



TIRE &  
RUBBER

## CASE STUDY

Manufactured Since 1942 by: Apex Engineering Products Corporation

**RYDLYME**  
World's Leading Biodegradable Descaler

# SHELL & TUBE HEAT EXCHANGER CLEANING

A tire & rubber manufacturer was experiencing heat transfer issues as water scale had accumulated on the shell side of their heat exchangers. Plant personnel quickly turned to **RYDLYME** Biodegradable Descaler to dissolve these issues. In addition to the use of **RYDLYME**, the plant decided to pair the biodegradable descaler with our specially built industrial descaling system, the PumpMaster 115v. This pump system is perfect for small cleanings such as this sub-10 gallon heat exchanger.

The mechanical engineers circulated 1 gallon of **RYDLYME** diluted with 3 gallons of water using the PumpMaster 115v for 1 hour. The plant staff was ecstatic with the results of the cleaning and are excited to see their efficiency return! Other equipment applications throughout the plant are now being inspected for scale and **RYDLYME** will be applied there in conjunction with a larger pumping system for the increased volume. Preventative maintenance schedules are now being designed which specify cleaning with **RYDLYME**.



Shell & Tube Heat Exchanger Before



Shell & Tube Heat Exchanger After

### CHALLENGE

Water scale deposits had accumulated on a shell and tube heat exchanger at a tire & rubber manufacturing plant.

### SOLUTION

A 25% solution of **RYDLYME** was circulated via a PumpMaster 115v descaling system through the heat exchanger for 1 hour.

### RESULTS

After the **RYDLYME** cleaning, the plant was ecstatic with the results! All heat transfer surfaces were completely clear of water scale deposits to maximize efficiency. The plant will now implement a preventative maintenance program and clean other applications throughout the facility.