

Technologies	AVANTech Delivers Results...	Facilities
	<p style="text-align: center;"><i>Offering Water Treatment and Radioactive Waste Management Services</i></p>	
<p>AVANTech Steel Containers (ASCs)</p>	<p>Design, Build, Test, Install, and Operate Systems:</p>	<p>Columbia, SC</p>
	<ul style="list-style-type: none"> ✓ BWR/PWR Water/Wastewater/Wet Waste Technologies – Ion Exchange, Reverse Osmosis, Ultrafiltration ✓ In-plant and Modular Ion Exchange Systems, including Cesium, Strontium, and Technetium Ion Selective Technologies – DOE Hanford Tank Side Cesium Removal (TSCR) System ✓ Basin and Tank Desludging with Solids Collection Filters (SCF™) ✓ Rapid and Remote Robotic Dewatering Systems/Fill-Heads ✓ Make-Up Water Systems ✓ Modular and Advanced Grouting and Solidification Systems – Cast Stone, High Ammonia Grout, Advanced Polymer Solidification (APS™) ✓ Radioactive Waste Casks and Containers Including HICs ✓ Next Generation Analytic Systems for Vapor Detection – AVANTech Continuous Emissions (ACE™) Monitoring System ✓ Experienced Commercial Grade Dedication (CGD) Processes 	
<p>DOE TSCR Process Enclosure</p>	<p>Two Decades of Results:</p>	<p>Knoxville, TN</p>
	<ul style="list-style-type: none"> ✓ 1+ Billion Gallons Processed Wastewater; 50+ Million Annually ✓ Operating 11 Wastewater Treatment Plants ✓ Fukushima Radioactive Waste Treatment Emergency Response ✓ Groundwater Treatment at DOE, US, and International Sites 	
<p>Solids Collection Filter (SCF™)</p>	<p>Three NQA-1 Manufacturing Facilities</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  <p>AVANTech</p> <p>     </p> </div> <div style="text-align: right;"> <p>Columbia, SC 803.407.7171</p> <p>Knoxville, TN Richland, WA 865.539.9000 509.943.6706</p> <p>www.avantechllc.com</p> </div> </div>	<p>Richland, WA</p>

AVANTech Steel Containers (ASCs) Provide Tremendous Savings

AVANTech, LLC has recently announced several new contracts for AVANTech Steel Containers (ASCs) for radioactive waste disposal, saving some nuclear power plants and other nuclear facilities over ~200K/year – a 25% liner savings year-to-year.

While raw steel prices have increased +10% over the last year and continue to rise, AVANTech has been proactive and added efficient fabrication equipment for production of dewatering/waste liners.



AVANTech has recently invested in liner shell plate, angle, and pipe rolling machines; Computer Numerical Control (CNC) mills; and precise waterjet abrasive cutting systems. This machinery increases production efficiency and reduces waste material, while allowing AVANTech to pass on these cost savings to customers.

Cost reduction strategies include:

- Raw material steel costs have been reduced by 25% because of the tooling obtained.
- Raw material filter costs are being redesigned/evaluated.
- Labor cost reduction team developed to create jigs to speed up assembly and modify designs to reduce weld time by 50%.

AVANTech's complete line of ASCs is available in all common sizes: 8-120, 10-160, 14-170/190, and 14-200/210/215, etc.; or can be built to custom specifications. All ASCs are high-quality, IP-1 packages and are designed to maximize internal usable volume. This results in more radioactive waste being shipped in each outgoing shipment, which contributes to fewer shipments and less costs.

The ASC dewatering/waste containers are compatible with existing fleet dewatering equipment (e.g., SEDS, RDE, etc.) as well as all remote container grapple systems. The ASCs are a direct OEM replacement and are capable of being gross dewatered or fully dewatered to meet the stringent Free-Standing Liquid requirements for direct commercial radioactive LLW burial.

AVANTech is also expanding alternatives for radioactive waste management cost savings:

- Liner-in-Liner (LNL™) Downblending Containers (*Patented*): ~\$150,000 Savings for each liner downblended.
- Volume Reduction Container (VRC™) Collapsible Radioactive Wet Waste Liner System (*Patent Pending*): ~20% Savings
- 800-gpm High-Flow Pressurized Solids Collection Filter (SCF™): Reduces outage time

AVANTech offers radioactive and industrial water treatment solutions with advanced fabrication facilities in Columbia, SC; Richland, WA; and Knoxville, TN. AVANTech has extensive experience creating integrated solutions in industrial, government, and nuclear power applications.