CONTACT DETAILS

NNC's Leak Sealing Services

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NNC Limited

Also Simon James



Remote Leak Sealing

- Remotely seals defects up to 10mm effective diameter
- Highly durable and withstands high operating pressures
- Resists corrosive environments
- Does not adversely affect pipework, valves or instrumentation
- Tackles simple and complex pipe runs up to 30 kilometres in length and volumes up to 100 cubic metres
- Caters for a wide range of operating conditions and harsh environments
- Treats carbon steel, copper, stainless steel, aluminium and other materials
- Performed by fully qualified teams and backed by the resources of a major engineering, consultancy and technical service company
- Correct flushing and post-treatment ensures that all excess material is removed from the system
- Cooling capability maintained
- Cost effective reduces or eliminates downtime

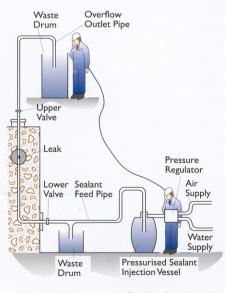


NNC is a world leader in remote leak sealing technology, developed exclusively by NNC experts to plug holes in inaccessible pipework. The leak sealing service has proven effective in sealing over 450 leaks at 40 sites all over the world.

NNC's remote leak sealing service is highly versatile and can provide permanent seals to both short or long pipe runs with complex system geometries. It offers a cost effective alternative to replacing or repairing pipework in inaccessible areas, such as buried in concrete, underground or in radioactive areas.

Many previously intractable leak problems have been solved by the NNC leak sealing team - some avoiding enforced plant shutdowns.

Also NNC is committed to keeping its industry leadership and maintains an ongoing development programme.



Schematic shows example of leak sealing where the pipe is buried in concrete

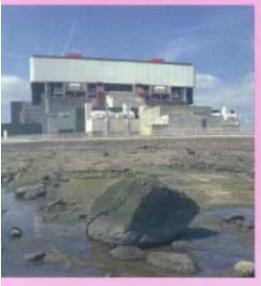
The Benefit of Experience

For Further information please contact:

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Adding value through knowledge

Remote Leak Sealing

The leak sealing technology itself is simple and effective. A sealant formulation is injected into a leaking pipe where it is pressurised into the defect responsible for the leak. Afterwards the excess mixture is flushed out with water, leaving a permanent plug in the defect.

Taking account of the curing characteristics and rheological properties of the sealant materials, NNC's leak sealing specialists know exactly how to inject the sealants under carefully optimised conditions.

The sealants used are fully compatible with pipework, valves and instrumentation. Correct flushing removes excess sealant ensuring that it does not coat the pipework internals, does not reduce heat transfer capability and that there is no risk of plugging the pipe itself.

A Complete Service in Leak Sealing

NNC provides the complete package, from characterising a problem, to preparing the relevant safety and regulatory documentation and effecting a successful seal.

NNC tailors the service to the needs of the client. Our specialists can undertake all the work or we can carry out a 'Technology Transfer' to enable your operational personnel to use the techniques.

A successful Track Record

Over 450 leaks at 40 sites worldwide have been successfully treated. Clients include: NIST, British Energy, North Carolina State University, RAL, CERN, Princeton, Schmehausen, Ontario Hydro and Los Alamos National Labs.



NNC Corporate Profile

Adding Value through Knowledge

NNC is a leading international independent engineering consultancy dedicated to adding value to our clients' businesses through the provision of a rich professional resource.

NNC is a modern and dynamic company, built on the firm foundations of more than 40 years' experience providing safe, high quality engineering solutions to clients – often involving safety critical or complex technical applications. The company has a well-established client base in the UK and internationally in the Nuclear, Defence, Transportation, Oil and Gas and Pharmaceutical industries.

NNC's strength lies in its people. The company's 1000 staff offer a wealth of knowledge, experience and expertise. Many of our consultants are highly respected international authorities in their fields. We have proven problemsolving ability, and an approach that integrates technical excellence with practical and cost-effective solutions.

Our services are diverse, providing a rich base of skills and capabilities on which our consultancy is founded. However, our consultancy succeeds through an ability to apply our skills effectively to meet customers' needs. Our core capabilities are based around multi-disciplinary engineering, project management, scientific and technical expertise.

NNC is customer focused. Our staff are dedicated to providing value for money through a commitment to quality and excellence. We stake our reputation on providing the best possible service based on responsiveness and flexibility, and through a willingness to listen and adapt to meet customers' requirements.

NNC has its headquarters in Knutsford, England (near Manchester). The company's services are supported by extensive Manufacturing facilities in nearby Risley, England, for the design and construction of high-integrity plant and equipment. At NNC's Technology Centre, also at Risley, fully equipped laboratories and workshops for physical, chemical and analytical testing are staffed by highly experienced consultant scientists and engineers.

From the early 1950s to the present day, NNC expertise has been at the heart of key developments in nuclear technology and in ensuring the safe and efficient operation of the UK's power stations. NNC's industry-leading knowledge and practical project skills have also won it a significant share of the nuclear Decommissioning and Waste Management market.

In the Defence industry, NNC's project management expertise and engineering excellence has been applied to a variety of flagship projects, including support of the UK's nuclear submarine and strategic defence facilities programmes. On the basis of this strong background NNC has developed to be a leading provider of dockyard safety, platform consultancy, and engineering services.

NNC is recognised as a leading international player in the nuclear industry – particularly in the countries of Central and Eastern Europe and the former Soviet Union. Our expertise – particularly in project management consultancy – is helping Western-funded assistance programmes with urgent safety improvements and helping to plan for the decommissioning of Russian-designed stations. Our close business links with Japan continue, after more than 30 years of technological co-operation. We offer expertise in all the world's commercial nuclear reactor technologies.

NNC has always been there to support major international research & development projects which require advanced, innovative or safety critical approaches. Our experts have their sights set firmly on the future. The company is proud to have some of the world's leading experts in Fusion, Fast Reactor, accelerator technology and particle physics.

We know our solutions must be driven by clients' business objectives. Sometime this can require creative commercial thinking. Where it delivers benefit for customers, we actively seek to co-operate with customers or other service suppliers through partnering arrangements or through forming consortia.

NNC's commitment to the future requirements of our customers is assured. Existing major contracts and partnerships will maintain and develop our capability and technical resource well into the $21^{\rm st}$ Century. The company is committed to Total Quality Management and operates a QA system, which is certified to ISO 9001.