

Arsenic and Hexavalent Chromium Removal

AVANTech provides proven adsorption technology for effective arsenic removal, as well as integrated systems for effective chromium removal and packaging.

Features & Benefits

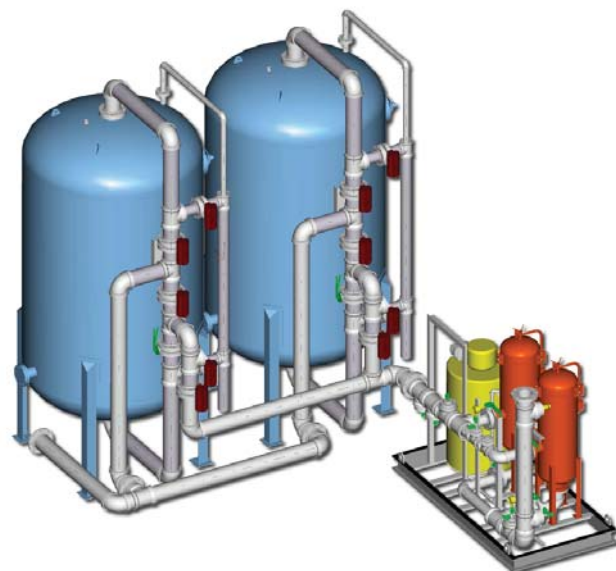
- ✓ Skid/trailer/container mounting
- ✓ Automated controls with data logging
- ✓ Quick installation/startup
- ✓ Mitigates system transients
- ✓ Improved product quality
- ✓ Unattended system operation

Pilot Scale Demonstration

- ✓ Verify treatment system compatibility
- ✓ Verify component performance
- ✓ Quality and optimize system parameters
- ✓ Create basis for guaranteed performance



Onsite Testing Available



Performance Factors

- ✓ Standard flow rates from 50 to 500 gpm.
- ✓ Supports 24/7 operation; no downtime required for backwashing, regeneration, or chemical cleaning.
- ✓ No secondary liquid waste requiring discharge or offsite treatment

Options for Implementation

AVANTech offers a variety of implementation options and services to accommodate client needs, including:

- ✓ Purchase
- ✓ Short- and long-term leasing
- ✓ Experienced engineers and trained operators available to support system design and operation

AVANTech Arsenic and Hexavalent Chromium Removal

Arsenic Removal

AVANTech's modular equipment accommodates all types of iron and titanium based media and is designed to provide an efficient, reliable, and economical means of arsenic removal.

Specific Features & Benefits:

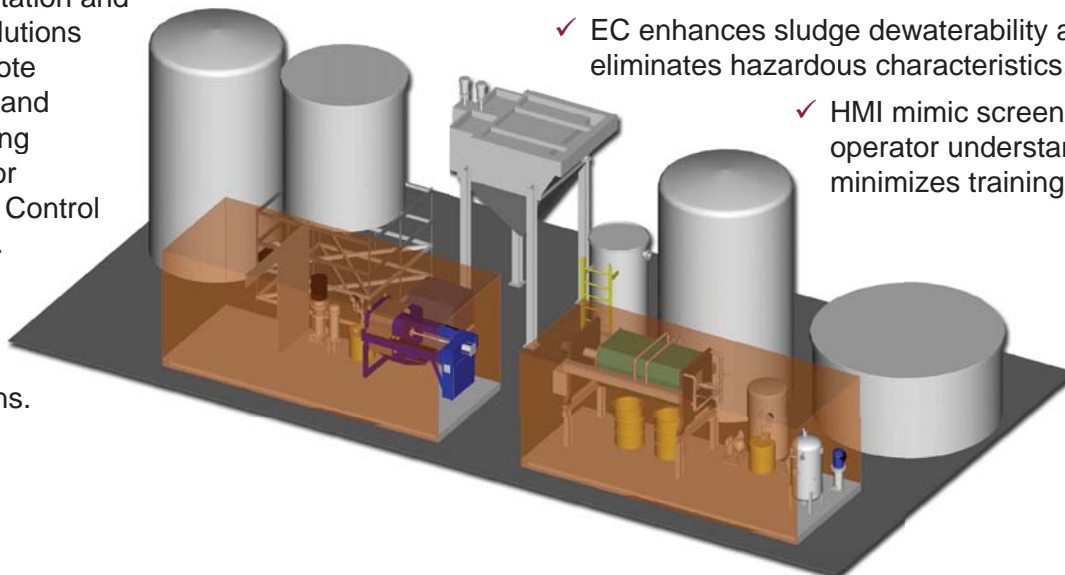
- ✓ Advanced arsenic selective media from leading manufacturers
- ✓ Integrated companion technologies for solids removal, chlorination, pH adjustment, etc.
- ✓ Sluicible vessel design minimizes time for media replacement



Arsenic Adsorption Media

Additional Performance Factors:

- ✓ Arsenic reduced to <10 ppb.
- ✓ Throughput of >50,000 BV (>400,000 gal/ft³).
- ✓ Skid mounted systems (oxidation, pH adjustment, prefiltration, and lead-lag vessel configuration provided when required to optimize performance).
- ✓ Sluicible media for emptying and refilling vessels.
- ✓ Instrumentation and control solutions allow remote operation and data logging (options for Telemetry Control available).
- ✓ Ideal for turnkey municipal installations.



Hexavalent Chromium Removal

Pressurized electrocoagulation system efficiently reduces Cr-VI to Cr-III and produces dewatered waste that meets TCLP and municipal landfill criteria.



Electrocoagulation Unit

Specific Features & Benefits:

- ✓ Electrocoagulation technology
- ✓ Multiple solids removal technologies
- ✓ Eliminates need for precipitation chemicals

Additional Performance Factors

- ✓ ~99.5% Chromium removal.
- ✓ Typical sludge generation of 10 ft³ per MMgal.
- ✓ Destroys and removes bacteria, viruses, and cysts.
- ✓ Compatible with a wide array of contaminants, including fats, oils, and grease.
- ✓ EC enhances sludge dewaterability and eliminates hazardous characteristics.
- ✓ HMI mimic screens aid operator understanding and minimizes training time.