

**Procedure for cleaning water-sealed liquidring pumps and systems with Scale-eX descaling compound**

When water scale, lime, mud and rust accumulates on the water side of a liquidring vacuum pump, it drastically reduces capacity and overall efficiency, increases power consumption and ultimately causes the pump to lock up and the electric motor to cut out on overload.

To disassemble the pump and remove scaling or rust from all the internal parts would be very time consuming. To simplify cleaning we offer **Scale-eX**, a simple non-corrosive, non-toxic biodegradable descaler, which gives excellent results in a fraction of the time.

1. Take unit out of service.
2. Remove all drain plugs and allow water to drain from pump casing. Replace drain plugs.
3. Remove discharge piping.
4. Disconnect seal-water piping, drain and close isolation valve.
5. Fill pump completely with **Scale-eX** and allow it to sit for a minimum of 3 (three) hours.
6. During this period, rotate the impeller 90° every 15 minutes by turning the shaft by hand.
7. After 3 (three) hours the pump should be clean and the rotor should turn freely by hand.
8. Drain the pump and flush with water until all residues have been removed.
9. Reinstall drain plugs and piping, open seal-water isolation valve and run pump for a minimum of 10 minutes to thoroughly flush pump.
10. Pump is now ready for service.

Repeat above procedure as necessary.