

# OPERATIONAL BENEFITS

## Asset Management.

1. By not introducing chemicals into your system you reduce the risk of **Scale** build up and **Corrosion**.
2. Acid cleans and other forms of invasive maintenance are greatly reduced as a result of **Scale** and **Biofilm** removal from the system.
3. The PERMACLEAN units are completely neutral, they do not cause **Corrosion**.
4. The working life of all equipment is increased due to soft clean water, pumps, valves, nozzles and impellers. **(NO CHEMICALS)**
5. The PERMACLEAN units have a **two year Warranty** for the life of the contract and are always fully maintained.
6. The PERMACLEAN system does not in any way void the Warranties on new Chiller systems.
7. Less damage to surrounding metal structures due to the eradication of Chemicals.

## Energy Management.

1. Scale is a very effective insulator, as little as 1/8" of Scale can reduce the thermal transfer efficiency of a Cooling Tower by as much as 10 percent or more. Eliminating Scale will save thousands of Dollars in Electrical charges.
2. Maintain maximum operating efficiency even in the warmest weather through the removal of Scale from the complete cooling system.

3. Less system bleeds. The addition of chemicals increases the Total Dissolved Solids (TDS) level in the cooling water thereby increasing system bleed rates.
4. By decreasing your bleeds you **REDUCE** your water usage.
5. Because **PERMACLEAN** is a **Non Chemical** system you have the ability to Re-use your Bleed water.
6. **No Trade Waste Cost.** EPA has approved the use of this water for Irrigation, Toilet flushing or Fire systems because of No Chemicals.