



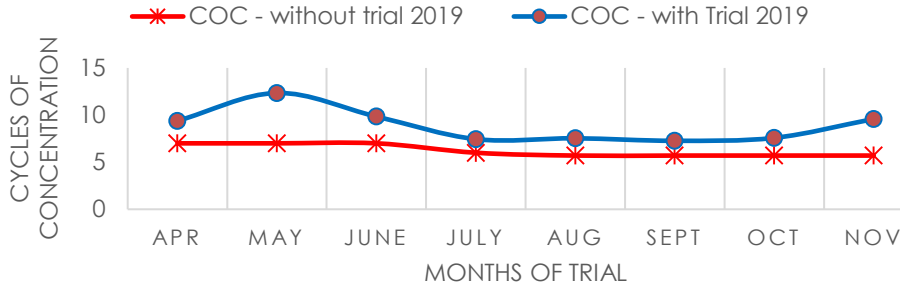
Insight on the potential of fouling and/or scale in the condenser system's heat transfer surfaces by applying patented cutting edge ultrasonic technology and online monitoring of all KPIs to help save water consumption while maintaining system integrity

SMART Water Management

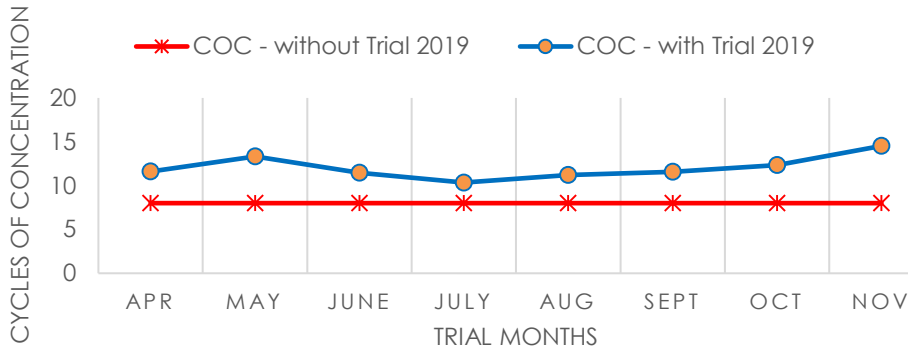
Presented by Cooltech & Solenis



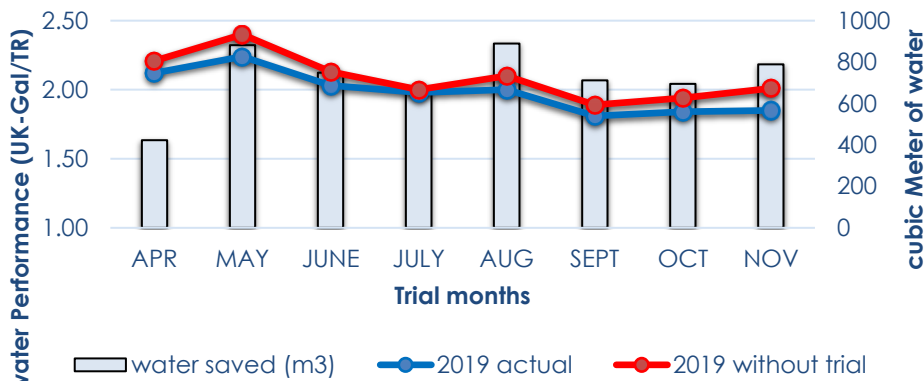
DCP-01 COC



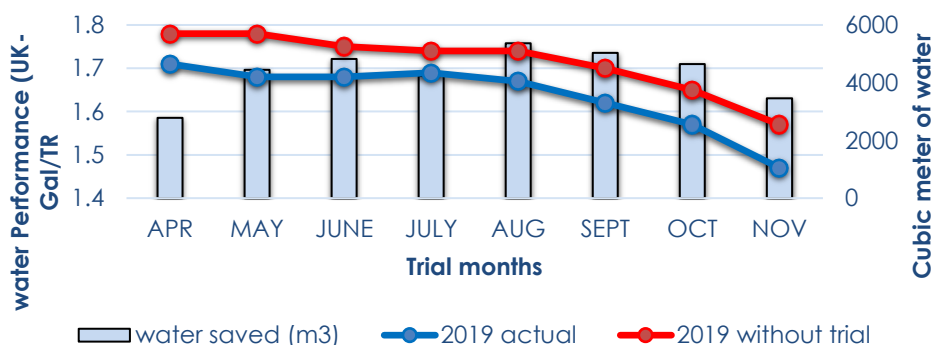
DCP-02 COC



DCP-01 trial Performance



DCP-02 Trial Performance



ACHIEVEMENTS

Successfully increased the cycles of concentration in both District Cooling plants resulting in 5% saving of water volume used as Make-up.

Controlled the scale build-up in chiller's condenser tubes (using high tech chemicals and online monitoring tools) to within the targeted limit and prevented losses in energy and additional maintenance cost.

Worked at 1000ppm (parts per million) of chloride for over 8 months and developing further plans to push this limit.

Did not increase nor add additional stress on the chillers in terms of electrical consumption.

Approach temperatures for chillers maintained as per manufacturer's recommended values.

Project investment was kept to as low as 15 – 20% of the total savings recovered.