

# FlexPro® RZ

*Flexible Control, Exceptional Protection, Maximum Efficiency*

FlexPro® RZ is a breakthrough innovation in cooling water treatment specifically designed to work with water reclaim, or water reuse on a broad range of cooling systems. This truly green solution supports emerging regulations while outperforming other cooling water chemistries.

## Why FlexPro® RZ?

In response to growing drought conditions and fresh water demands, businesses are becoming more aggressive in their sustainability efforts to reduce, reuse, and recycle water. The cooling tower is one of the largest systems that uses reclaim water. Reclaim comes with challenges, however, as some systems have not been equipped to handle this type of water makeup. These challenges may include:

- Increased algae growth caused by high and variable phosphate levels
- Fouling and severe localized corrosion because of high levels of BOD and TOC
- Increased potential for deposition because of high TSS levels
- Challenging biological control because of ammonia and organic matter
- Calcium Phosphate scale inhibition challenges when using water from POTWs

These complexities, along with emerging environmental restrictions on water discharge, prompted a ChemTreat research effort to develop a product to alleviate these challenges associated with reclaim. The result of this endeavor is FlexPro® RZ, a versatile approach to cooling water treatment specially designed for reclaim water.

- Proven effectiveness on an extremely broad range of water reclaim & reuse makeup sources
- Superior corrosion control by forming a persistent film across cooling system surfaces
- Exceptional fouling and scale control
- Reduced nutrient loading resulting in significant reductions in biocide and chlorine usage





## Why Use Reclaim?

Water scarcity is an increasing global concern. There have been aggressive efforts to reduce, reuse, and recycle this precious natural resource. Water users would like to make this transition effective and economical while maintaining efficiencies and equipment longevity. A successful application of reclaim water in your facility has numerous benefits, such as reduction in raw water and sewer costs, and a favorable environmental footprint.

Reclaimed water is a loosely defined product originating from any number of sources (grey water, produce water, or Title 22 water). The prior use can originate as rinse waters from demineralizers or other processes, process overflow, boiler or cooling tower blowdown, Reverse Osmosis reject, oil water separation, or POTWs. Needless to say, each of these secondary use waters have a different contaminant pallet for removal. Site specific treatment may include one or more of the following process operations: suspended solids, dissolved solids, metal oxides, BOD, ammonia, and other harmful constituent removal.

Most applications are not set up to do all the desired pretreatment which adds risk and requires treatment expertise to effectively meet expectations. ChemTreat has been successfully using reclaimed water in open cooling systems for over 40 years. Our knowledge and product offerings have increased as our experience has grown.

You can feel comfortable knowing ChemTreat has the chemical and process treatment to help accomplish your water conservation objectives through the use of reclaimed water.

## Benefits of FlexPro® RZ Technology

### Increased Flexibility

- Effective corrosion protection for multiple metallurgies including steel, copper, and aluminum
- Green chemistry that is effective across a broad range of water hardness levels
- Increased stability with makeup water and air borne contaminants
- Rapid, accurate analysis using a handheld or online sensor

### Maximum Protection

- Avoids Calcium Phosphate fouling in high temperature heat exchangers
- Controls deposition of Calcium Carbonate, Iron, Aluminum, and Manganese
- Lowers aquatic effects with a favorable EH&S profile
- DOT non-corrosive, safe handling and shipping

**FlexPro® RZ**

