

C53A Series Air Filtration Systems

Oxidation-Based Filtration for Problem Well Water

- Air-induction technology helps reduce iron, manganese, and hydrogen sulfide
- Enhances filtration performance through oxidation-based treatment
- High-capacity, high-flow filtration for commercial applications



The A. O. Smith C53A Series delivers high-capacity air filtration for commercial applications with challenging well water conditions. Utilizing a unique air-induction process, the C53A oxidizes dissolved iron, manganese, and hydrogen sulfide into filterable particles, improving filtration effectiveness without the use of chemicals. Flexible system configurations, advanced controls, and durable construction support reliable operation and long-term serviceability.

Features

Air-induction filtration technology helps oxidize dissolved iron, manganese, and hydrogen sulfide for more effective removal

Targeted filtration capabilities support iron, manganese, sulfur, particulate reduction, and other application-specific treatment needs

Flexible system configurations support single through multi-unit designs

Advanced controls provide system visibility and diagnostics

Fully adjustable backwash cycles provide flexible operation

Durable fiberglass-reinforced mineral tanks resist corrosion for long-term reliability

Top-mounted valve design allows easier access for servicing and maintenance

Wide range of filtration media allows customization for application-specific treatment requirements

NSF-certified components ensure trusted material quality and system integrity

Options

Progressive flow

Separate source backwash

Backwash air technology

ASME vessels (18" and larger)

Multiple valve sizes

C53A Series – System Components & Performance



System Monitoring & Visibility

- Advanced controls provide real-time system visibility
- Integrated diagnostics include flow, usage, and regeneration data
- 90-day water usage history, peak flow tracking, and totalizer data support performance insights

Control & Performance Optimization

- Fully adjustable backwash cycles enable optimized system operation
- Configurable multi-unit operation supports up to six tanks
- Engineered to maintain consistent performance under varying demand



System Integration & Flexibility

- Optional system controller provides centralized system management
- Supports multi-unit coordination and external system integration
- Plug-and-play capabilities support separate source backwash configurations

Durability & Operational Reliability

- Valve construction optimized by size:
 - 1"–1.25": corrosion-resistant Noryl®
 - 1.5"–3": lead-free brass
- Stainless steel meters provide accurate flow measurement and durability
- Battery backup preserves time settings and system data during power interruptions

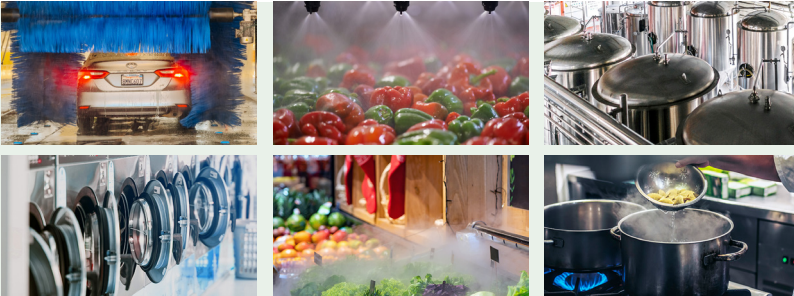
Filtration Media

Supports a wide range of media types—including Birm®, Turbidex™, Calcite, Corosex, Carbon, Greensand Plus™, and multilayer media—enabling targeted treatment for chlorine, iron, particulates, and pH adjustment within a single system platform.



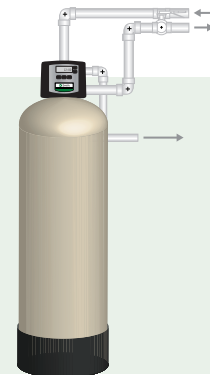
Operating Limits

30–100 psi • 40–100°F



Shown: Select applications.

Explore additional system applications at aosmith.com/commercialwatertreatment



Note: This system is not intended for the treatment of microbiologically unsafe water without adequate disinfection.

