



# DESCALING GALVANISED COOLING TOWERS

With **SCALEBREAKER SR** & ZnI Inhibitor

## Guidance notes

1. Isolate flow and return to the cooling tower coil.
2. Isolate/switch off the cooling tower fans.
3. Reduce the water level in the sump to a minimal level of 25 to 30 cm, and close drain cock securely.
4. Commence re-circulation, such that sump water is being continually cascaded over the fouled heat exchanger piping.
5. Slowly gravity feed the ZnI booster inhibitor into the sump water via access manhole, taking care not to choke pump inlet.
6. Slowly gravity feed the **SCALEBREAKER SR** crystals into the sump water, allowing them to dissolve, giving a pink / red solution, monitoring the reaction of the solution with the deposit build-up. Again, take care not to choke pump inlet.
7. If access permits, the **SCALEBREAKER SR** crystals may be sprinkled directly along the length of the cooling tower heat exchanger coil from above, as water is being re-circulated. This may not be a viable option in brisk wind conditions.
8. If excessive foaming is a problem, add **FOAMBREAKER** in 25 ml doses.
9. When there is no further apparent foam generation from the sump, and yet the solution is still pink, then descaling may be assumed to be complete.
10. If the reaction ceases, and the solution has become yellow, indicating that the **SCALEBREAKER SR** has become

exhausted, add another 5 kg crystals to the solution to see if there is any further evolution of foam.

11. If not, descaling is complete.
12. Cease circulation of the solution, and check pH of the solution.
13. If pH is greater than 4.5, the solution may be discharged to drain, allowing an excess of fresh water to follow.
14. If pH is lower than 4.5, slowly add **NEUTRALISING CRYSTALS** until the requisite pH level is reached, and then discharge.
15. Introduce fresh water into the cooling tower, and re-circulate for 5 minutes, and dump.
16. Repeat this process again, and check pH of water. Repeat process until pH of 7 is reached.

**NOTE:** Whilst **SCALEBREAKER SR** is a relatively safe to handle and use descaling compound, and is only rated as an irritant, users should still wear face visor, protective rubber or PVC gloves, and waterproof protective clothing .