

# The Role of Activated Carbon in Industrial Water Treatment

In modern industrial water systems, **activated carbon is a cornerstone of effective pretreatment and water quality control**. Whether it's protecting high-value equipment, removing chemical contaminants, or meeting regulatory standards, **activated carbon plays a critical role** in maintaining reliable plant performance.

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## Why Activated Carbon Matters

Activated carbon works through a process called **adsorption**, where contaminants adhere to the surface of carbon particles. With its extremely porous structure, activated carbon can trap and hold a wide variety of impurities, making it one of the most versatile treatment materials available.

### Key Contaminants Removed:

- **Chlorine & Chloramine** – common disinfectants that must be removed to protect ion exchange resins and RO membranes
  - **Organic Compounds** – including solvents, VOCs, herbicides, and pesticides
  - **Color, Taste, and Odor Compounds** – improving water quality for sensitive industrial processes
  - **Disinfection Byproducts (DBPs)** – ensuring regulatory compliance and downstream safety
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## Protection for Downstream Equipment

Installing a properly sized and maintained activated carbon bed doesn't just improve water—it **extends the life of your entire treatment system**, including:

- Reverse osmosis membranes
- Ion exchange resins
- Distribution piping and valves

By capturing harmful organics and oxidants before they reach these systems, activated carbon helps reduce fouling, extend service intervals, and lower replacement costs.

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## RTI Offers Turnkey Activated Carbon Installation Services

While activated carbon delivers significant operational benefits, **installation and replacement can be a messy, labor-intensive job**. That's where **Recirculation Technologies LLC (RTI)** comes in.

### RTI Provides:

- Bulk supply of **premium-grade activated carbon**
- **On-site carbon removal and replacement**
- Safe handling and disposal of spent carbon
- Minimal disruption to plant operations
- Optional vessel inspections during service

Whether you're upgrading your system or replacing a fouled carbon bed, RTI ensures the job is **done cleanly, efficiently, and safely**.

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## Cleaner Water, Smarter Maintenance

A healthy carbon bed improves system reliability, reduces downtime, and contributes to a longer service life for costly components. When paired with RTI's professional installation and support, **you get maximum value from every pound of activated carbon**.

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## Let's Get Your Carbon System Running at Peak Performance

Ready to install or replace activated carbon in your system? RTI is here to help with material supply, professional installation, and long-term support.

 **Call us:** 215-682-7099    **Email:** [sales@rtiservices.com](mailto:sales@rtiservices.com)    **Visit:** [www.rtiservices.com](http://www.rtiservices.com)