOFD weld examination
 - Hanger and support inspection and adjustment
 - Post-weld heat treatment (PWHT) per WPS requirements
 - As-found and as-left documentation packages
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- ASME B31.1 — Power Piping, Mandatory App V / CPS Chapter VII
 - ASME Section IX — Welding Qualifications
 - ASME PCC-2 — Repair of Pressure Equipment and Piping
 - API 579-1/ASME FFS-1 — Fitness-For-Service
 - EPRI Guidelines for P91 Welding, Heat Treatment, and NDE