

# 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

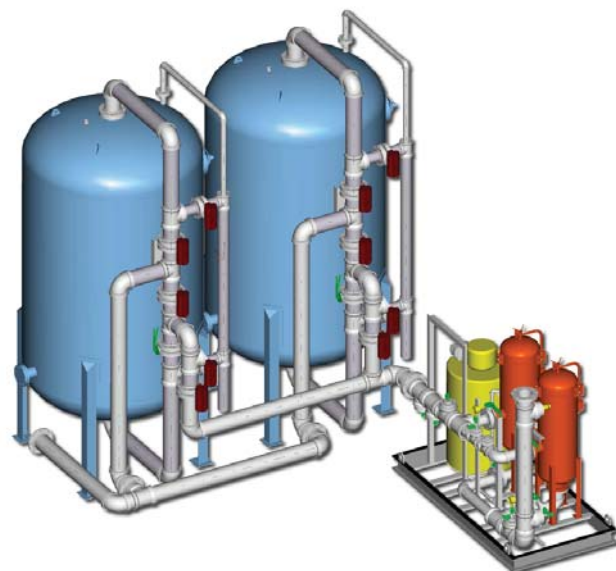
- ✓ Skid/trailer/container mounting
- ✓ Automated controls with data logging
- ✓ Quick installation/startup
- ✓ Mitigates system transients
- ✓ Improved product quality
- ✓ Unattended system operation

## 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:

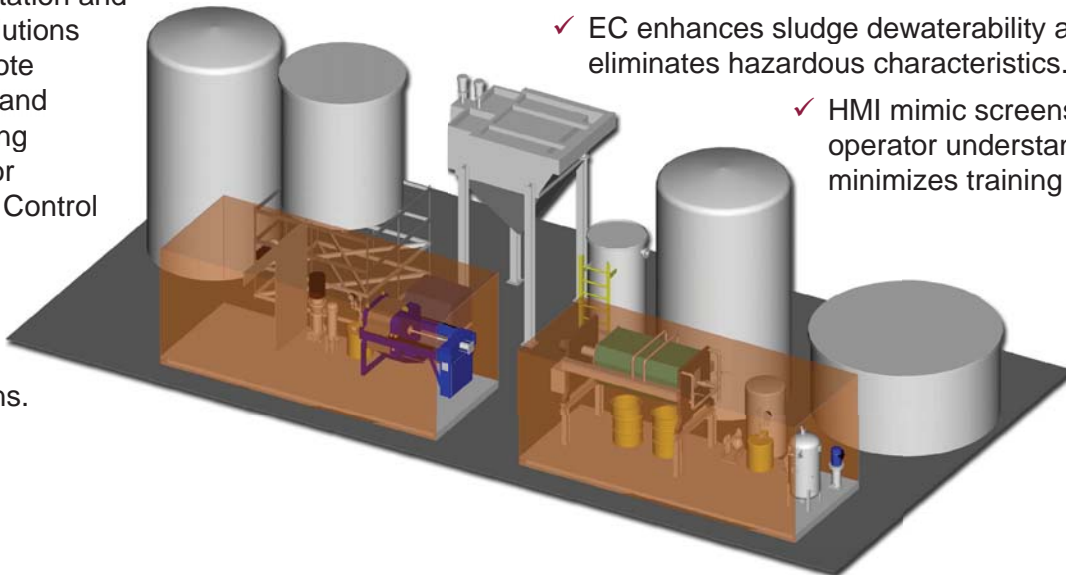
- ✓ Advanced arsenic selective media from leading manufacturers
- ✓ Integrated companion technologies for solids removal, chlorination, pH adjustment, etc.
- ✓ Sluicible vessel design minimizes time for media replacement



*Arsenic Adsorption Media*

### Additional Performance Factors:

- ✓ Arsenic reduced to <10 ppb.
- ✓ Throughput of >50,000 BV (>400,000 gal/ft<sup>3</sup>).
- ✓ 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 ft<sup>3</sup> 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.