

Manufactured Since 1942 by: Apex Engineering Products Corporation

**RYDLYME**<sup>®</sup>  
World's Leading Biodegradable Descaler

## Mining Industry

**RYDLYME** dissolves water scale, lime, struvite, vivianite, calcium and rust deposits safely, quickly and effectively!



Before

After

*the solution to your  
water scale problems*

Water scaling is a pervasive issue in the mining industry, affecting various equipment critical to mining operations. Scaling occurs when minerals and other impurities in water accumulate on surfaces, forming a hard, crystalline layer. This can lead to reduced efficiency, increased energy consumption, and the need for frequent maintenance. Several key pieces of equipment in the mining industry are particularly susceptible to scaling, including heat exchangers, cooling towers, vacuum pumps, pumps, and pipelines.

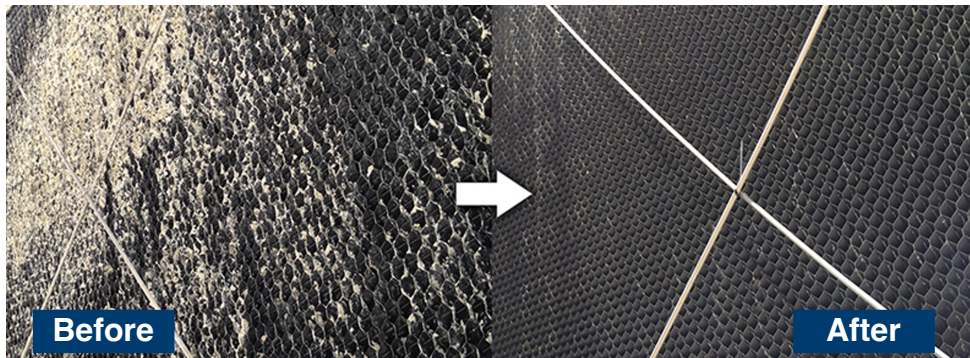
### Heat Exchangers

In mining operations, heat exchangers play a crucial role in maintaining optimal temperatures for various processes. However, when water with high mineral content is used in these systems, scaling can occur on the heat exchanger surfaces. This reduces heat transfer efficiency, leading to increased energy consumption and decreased overall system performance. Regular cleaning and descaling are necessary to ensure the smooth operation of heat exchangers.



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### Cooling Towers



Cooling towers are employed to dissipate heat generated during mining processes. Scaling in cooling towers can impede the flow of water, reducing the tower's cooling capacity. This can result in higher temperatures in critical equipment and a decline in operational efficiency.

Additionally, scaling can lead to corrosion issues in the cooling system. Routine maintenance with **RYDLYME** are essential to mitigate scaling in cooling towers.

### Vacuum Pumps

Vacuum pumps are used in various mining applications, such as material handling and processing. Scaling in vacuum pumps can lead to decreased pump performance, increased energy consumption, and a higher risk of mechanical failure. Regular inspection and cleaning are necessary to prevent scaling issues and maintain the efficiency of vacuum pump systems.



## Pumps



Scaling within pumps can cause reduced flow rates and increased energy consumption. It can also lead to cavitation, which can damage pump components. Proper inspection and regular maintenance with **RYDLYME** are crucial to preventing scaling in pumps and ensuring their reliability in mining operations.

## Pipelines

Scaling in pipelines can result in reduced flow rates and increased pressure drop. Over time, this can lead to decreased efficiency and increased energy costs for transporting materials within the mining facility. Regular inspection, cleaning, and descaling with **RYDLYME** are necessary to combat scaling in pipelines.



## Boilers



Boilers are commonly used in mining operations for steam generation. Scaling in boilers can reduce heat transfer efficiency, leading to increased fuel consumption. It can also result in uneven heat distribution and increased maintenance costs. Regular inspection and maintenance of the boiler are critical to maintaining the performance and reliability of boiler systems.

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Choose **RYDLYME** Descaler

The Comprehensive Solution for Sustained Efficiency in Mining Operations!

**RYDLYME** biodegradable descaler is as much as 12x faster than other chemical descalers, with most cleaning applications completed within only a few hours. Unlike mechanical cleaning

methods (e.g. brushing, rodding, hydro blasting), **RYDLYME** descaler can be circulated through equipment or system without the time and cost of dismantling. For many plants and facilities, a shutdown can cost thousands, even millions of dollars. In most cases, **RYDLYME** descaler is utilized for 2-6 hours of cleaning circulation resulting in fast turnaround!

**RYDLYME** descaler is the ONLY product of its kind that is truly non-toxic and safe! Unlike other chemical descalers and traditional harsh acids, **RYDLYME** descaler can be safely handled by personnel (you can even hold it in your hand without injury!) and there are NO transportation or handling restrictions! It can be safely disposed of in normal plant sewers, even in the case of an accidental spill at full-concentration!

Since 1942, **RYDLYME** biodegradable industrial chemical descaler has been used to safely and efficiently dissolve tough mineral deposits such as water scale, limescale, calcium, and rust. This revolutionary descaler is fortified with a complex formula of wetting and penetrating agents that dissolve into a solution for quick and easy disposal.

Pair **RYDLYME** with an industrial descaling system to circulate throughout your equipment!

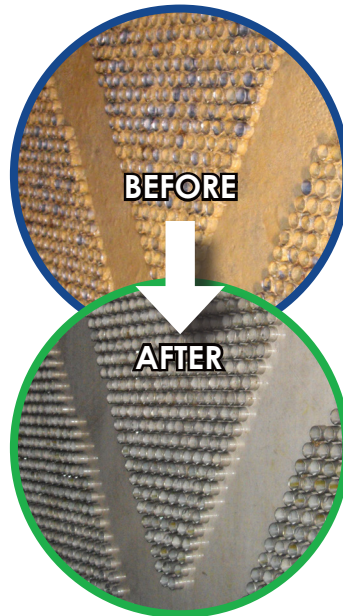
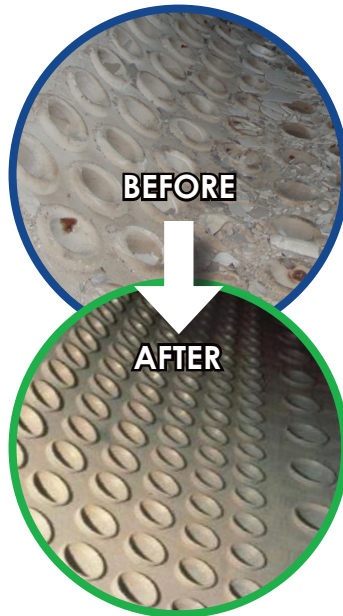
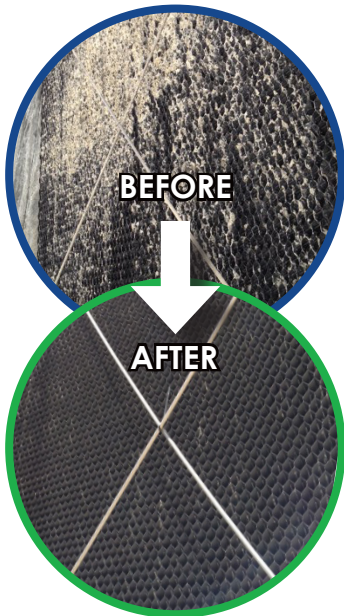


Cooling Tower Scale

Boiler Scale

Condenser Scale

Valve Scale



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