

# APEX

QUARTERLY

FOURTH QUARTER 2022

**IN THIS ISSUE:**

**COOLING TOWER DESCALING WITH *RYDLYME* -  
DESCALE SAFELY & EASILY!**

**CIRCULATION IS KEY - MAKE SURE TO  
UTILIZE AN INDUSTRIAL DESCALING SYSTEM!**

***RYDLYME* DESCALES A SIZABLE BOILER  
AT A COLLEGE!**



**NEWS ON SAFE  
CHEMICAL SOLUTIONS  
FROM APEX ENGINEERING  
PRODUCTS CORPORATION**

“ Easily circulate **RYDLYME** through cooling towers to clean the fill, basin and much more! Save time & money! ”



## COOLING TOWER DESCALING

### The road to recovering efficiency

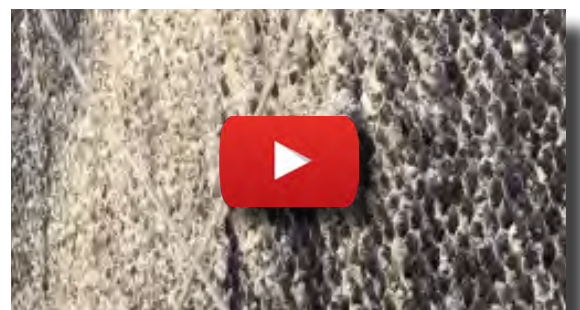
Adding **RYDLYME** descaler to the cooling tower basin allows the tower's transfer pump to circulate the solution throughout the entire cooling system while in operation.

This can all be accommodated during the normal operation of the cooling tower without shutdown!

It is imperative when calculating the required amount of **RYDLYME** descaler needed for a cooling tower system to include enough **RYDLYME** for the equipment load of the tower as well as the tower.

### **RYDLYME** Features:

- Biodegradable
- Dissolves 2.2 lbs of scale per gallon of **RYDLYME**
- NSF/ANSI 60 certified
- Non-corrosive and safe for personnel



The basic principal of a cooling tower is to cool the water that has picked up heat generated by equipment within the facility. The operation begins in the tower basin where the cooled water is pumped out into the facility and utilized for cooling the equipment on the tower system. As that equipment is cooled, the water picks up the heat and returns to the top of the cooling tower. The hot water is distributed onto a hot deck or through the sprayer nozzles that evenly distribute it over the tower fill media. The tower fill media is designed to increase surface area, as well as contact time between air and water. This enhances evaporation and allows further cooling of the tower water. The water then falls into the tower basin where it is then pumped back into the facility continuing to cool the equipment.

Scaling within a cooling tower can restrict the water distribution of spray nozzles, reduce the water flow through the openings of a hot deck and restrict the airflow within the tower. All of these conditions will result in diminished cooling capacity and inefficient operation of the associated equipment on the cooling tower system.

The photos below show just how bad scaling can be inside of a cooling tower. The scale was so heavy that the float could not engage! The cooling tower was returned to OEM specifications after a **RYDLYME** cleaning. The maintenance staff were incredibly pleased with the ease of use as well as the results from **RYDLYME**.



**RYDLYME**  
World's Leading Biodegradable Descaler



# RYDLYME®

World's Leading Biodegradable Descaler

## INDUSTRIAL DESCALING SYSTEMS

**RYDLYME** Industrial Descaling Systems are specifically designed to circulate **RYDLYME** biodegradable descaler through a vast array of equipment and systems keeping your facility in peak operating condition.

We proudly offer Iwaki seal-less magnetic drive pumps and air powered double diaphragm pumps also available on a cart system.



**15PPC & 15MDC  
Shown**



**15MDC**



**10CIP**



**10MDC**



**Pumpmaster 115v**



**15MDO**



**10MDO**



**15PPC**



**10PPC**



**20PPO**



**15PPO**



**10PPO**



**75LDP**

## SIZABLE BOILER TUBE DESCALING

A Midwestern college was noticing heating inefficiencies in their boiler system. Upon further inspection, a layer of scale was found blanketing the boiler tubes causing the aforementioned heating inefficiencies. Several methods of removing this scale were reviewed and analyzed, yet the obvious choice was **RYDLYME**. The safety, ease of product knowledge and the help of a local representative were only a few of the reasons the superior liquid descaler was chosen.

2,310 gallons or (7) 330 gallon totes of **RYDLYME** were used at a 50% dilution to circulate throughout the massive boiler. The solution was circulated for 8 hours due to the scale severity and size of the boiler.

After the recommended circulating time, **RYDLYME** was drained from the boiler and the results were revealed - the boiler tubes were down to bare metal once more! Efficiency was restored and another satisfied customer of **RYDLYME** emerged.



### CHALLENGE

A massive boiler at a Midwestern college was experiencing heating inefficiencies in their boiler system.

### SOLUTION

A total of 2,310 gallons of **RYDLYME** was circulated through the boiler for 8 hours due to scale severity.

### RESULTS

The customer is extremely satisfied with the results of **RYDLYME** dissolving the scale surrounding the boiler tubes - **RYDLYME** is scheduled to clean their other boilers as well!

## DESCALER & PUMPING SYSTEMS



**RYDLYME** biodegradable descaler is uniquely formulated to dissolve the toughest water scale, lime scale, mud and rust deposits from virtually any water-operated equipment. NSF A3 and ANSI 60 certified.



**RYDLYME Pumping Systems** are specifically designed to circulate **RYDLYME** through a vast array of equipment and systems to keep your facility at peak operating condition.

## CLEANERS & DEGREASERS



**RYDALL CC Coil Cleaner** is a biodegradable, concentrated solution that is safe for indoor and outdoor cleaning of air exposed surfaces on HVAC/R equipment. Dilutable and capable of being applied via foaming applicator. NSF A3 certified.



**RYDALL MP Multi Purpose Degreaser** is a biodegradable, versatile cleaner that quickly and safely removes oil, grease, grime and other pollutants from wettable surfaces and components. NSF A1 certified.



**RYDALL HD Heavy Duty Degreaser** is a biodegradable heavy duty, industrial grade degreaser. Used specifically on all carbon based derivatives that are found on the oil and/or process sides of your critical equipment or systems.



**RYDALL VP Specialized Degreaser** is a biodegradable, pH neutral degreaser specifically designed to safely and quickly clean and degas refinery process equipment. It can be applied in circulation or vapor phase applications.



**RYDALL DC Deodorizing Cleaner** is a biodegradable, ultra-concentrated cleaner designed to be used generally in janitorial applications such as floor, bathroom and window cleaning.

## ODOR CONTROL, WATER TREATMENT & WASTE CONVERSION



**RYDALL OE Odor Eliminator** is a unique, environmentally beneficial additive that is applied to landfills, compost or other organic odors. Naturally enhances methane release and production. Contains no masking agents, essential oils or fragrances.



**RYDALL WO Water Optimizer** is an environmentally beneficial additive that naturally reduces and prevents the formation of  $H_2S$ , COD, BOD, FOG, TDS and TSS. Thereby reducing corrosion and discharge penalties while increasing production.



**AEPC Thermal** is a division of Apex Engineering Products Corporation (AEPC). Our mobile waste conversion plants are trailer mounted and ready for deployment!

1241 Shoreline Drive Aurora, Illinois 60504 T: 630.820.8888 | 800.451.6291 | F: 630.820.8886 | MADE IN THE USA

Apex Engineering Products has been formulating and manufacturing safe and biodegradable specialty cleaning chemicals for a diverse range of applications around the world. From our **RYDLYME** biodegradable descaler to our versatile **RYDALL** line of degreaser/cleaner, odor control and water treatment products, we aim to decrease downtime and increase efficiency.

We are a fourth-generation, family-owned company acclaimed not only for our biodegradable line of products, but also our in-depth and exceptional customer support. With decades of knowledge and experience in a wide array of applications, our professional technicians will work closely with you to determine the best solution for your facility's unique challenges.

Apex Engineering Products also takes great pride in being an ISO 9001 Certified Company providing the highest level of support and quality of products to our customers... **another formula that hasn't changed in over 80 years!**