Outage Services

Specialty Welding & Machining

The Westinghouse Solution

Westinghouse provides implementation of schedule/quality-critical mechanical projects and specialty welding applications for power facilities. Our project managers, supervisors, weld operators and craft personnel have decades of experience delivering the most critical quality and productivity for our customers.

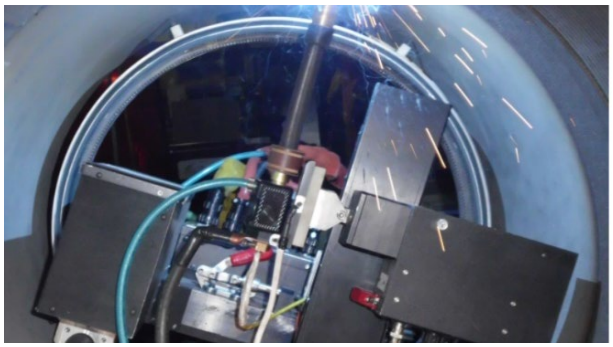
Customer Benefits

Westinghouse's robust infrastructure includes a well-developed Project Management System to estimate, manage and deliver all projects through detailed work breakdown structures and critical path schedule management. We meet or exceed all safety standards, reduce planned schedule duration and respond to emergent scenarios.

Westinghouse utilizes cutting-edge specialty welding and machining equipment and processes and a talented engineering team to create innovative solutions for higher productivity and quality. Our Weld Guarantee drives 1st time quality.

Quality Assurance & Welding Programs

Our Quality Assurance Programs meet 10CFR50 Appendix B/NQA, National Board (NBIC), R, NR and ASME Codes with U and S Stamps and our in-house Welding Program meets ASME Section IX and AWS Codes with hundreds of weld procedures and nearly 1,000 welder qualifications. We have qualified over 400 union welders to our program.



Welding Capabilities

Westinghouse has the most capable and efficient specialty welding and machining organization in North America with the ability to provide the following services:

- General machining (pipe cutting & welding)
- New system/plant installations
- Reactor coolant pump repairs & system piping
- Component replacement
- Dry cask storage welding
- Secondary plant system repairs/replacement
- FWH/MSR replacement/repair
- Pump & valve weld repair
- Structural weld overlay
- RPV vessel repairs
- Piping modification
- EDM machining
- Engineered solutions to complex mechanical challenges

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www.westinghousenuclear.com/operating-plants/outage-services/specialty-welding-and-machining

Welding Project Examples

Turnkey Contractor Feedwater Heater Replacement

Westinghouse worked with a Northeastern nuclear utility as a turn-key contractor to provide all of the management, supervision, craft and subcontractors to perform all scopes of work involved in a multiple feedwater heater replacement project. Scopes included planning, scheduling, piping replacement, condenser cutouts, heavy rigging, scaffolding, insulation, asbestos removal, FME, hole watch and fire-watch attendants and involved managing over 470 subcontractor resources.

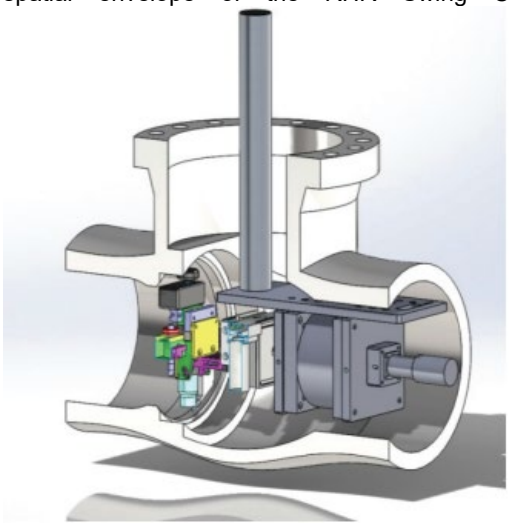
Westinghouse's partnership with an At-Risk joint success framework led to successful replacement of all three feedwater heaters, piping and condenser walls within the aggressive 28 day schedule.

RHR Swing Check Valve Seat Replacement

The project involved replacing a welded seat insert in one (1) 10" diameter 300lbs Anchor Darling swing check valve in the Residual Heat Removal (RHR) system during an outage at a Midwestern nuclear generating plant.

Due to adjacent pipping and structures, radial and axial clearances around the valve were minimal. In addition the spatial envelope inside the valve was limited and prevented the use of manual welding or machining processes. Finally, the work was performed in a radiologically controlled area, the valve inside was contaminated.

Through its specialized tooling design and customization capability, Westinghouse was able to offer a seat replacement versus valve replacement option. Both a purpose-built machining system and remote video operated Gas Tungsten Arc Welding (GATW) orbital weld head were customized by Westinghouse's tooling engineers to fit within the limited spatial envelope of the RHR Swing Check Valve.



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