

Manufactured Since 1942 by: Apex Engineering Products Corporation

RYDLYME
World's Leading Biodegradable Descaler

Vacuum Pumps

RYDLYME dissolves water scale, lime, mud and rust deposits safely, quickly and effectively!



*the solution to your
water scale problems*

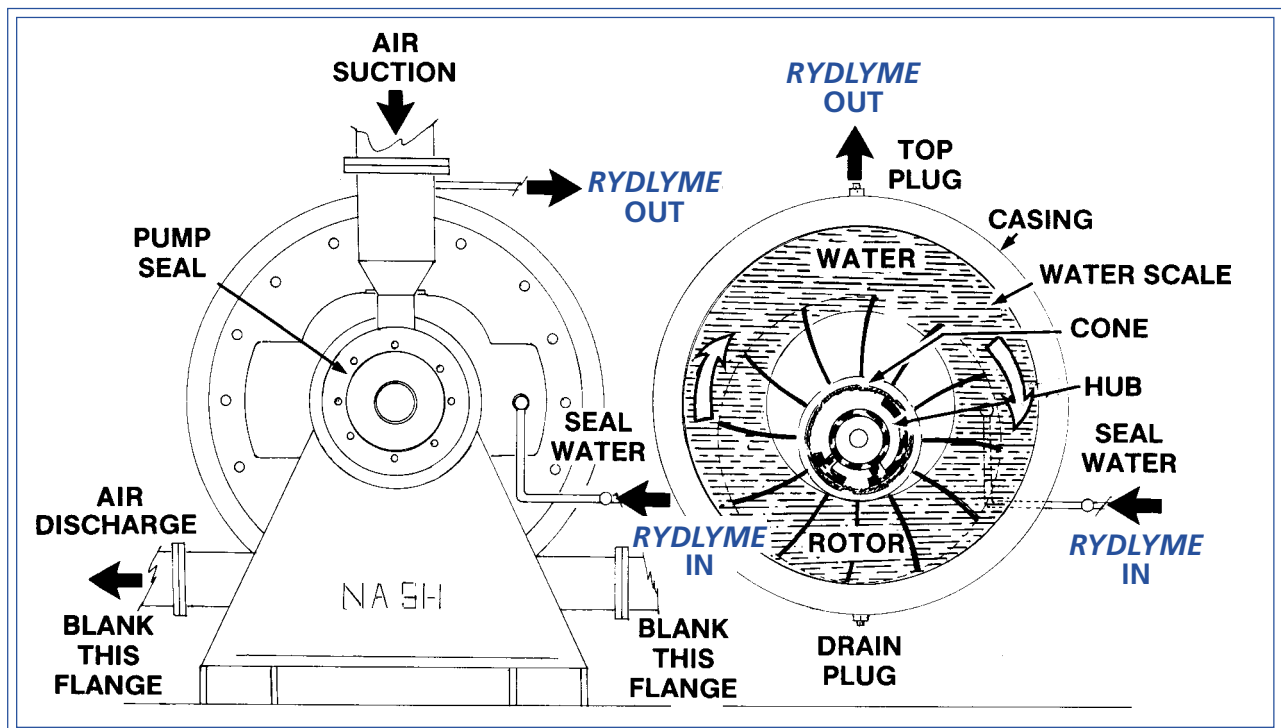
Recommended **RYDLYME** Quantities

MODEL						HP	QUANTITY
CL-200	SC-3	SC-4	L3	H4	MT/AT-124	10	10
CL-300	SC-5		L4	H5	AT-184	15	10
CL-400	SC-6	SC-7	L5	H6	K5	25	10
CL-700			L6	H7	K6	30	15
			L7	L8	H8	K8	K9
CL-1000	CL-1500			H10	AT-1004	60	20
CL-2000	CL-2003					80-120	25
CL-3000					AT-2004	125-175	55
CL-4000					AT-3004	160-225	60
CL-6000		904L	904M			250-325	90
CL-9000		904P	904R			425-500	120
CL-14000		904S	904T			500-700	180
		904U				700+	210
PREMIER 2000							
2160						550	180
2200						600	220
2280						650	330
2370						750	440
2480						825	550
2620						1175	990

For other manufactures and model numbers, please consult Apex Engineering Products Corporation

The time required for cleaning will vary with the thickness and hardness of the deposit. The average **RYDLYME** cleaning time is about two (2) hours, for the Premier series we recommend four (4) hours.

The foregoing quantities are average for the size and model listed. In some instances, additional **RYDLYME** may be required to thoroughly remove all deposits in your vacuum pump.

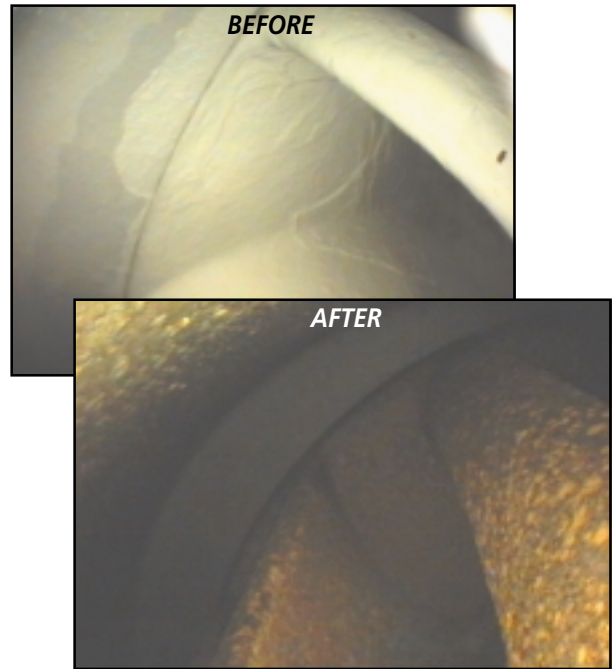


RYDLYME® for Vacuum Pumps

When water scale, lime, mud and rust accumulates on the water side of compressors or vacuum pumps of this type, this not only drastically reduces volume and overall efficiency, but also increases electrical load.

In order to remove the water scale, lime, mud and rust from the casing, rotor, hub, cones, and associated piping, the following instructions should be followed.

1. Write down current or "before" amperage readings, cfm at vacuum capacity and the vacuum in inches of mercury.
2. Take unit out of service.
3. Remove bottom drain plug and allow all water to drain from pump casing. Replace bottom plug.
4. Break seal water piping and attach **RYDLYME** pump discharge hose.
5. Remove top plug, attach return hose and place other end of return hose in **RYDLYME** receiver.
6. Insert "blank" in flanges of discharge piping (see figure 1) and tighten flange bolts.
7. Add the prescribed quantity of **RYDLYME** to the receiver (see chart at left) and start pump.
8. In some instances additional water may be required to maintain circulation. Add only enough water to maintain circulation.
9. Tighten pump seal packing to minimize leakage of **RYDLYME**.
10. After 15 minutes of **RYDLYME** circulation, turn pump rotor 90 degrees by pulling on the drive belts or jacking the starter switch.
11. Every 15 minutes thereafter, turn pump rotor through 90 degrees to assure a thorough cleaning of all interior parts of your pump, including hub, cones and rotor.
12. Continue the circulation of **RYDLYME** for a total of two (2) hours.
13. After two hours of circulation time, with intermittent turning of rotor, the pump should be clean and the rotor should turn freely.
14. Shut off circulating pump and drain all the **RYDLYME** by removing the bottom drain plug.
15. Disconnect all the **RYDLYME** hoses and the circulating pump.
16. Reconnect the seal water piping.
17. Remove "blank" in flanges of the discharge piping and tighten flange bolts.
18. Open the seal water valve and flush pump with water.
19. With the seal water running, start vacuum pump and operate for 10 minutes to thoroughly flush pump. During this time adjust the seal water rate to manufacturers recommendations.
20. Return pump or compressor to service.
21. After unit has stabilized, write down current or "after" amperage readings, cfm at vacuum capacity and vacuum in inches of mercury.
22. Compare "before" readings with the "after" readings. The difference between the "before" and "after" amperage readings multiplied by the cost per kw/hr at your facility, will render the obvious value of feasibility of **RYDLYME** cleaning of your liquid ring vacuum pumps. **RYDLYME** cleaning should be performed on a preventative or predictive maintenance schedule.



RYDLYME effectively removes water scale, lime, mud and rust from compressors and vacuum pumps

It is quite common that water scale, lime, mud and rust deposits can cause the rotor to completely seize causing immediate shutdown.

When a Seized Rotor is Encountered

- A. Complete steps 1 through 7.
- B. It is best to introduce **RYDLYME** wherever possible. Start by removing both plugs from the top of the pump (if scale blocks the passage, take a screwdriver and poke it through). Then add 100% **RYDLYME** into the top ports as well as pumping some into the seal water passage. Once you have done this, please allow the **RYDLYME** to sit for 30 to 45 minutes. This will enable the product to start freeing up the pump. (Do not put the plugs back in until you start the circulation process).
- C. After pumping **RYDLYME** for 10-15 minutes, turn rotor 180 degrees with wrench and pump another 15 minutes.
- D. **RYDLYME** will dissolve the water scale that causes the seizing and allow the remaining steps to be accomplished.
- E. Should the rotor remain seized after circulating **RYDLYME** for 10-15 minutes, disconnect the hose from the plug (discharge hose from pump) and attach this hose to the opening at the top of the casing. Circulate **RYDLYME** into this opening for 10 minutes while periodically testing to see if the rotor has freed. When rotor is free, proceed according to the instructions.

Periodic **RYDLYME cleaning will keep your vacuum pump operating at peak efficiency.**



*Multiple vacuum pumps can be cleaned at the same time when using **RYDLYME**.*

Why Should You Use **RYDLYME**® ?

RYDLYME is **EFFECTIVE** . . . it dissolves approximately two pounds of scale per gallon!

RYDLYME is **NON-HAZARDOUS** . . . it does not fall under any of the seven federally designated classes of hazardous waste!

RYDLYME is **BIODEGRADABLE** . . . it has a biochemical oxygen demand of 16 mg/l and can be disposed of through existing plant sewers!

RYDLYME is **SAFE** . . . it can be held in the open hand without injury!

RYDLYME is **ECONOMICAL** . . . Call us at (800) 451-6291 to learn how an investment in **RYDLYME** can multiply your efficiency!

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RYDLYME®
World's Leading Biodegradable Descaler

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