Case study







Paul Fabrications

targets new opportunities

Precision engineering firm Paul Fabrications is targeting new opportunities in the nuclear sector after becoming the 100th company to complete the F4N programme.

Based in Castle Donington, near Derby, the long-established firm has worked in the civil nuclear sector for around 50 years. After producing a range of fabrications for the UK's Magnox and advanced gas-cooled reactor (AGR) programmes, Paul Fabrications now specialises in manufacturing intricate spacer grids for the fuel assemblies produced at Westinghouse's Springfields facility for the AGR fleet.

While aerospace accounts for the bulk of business, nuclear currently makes up around 40 per cent of Paul Fabrications' turnover, with 24 employees working in its dedicated nuclear fabrication workshop. As the AGR fleet nears the end of its service life, the company is looking to replace this revenue stream and increase its offering to the wider nuclear industry.

"The pressure on us is to look for new work in the nuclear sector," says Peter Tryner, nuclear operations manager.
"There's a world of work to be had in the nuclear area that we have the capabilities on this site to do."

The team completed the online F4N assessment in 2015, and soon put together an action plan to address some minor gaps. The assessment didn't present any real surprises, but did highlight room for improvement in areas such as documentation and standard work methods.

The assessment helped the team focus on the particular requirements of the nuclear sector, notes Kevin Dexter, business development executive. "Fit For Nuclear helped us see what the nuclear industry requires that is a little different to what we do in aerospace, and gave us some structure about how these improvements go across the site," he says. "Both sides of the business are highly regulated, but on the nuclear side, it's a different set of requirements and it's probably even more highly regulated."

F4N also gives Paul Fabrications an industry-recognised badge to demonstrate their capabilities for nuclear work. "We've got 50 years' experience, but it's in the fact we've never really marketed ourselves in the industry that we see the benefit of F4N," Dexter notes. "You need to be part of the club. It's that visibility side that we probably didn't fully appreciate – how to go about it, and who to go and talk to."

Following its 2012 acqusition by a US investor, Acorn Growth Companies, Paul Fabrications traded under the AGC AeroComposites brand. The US owners have recognised the history and pedigree behind Paul Fabrications, as well as its UK sister companies, and all UK businesses are again operating under their established names.



"Fit For Nuclear helped us see what the nuclear industry requires that is a little different to what we do in aerospace."

The parent group fully supports Paul Fabrications' ambitions in nuclear, and is ready to invest for long-term growth.

"We want to see the UK return to industrial growth and this business to provide well-paid jobs for a long period of time, and nuclear is one strong avenue to do that," says Wayne Exton, chief executive officer at AGC AeroComposites. "Our knowledge is growing as we go through Fit For Nuclear, and I hope in the next two or three years we should start to see some new opportunities."

Exton says the long-term nature of the nuclear sector gives a good case for significant investment in new capabilities. The firm has extensive experience in working with customers to improve production efficiency through innovation. After working with Springfields and regulators to reduce costs of the fuel assembly grids, Paul Fabrications now produces some designs by machining rather than fabrication.

The firm is primarily focusing on opportunities in nuclear new build, where Tryner says the firm's established connections with Westinghouse should put them in good stead for bidding for work on the AP1000 reactors planned for Moorside. The team continue to work with their F4N industrial advisor to sustain their journey of continuous improvement, and to identify and target opportunities across the sector including decommissioning and small modular reactors.

"Fit For Nuclear has opened some doors for us which we have not really been privy to in the past," concludes Exton.

"This is a relatively slow-moving industry compared to others, but we have been part of the nuclear sector for a long time, we want to be part of it, and we're prepared to invest. If we can play our part in new build and use the skills and experience we've evolved, that would be fantastic."

agcaerocomposites.com/content/nuclear-manufacturing October 2016

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



F4N was developed by the Nuclear AMRC and its leading industrial partners, and has been extensively developed and expanded to meet industry demand. The service lets UK manufacturers measure their operations against the standards required to supply the nuclear industry, and take the necessary steps to close any gaps.

Hundreds of companies have completed the online F4N assessment, with most receiving ongoing support and development from the F4N team of nuclear specialists and experienced industrial advisors.

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



To find out how the Nuclear AMRC can help your business:

namrc.co.uk

enquiries@namrc.co.uk

0114 222 9900

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

Supported by the









