

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

- 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