

APEX

QUARTERLY

THIRD QUARTER 2017

IN THIS ISSUE:

CLEAN YOUR BOILERS WITH *RYDLYME* - START UPS ARE AROUND THE CORNER!

WHY CLEAN YOUR COILS WITH *RYDALL CC*?

FOUL TERRITORY: ODORS IN ALLEYWAYS, DUMPSTERS & MORE...



NEWS ON SAFE
CHEMICAL SOLUTIONS
FROM APEX ENGINEERING
PRODUCTS CORPORATION

CONTENTS



Boiler season is right around the corner - prepare with **RYDLYME!**



RYDLYME tackles system at pulp and paper plant!



RYDALL CC and coil cleaning - the only coil cleaner you need!



APEX ENGINEERING JOB REPORTS



RYDALL DC put to the test!

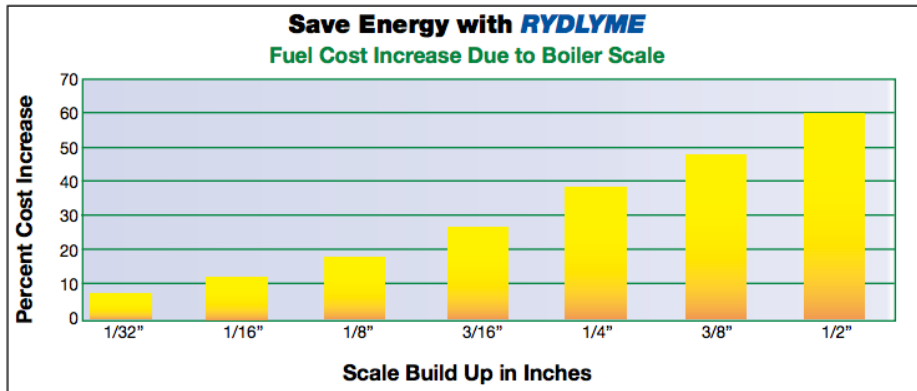


DON'T WAIT TO CLEAN YOUR BOILERS

The cold is just around the corner - don't wait until it's too late!

Like most of us, it's hard to believe that October is already here and the leaves are beginning to change. It won't be too long until boilers will be called upon again to keep us nice and warm.

Boilers represent the heart of many institutions including: airports, factories, food companies, general industry, hospitals, hotels, housing authorities, medical centers, office buildings, power utilities, schools, shopping malls, and other locations where hot water or steam is an essential part of the operation.



Scale is the accumulation of minerals such as calcium and magnesium on the water side of boiler heating surfaces. When boiler water turns to steam, residual minerals are left in the boiler. These minerals then settle out of the boiler water and form scale on the boiler heating surfaces. If the water delivered to the boiler contains even small amounts of scale-forming materials, the internal heating surfaces of the boilers can soon become coated with scale, leading to overheating, increased fuel consumption and subsequent tube failures. Even light or spotty scale deposition can be the foundation for hot spots, cracking, and distortion. For this reason, regularly cleaning the interior of steam generator and hot water systems is imperative. Boiler maintenance is crucial to the continued efficient operation of your facility. One component to your boilers preventive maintenance program should be an annual cleaning to remove mineral scales that have accumulated within the boiler. These deposits are great insulators that inhibit heat exchange and cause the boiler to lose heat transfer, thus efficiency.

FOR INSTANCE, SCALE THAT IS ONLY 3/16" THICK WILL CAUSE THE BOILER TO USE 27% MORE FUEL!

A common unknown fact is that boiler tube failures account for the majority of a power plant's forced outages. This, all because the boiler may be suffering from inadequate heat transfer. Water scale deposited in steam boilers is usually harder and denser than deposits found in hot water boilers. This is due primarily to the temperatures involved.



But even the smallest amount of boiler scale deposits hinder good over-all heating efficiency. These mineral deposits may occur from poor blow down and/or poor water treatment practices. Mineral deposits develop due to:

- Operating hours
- Boiler treatment methods
- Blow down techniques/procedures
- Feed-water hardness
- Operating temperatures
- Feed-water control fluctuations

During this winter season, make sure your boilers are operating efficiently to save money and significantly reduce the risk of costly repairs down the road.

Factors To Consider Before Boiler Cleaning

- Type and design of boiler; low temperature hot water, high temperature hot water, low pressure steam or high pressure steam?
- Size of boiler can be obtained from the name plate or other documentation.
- What is boiler used for? Heating or process (heat exchanger)?
- Age of boiler?
- The characteristics of the deposits and deposit analysis.
- Thickness of deposit; thickest area, thinnest area, average?
- Date last cleaned, if ever?
- Has any boiler feed-water treatment been used?
- Boiler history?
- What is the boiler's water capacity?
- Compatibility of the cleaning solvent with the metallurgy of the system.
- Ease of the cleaning application.
- Method of spent solvent disposal.
- Cost of cleaning method.
- Any tubes or sections leaking now? If so, they should be fixed before cleaning.

Don't wait to service your boilers - contact Apex Engineering Products Corporation today and get ahead of the weather!

WHY USE RYDLYME?

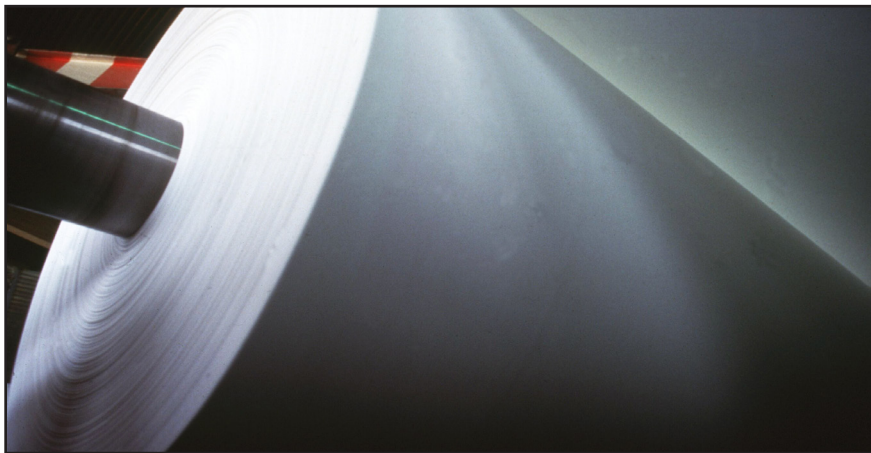
- 12X Faster and dissolves 50% more scale than other descalers!
- Safest descaler on the market! Hold **RYDLYME** in your own hand!
- Biodegradable without neutralization!
- NSF/ANSI 60-certified for potable water systems!
- Utilize our available pumping systems - easy to use!

[Click here](#) to contact an Apex Engineering Products representative for more information at **630.820.8888!**



RYDLYME USED ON BI-CARBONATE SYSTEM AT PAPER PLANT

A paper plant for a major company in Pennsylvania used **RYDLYME** to dissolve mineral deposits within its Bi-Carbonate System (Bi-Carb), which controls alkalinity in the plant's process water system. The Bi-Carb produces scale buildup inside the mix and day tanks, plugging up the system's pipes, strainers and other components.



Solution

- 125 gallons of **RYDLYME**.
- Circulated via pump inside mix tank for 3 hours; solution then transferred to day tank and circulated throughout the rest of the system (closed-loop) for 6-8 hours.

Results

- After cleaning and water flush, scaling throughout the entire system was eliminated, returning it to peak operating efficiency.
- Client plans to continue using **RYDLYME** in this cleaning application and is evaluating other applications in and around the plant where **RYDLYME** can be used.

RYDLYME TAKES ON AN OIL JOB

An Oklahoma oil refinery experienced heavy fouling on the distribution plates/packing material in its ketone stripper unit. The fouling was a result of caustic solution and water being steam heated. With a deposit buildup, the unit does not effectively remove the ketone from the waste stream. The plant turned to **RYDLYME** to address the issue.

Solution

- 990 gallons of **RYDLYME**.
- Circulated via 2-inch diaphragm pump for 8 hours.

Results

- Client was extremely happy with the cleaning as the unit was able to effectively remove the ketone, improving efficiency. Also, **RYDLYME** is now part of the unit's normal maintenance procedure.
- **RYDLYME** was also used in a prior job at the plant cleaning out a heat exchanger. The cleaning reduced temperatures from 300° to 150° F on process side and 160° to 125° F on tube side - a 100% reduction!



RYDALL CC TACKLES COILS



WHY CLEAN YOUR COILS?

Air-cooled condensers, evaporator coils and other finned cooling and heating coils can become coated and clogged with organic and inorganic deposits such as oils, calcium, dust, dirt and other deposits. This contamination will, in turn, cause the coil to lose efficiency in the form of increased energy consumption, loss of air flow and a decrease in indoor air quality. Cleaning your coils a minimum of twice per year will restore your efficiencies and extend the useful life of your equipment.



WHY USE RYDALL CC?

Suited for use with almost any indoor/outdoor coil, **RYDALL CC** will remove unwanted deposits and return coils back to peak efficiency.

- Biodegradable!
- NSF Certified!
- Use for Indoor/Outdoor Coils!
- Safe on All Roofing Materials!
- Low-odor Acid Based Formulation!

HOW TO USE RYDALL CC?

Simply dilute 1 part **RYDALL CC** and 2 parts water, spray, let soak and rinse away! For application questions and information please contact an Apex Engineering Products representative at 630-820-8888!



IN ACTION: **RYDALL MP**

RYDALL MP removes grease with ease!

A manufacturing facility in Wisconsin used **RYDALL MP Multi Purpose Degreaser** to cut through eight months worth of grease, grime and dirt buildup on its Haas ST30 CNC Lathe unit.

Solution

- Spray bottle of **RYDALL MP** (50% - 50% dilution with water).
- Sprayed area, let sit for approximately 1 minute and wiped off.

Results

- After just 3 applications, the heavy buildup was gone.
- The company is using **RYDALL MP** on other equipment and areas throughout its facility to safely eliminate grease, grime and other contaminants.

IN ACTION: **RYDALL WO**

RYDALL WO gets a hole in one!

A specialty starch processor in Maine was intrigued by the capabilities of **RYDALL WO** in reducing the amount of produced sludge and its effluent BOD levels. Apex provided a small sample of **RYDALL WO** to the client for testing on a sample of its wastewater obtained from the sludge tank.

Solution

- 200 ppm of **RYDALL WO** was added to the sample.
- The BOD level in the sample wastewater measured around 5,500 mg/l.

Results

- After only 6 days time, the BOD level dropped significantly down to 75 mg/l!
- The client then decided to add **RYDALL WO** to their 350,000 gallon sludge tank with tremendous results.

FOUL TERRITORY

A whimsical concoction of information in the world of scale, grease, odors and more.

RYDALL DC Put To Test!



RYDALL DC Deodorizing Cleaner was put through a rigorous series of field tests by Trane Supply during the “dog days” of this past Chicago summer. These trials included hotel cleaning staff that had to clean up after their guests that had partied a little too hard, assisted living facilities where the cleaning and deodorizing challenges are innumerable, owner occupied buildings where the trash chutes and dumpster areas are chronically problematic, alleys that have been used as a convenient restroom and even crime scenes requiring cleanup. None of these trials proved a challenge for **RYDALL DC**.

The performance of **RYDALL DC** during these trials prompted Chicago Trane Supply to request a corporate part number be assigned to **RYDALL DC** and it is now available to all Trane Supply locations.



DESCALER & PUMPING SYSTEMS



RYDLYME biodegradable descaler is specifically designed to dissolve the toughest water scale, lime scale, mud and rust deposits from virtually any piece of water-based equipment. **NSF-certified.**



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

CLEANERS & DEGREASERS



RYDALL CC Coil Cleaner is a biodegradable coil cleaner specifically designed to clean dirt, grease and soil residue from air-exposed surfaces of critical cooling or heating equipment. **NSF-certified.**



RYDALL MP Multi Purpose Degreaser is a biodegradable, highly concentrated degreaser/cleaner that quickly and safely removes oil, grease, grime and other pollutants from all surfaces and components. **NSF-certified.**



RYDALL DD Definitive Degreaser is a biodegradable, heavy-duty degreaser used specifically on all carbon-based derivatives found on the oil and/or process side of your equipment or system.



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 product that vitalizes microorganisms already present on surfaces and help speed up their metabolic process to naturally rid surfaces of odor and disease-causing bacteria.

ODOR CONTROL & WATER TREATMENT



RYDALL OE Odor Eliminator is a unique, environmentally beneficial biocatalyst containing a complex mixture of natural nutrients, vitamins, and trace elements designed to eliminate industrial odors and corrosion problems.



RYDALL WO Water Optimizer is an environmentally beneficial additive that disallows the formation of H_2S , COD, BOD, FOG, TDS and TSS. This unique biocatalyst is also effective in enhancing methane production and O_2 content.

1241 Shoreline Drive
Aurora, Illinois 60504
T: 630.820.8888 | 800.451.6291
F: 630.820.8886



For 75 years, 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 cleaners and degreasers, our products will decrease downtime and increase efficiency.

We are a fourth-generation, family-owned company renowned 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 knowledgeable technicians will work closely with you to determine the best solution for your facility's unique challenges. To further minimize your downtime, virtually all orders are shipped out within 24 hours.

Apex Engineering Products also takes great pride in being an ISO 9001:2008 Certified Company providing the highest level of support and quality of products to our customers...**another formula that hasn't changed in 75 years!**