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Jacobs remote leak sealing

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Jacobs remote leak sealing service seals holes of up to 10mm effective diameter within inaccessible pipes where access is either dangerous, impractical, or not cost effective. Many complex research facilities such as particle accelerators contain large amounts of remote pipework in inaccessible areas. This inaccessibility can be caused by being:

- Buried post construction in concrete
- Situated in high hazard environments (radiation, magnetic flux, high temperature)
- In physically challenging areas (height or confined space)

Cooling water systems associated with these facilities often suffer from minor leaks in inaccessible areas. Such leaks can interfere with vacuums, electronics or reduce cooling efficiency. Replacement of these pipes may result in extensive programme downtime and increased financial costs. The poster describes a unique technique to permanently repair such leaks remotely by injecting a water-based sealant into the pipe. The sealants used are compatible with the vast majority of pipework, valves, and instrumentation. The internals of the pipe are not coated in any way; hence the heat transfer properties of the cooling system are unaffected. The poster describes how this technology has been successfully applied to cooling systems within research facilities, such as at ISIS, Rutherford Appleton Laboratories (UK). A variety of components associated with the LINAC at Los Alamos Neutron Science Centre (USA) were sealed during a demonstration of the technique.

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Footnotes

I have read and accept the Privacy Policy Statement

Yes

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