

Photonics Lab, London College

Photonics is the science of light. It is the technology of generating, controlling, and detecting light waves and photons, which are particles of light.

The characteristics of the waves and photons can be used to explore the universe, cure diseases, and even to solve crimes, so as you can imagine the water used in the lab processes have very specific requirements.

Problem

Our client contacted us to help them with the dedicated closed loop process cooling system they were contracted to install.

This was a complex matter – the conditions required in the photonics lab are very specific and the water used in the testing process had to be maintained within very specific parameters.

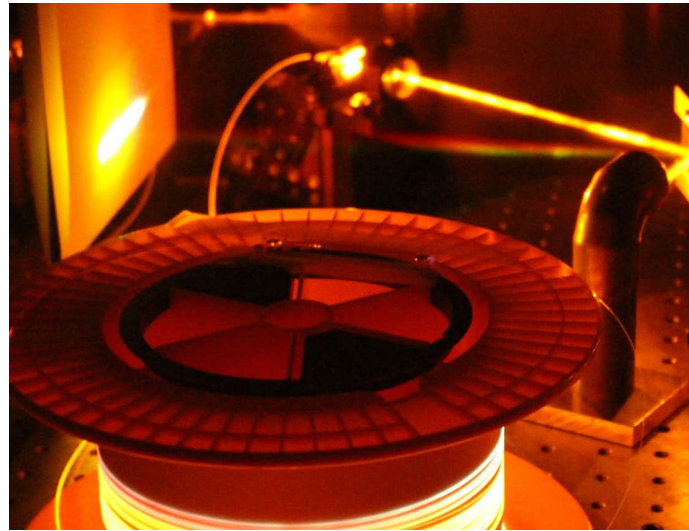
The equipment being fed by the system is particularly sensitive to water condition, meaning the following parameters have to be maintained at all times:

- pH between 5.8 - 8
- calcium carbonate concentration of less than 80ppm
- Sidestream Filtration unit (to prevent blockages)

Solution

We came up with a solution after attending site to discuss all possible options with both the mechanical installer and the main contractor.

After in-depth discussion we proposed the supply of three separate plant items, each to combat one of the issues to ensure its optimum operating levels could be preserved.



“White light laser” – a fibre based supercontinuum source

Conclusion

Goodwater supplied all the equipment necessary to treat the water as per the client’s request.

The client also wanted the selected plant to be as maintenance-free as possible, and the solution was put together with this in mind.

This project highlights the depth and range of Goodwater’s capabilities for equipment supply. We can propose robust and bespoke treatment plant to the differing needs of any customer.

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Water Parameters:

pH between 5.8 - 8

calcium carbonate
concentration of less than
80ppm

sidestream filtration to
prevent blockages

Solutions:

✓ Resin Cartridge on make-up
feed to keep hardness below
80ppm.

✓ pH monitor/controller c/w pH
Buffer dosing set to correct
increases in pH.

✓ GLF Side Stream Filter to filter out
suspended solids and iron.