



## ***RYDLYME* CLEANING OF SIEMENS VACUUM PUMPS**

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

There are two methods to cleaning a Siemens Vacuum pump. If your pump has a separator tank, we recommend you drill and tap the sidewall of the separator tank. If your pump does not have the separator tank, you will need to drill and tap the blank flange, either method will allow the vacuum pump to be completely flooded with the *RYDLYME* solution and provide a proper return point.

In order to effectively and safely remove all these insulating mineral deposits from the casing, rotor, hub, and cone, the following *RYDLYME* cleaning 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 the unit out of service.
3. Shut the water off to the unit.
4. Remove the “total drain plug” and allow the unit to completely drain.
5. Insert “blanks” on the flange manifold, separator flange and both the top and / or side discharge flanges, then tighten bolts.
6. Take a screwdriver and poke it through any deposits that might be blocking or impeding the flow during the circulation on the “total drain port”.
7. Hook up one circulation hose to the pump discharge and the other end to the total drain port.
8. Hook your second hose up to the 1” male fitting on either the separator tank or the blank flange (depending on your situation) and return it to the receiver bucket (see diagram in brochure).
9. Add the prescribed quantity of *RYDLYME* to the receiver bucket (see chart) and start pumping into the vacuum pump.
10. Once you have introduced the recommended amount of *RYDLYME*, you will want to use water as make up to complete the circulation. Add only enough water to maintain circulation.



11. During the cleaning process, additional water may be needed to maintain circulation. It is common to keep the level inside of the receiving bucket 12 inches below the top.
12. After 30 minutes of *RYDLYME* circulation, it is best to start turning the rotor 90-degrees every 15 minutes by pulling on the drive belts or jacking the starter switch. This will assure a thorough cleaning of the hub and rotor.
13. Continue the *RYDLYME* circulation for the designated amount of time (see chart). After the designated amount of circulation time the pump should be clean and the rotor should turn freely, if not, the pump may have been more fouled than anticipated. In this case a longer circulation period, more *RYDLYME*, or both may be needed to completely clean the unit.
14. Shut off the circulating pump and disconnect the hose from the receiving bucket and put it in a drain.
15. Now you are ready to flush the unit.
16. Put a water supply hose into the receiving bucket, turn the circulation pump on and flush out the unit for 20 to 30 minutes.
17. Disconnect all the *RYDLYME* hoses and the circulation pump.
18. Replace your “total drain plug”.
19. Remove all of the blanks in the flanges and tighten up the flange bolts.
20. Open the seal water valves.
21. Return the pump to service.
22. After the unit has stabilized, write down the “after” current amperage readings, cfm at vacuum capacity and vacuum in inches of mercury.
23. Compare the “before” and “after” readings. The difference between the “before” and “after” amperage readings multiplied by the cost per kW/hr at your facility, will render a dollar value. The dollar amount will help determine the feasibility of future *RYDLYME* cleanings of your Siemens vacuum pumps.

*RYDLYME* cleanings should be performed on a preventative maintenance schedule to extend the overall performance and life of your Siemens vacuum pump. With the pump operating cleanly and efficiently, this will also extend the life of your drive motor, decreasing a potential burn-up.