Case study

F4N
Fit For Nuclear

NUCLEAR AMRC
ADVANCED MANUFACTURING RESEARCH CENTRE

Larkshill Engineering invests in a nuclear future

Machining specialist Larkshill Engineering is expanding its operations to meet growing demand after driving quality improvements with Fit For Nuclear.

Birmingham-based Larkshill is a manufacturer and designer of special-purpose machines and precision components for a range of industries. Founded in the 1980s to serve the automotive industry, it has grown to cover aerospace, oil and gas and, increasingly, nuclear.

"We've been in the nuclear market for about four years, doing work for sub-tier manufacturers, and we've had some dealings with Sellafield directly," says Gary Murphy, project manager at Larkshill.

Larkshill started to look at nuclear to help out a regular client, and soon realised the special demands of the sector. **"That's when we got involved with Fit For Nuclear because I realised we needed more help,"** Murphy recalls. **"We learned the hard way about the importance of full traceability and making that part of your process."**

After completing the online F4N assessment in 2011, Larkshill was visited by the Nuclear AMRC's supply chain experts for a detailed on-site assessment.

"We thought it was absolutely exceptional," Murphy says. **"To get the kind of support and advice and dedication and direction they were giving us, we'd probably have to pay thousands of pounds to any consultancy. I was astounded by the level of detail involved."**

The main areas identified for improvement were in quality management, particularly in traceability of everything that happens in the business. The company was ISO 9001 certified, but hadn't always followed best practice if there wasn't an immediate benefit.

"If there were certain things we didn't have to do, we wouldn't have done them, largely for cost reasons," Murphy admits. **"But now, we do it because we understand that having detailed KPIs are really valuable to the business. It's about securing and monitoring and measuring as much as we possibly can."**

The company has now introduced 100 per cent inspection of the components and assemblies it produces, and invested in a new FaroArm to complement its established CMM capabilities. **"The requirement to report every single dimension has made us look at inspection in a very different way,"** Murphy says.

The new regime has improved rework rates by 35 per cent, Murphy notes, saving the business thousands of pounds.

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The assessment also identified health and safety as a critical area – Larkshill did have a H&S policy in place, but benchmarking against the ISO 18001 standard identified room for development.

Driving these improvements through the business meant getting everyone on board. **"There was some negative feedback, partly because of the amount of additional work and additional accountability for operators on the shopfloor,"** Murphy says.

"But when we communicated why we were doing it, it was understood. We said this is about the longer term and expanding our customer base and industry expertise. The complexity of the items we can do standing on our heads, but we need to have the mindset about recording everything and the attention to detail. It's about nuclear culture."

Larkshill has now won contracts with Rolls-Royce on nuclear submarines, and with Babcock.

"We continue to see strong opportunities in decommissioning, and we are looking at putting ourselves in a stronger position for new build," Murphy says. **"I think the complexity of what we do here and the precision of our machines will put us in a good position."**

The company has expanded into a new facility, and is introducing dedicated cells for areas such as stainless-only machining to reduce costs by removing contamination risks. **"That will give us the capacity to do extra offerings for nuclear customers,"** Murphy says.

"The F4N process did help us take that decision to expand," he concludes. **"It was a very detailed and structured emphasis on what is really required – not necessarily saying that nuclear is the way forward for everybody, but helping us to understand that this is the way to do it and this is what we have to invest in."**

www.larkshill.com

Fit For Nuclear (F4N) helps UK manufacturers get ready to bid for work in the civil nuclear supply chain.

F4N
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F4N was developed by the Nuclear AMRC with leading industrial partners, and is delivered in partnership with the Manufacturing Advisory Service, part of the government-backed Business Growth Service.

F4N also offers grants to companies based in England for business improvement or R&D projects.

Begin your F4N journey: **namrc.co.uk/services/f4n**

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enquiries@namrc.co.uk 0114 222 9900

Nuclear AMRC, University of Sheffield, Advanced Manufacturing Park, Brunel Way, Rotherham, S60 5WG

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