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Top summer cooling systems tips to keep public sector facilities operational this summer

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As the UK continues to swelter in what is predicted to be another record-breaking summer, ensuring essential cooling systems operate at peak efficiency is vital for public sector organisations across the UK.

Prolonged heatwaves and higher temperatures expected for summer 2025 will place increased strain on HVAC and pump systems – vital infrastructure that can be overlooked after months of minimal use during winter.

In public sector buildings, a failure of these systems can lead to serious disruptions, health risks or closures.

John Calder, technical director at Dura Pump, has shared his expert advice drawn from over 15 years of experience to help facilities teams stay one step ahead and avoid costly downtime this summer.

Run your pumps early to avoid surprises

In an ideal world, maintenance would be carried out regularly throughout the year, as regular inspections help identify leaks, worn components and loose connections early. Routine tasks such as filter replacements and system flushing are essential for keeping pumps in top condition and prepared for the increased demands of summer.

“It’s not uncommon for pumps to seize after a period of inactivity.” John explains: ”Running your system early in the season helps uncover these issues in a controlled, low-risk environment, giving you time to

schedule routine maintenance tasks before they become urgent, and harder to manage at a time when the pumps are needed the most."

After months of inactivity, cooling pumps can seize or malfunction when first reactivated, often due to hardened seals, blocked impellers or corrosion. Simply switching your system on when the hot weather hits can reveal hidden faults during peak time.

Check system pressurisation

Getting the pressure right in your cooling system is more than a box-ticking exercise – It is critical to performance and safety. If the pressure is too low, the system may stop working entirely. If the pressure is too high, this may damage pipes, cause excessive water usage, leaks, and shorter appliance life spans. It's a simple check, but one of the most important on your summer maintenance to-do list.

"Cooling systems rely on a consistent pressure range to function properly", John adds, " A failing or incorrectly configured pressurisation unit can lead to airlocks or system failure, both of which reduce cooling efficiency and increase wear."

Installing pressure sensors can also help monitor performance continuously. Pressure sensors function as a protector, contributing to improving their system performance, extending the pump's lifespan and reducing energy. With alerts set for pressure fluctuations, facilities teams can catch issues early and intervene before they escalate.

Test and calibrate your control systems

Even the most efficient cooling system can fall short if the control panel isn't doing its job properly. If your controls are unreliable, it doesn't matter how well the rest of the system performs. A full inspection and recalibration of control systems ensures your setup is running efficiently and responding correctly to demand.

Testing control panels, sensors, and automation sequences can prevent future energy waste, and reduce unnecessary strain on the pumps themselves.

"During seasonal transitions, recalibrating your sensors and controllers is key", John advises. "If temperature or flow sensors drift out of calibration, your system might underperform or overcompensate, driving up your energy usage unnecessarily, and in today's climate – both economic and environmental – no organisation can afford that."

"Whether you're aiming to cut operational costs or meet sustainability targets, ensuring your control systems are accurate and responsive is a simple and impactful step you can take."

Check for blockages and circulation

The pumps are the heart of any cooling system, and if circulation fails, performance drops fast. Blockages and airlocks in a cooling system can reduce performance and prevent chilled water from circulating efficiently. Before demand increases, check that your circulation pumps are working properly and that servicing is fully up to date.

"Clogged strainers or airlocks in the system are a major contributor to poor circulation", Says John. "It's

also essential to check that air vents, filters, and cooling coils are clean and free from dust, dirt and debris, as these can restrict flow and reduce overall efficiency."

As mechanical systems with moving parts, including electric motors, impellers and belts, pumps should be given a full service ahead of summer to ensure consistent and uninterrupted operation.

When in doubt, call in an expert

Even when a system appears to be working, that does not mean it's running efficiently. Pumps may be overworked, poorly controlled or simply outdated. Inefficiencies like these can lead to higher energy bills, unnecessary strain, and a greater risk of failure during peak usage.

Professional servicing allows you to assess your system's performance. Engineers can recommend upgrades such as variable speed drives, smarter control systems or replacement for antiquated belt-driven pumps.

"It's not just about whether a system works, it's about how efficiently it runs", John added, "if pumps are overworked, outdated, or lacking smart controls, there's a huge opportunity to upgrade to modern energy-efficient technology. That means better reliability, lower running costs, and reduced carbon emissions."

To find out more about Dura Pump, visit https://www.durapump.co.uk/