

*high purity ~ simple package ~ proven reliability*

# Recoflo® TriFlo™ Demineralizer

Achieve ultra pure water and eliminate the need for a mixed bed polisher or an electrodeionization system. Eco-Tec's Recoflo® TriFlo™ Demineralizer offers proven efficiency, reduced waste generation, and low operating costs.

## What is the Recoflo® TriFlo™ Demineralizer?

Eco-Tec's Recoflo® TriFlo™ Demineralizer utilizes the next generation of ion exchange with compressed bed, counter-current technology. With the consistent philosophy of a simple package with proven reliability, the TriFlo™ produces high purity water at low operating and total installed costs.

The Recoflo® TriFlo™ Demineralizer can produce ultra pure water with a conductivity **less than 0.1  $\mu\text{S}/\text{cm}$**  (10 megohm/cm resistivity), by adding a cation bed to the Recoflo® Demineralizer's two bed configuration. With the third bed, a single equipment skid can produce high purity water from a feed source containing up to 450 ppm of TDS. This high performance is the result of the rapid and efficient proprietary exchange kinetics of Recoflo®, that eliminates the need for a mixed bed or an electrodeionization system, while reducing operating costs.

## How Does the Recoflo® Demineralizer Work?

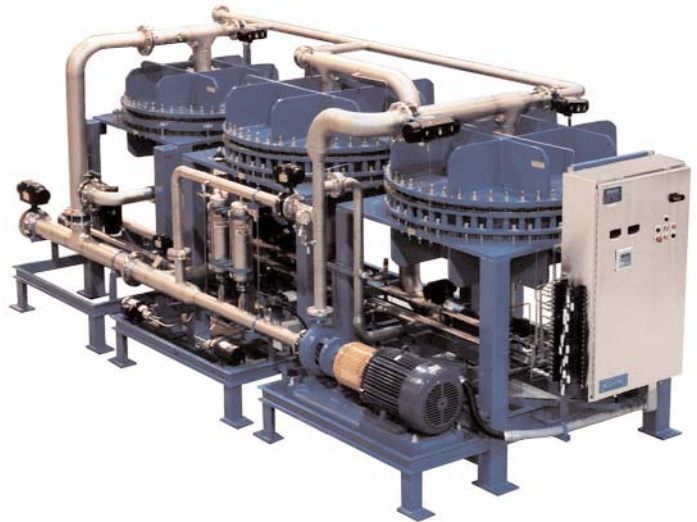
The Recoflo® TriFlo™ Demineralizer has proven, consistent performance with each of its key features offering **up to 5 times higher throughput rates** than other demineralizers:

### **Short bed height and small resin volume**

Recoflo® resin beds are only 6 inches (15 cm) to 24 inches (60 cm) in depth, requiring only up to 15% of the resin volume required of conventional ion exchange systems.

### **Low resin exchange loading**

Recoflo® uses less than 15% of the total exchange capacity of the resin compared to conventional ion exchange processes that use resin to near exhaustion.



### **Fine mesh resin**

Recoflo® uses Eco-Tec specified resin with a resin bead particle diameter of one-quarter the size of resin used by conventional ion exchange systems.

### **Compressed resin beds**

Recoflo® resin beds are at a state of compression at all times, with no freeboard.

### **Counter-current regeneration**

Recoflo® uses counter-current regeneration to ensure that the cleanest and most effective, resin is at the bottom of the bed after regeneration.

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Features	Benefits
Short-bed height	50% less floor space required and up to 70% less headroom Better resin kinetics Easy maintenance
Small resin volume	Better resin kinetics Reduced replacement resin costs Less time required for resin replacement
Compressed resin bed	Maximizes regeneration efficiency, ensures flow distribution, reduces rinse requirements and provides longer resin life
Low resin exchange loading	Better resin kinetics Resin efficiency Longer resin life
Fine mesh resin	Better resin kinetics Reduced cycle times Stronger resin
Specifically designed piping	Eliminates “dead spots” and helps to prevent bacteria growth
Counter-current regeneration	Efficient resin Effective resin rinsing
Pre-assembled, skid mounted	Easy installation
Full factory pre-testing	Fast installation
Fully automated	Remote monitoring Reduced operator attention

## Why Use a Recoflo® Demineralizer?

**Operational impact through proven product quality with:**

- Operating cost savings
- Maintenance savings
- Time-savings
- Installation savings
- Space savings
- Chemical consumption savings
- Waste reduction savings



**Contact Eco-Tec For More Details.**

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