Case study







Nuclear lift for SCX Special Projects

SCX Special Projects, the mechanical handling specialist which recently completed its most challenging crane projects yet for a nuclear client, has been regranted Fit For Nuclear.

Based in the engineering cluster of north-east Sheffield, SCX Special Projects specialises in bespoke lifting and handling systems for demanding and safety-critical applications. It forms part of the SCX group, along with crane servicing arm Street CraneXpress and electrical component supplier Burnand XH. It also works closely with its sister company, lifting equipment manufacturer Street Crane.

Last year, SCX Special Projects commissioned what group marketing manager Darren Falkingham calls the most advanced cranes it has ever built for the nuclear market – two 35-metre span Goliath bridge cranes running in parallel on two 350-metre long storage rafts, to store and triple-stack large cylinders.

With a 25-tonne safe working load, four-point vertical lift hoisting and a bespoke grapple to interface with the cylinders, the cranes include advanced safety features such as the MotoSuiveur failsafe load arresting system, for which SCX Special Projects holds the exclusive UK licence.

Designing the cranes drew on the firm's expertise in safety-rated electrical control and instrumentation. The system is semi-

automated to reduce any possible radiation dose risks for the operators, and includes full asset tracking and data logging.

The 70-strong SCX Special Projects team drew on all of the group's specialist resources to design and manufacture the two Goliath cranes. The cranes were assembled and tested at its Sheffield facilities, where rails were installed to accurately replicate the client's site conditions.

Around a third of SCX Special Projects' current work comes from the nuclear sector. Most is in decommissioning – another recent project saw the firm design, test and install a semi-automated intermediate level waste drum store crane with bespoke grapple for Dounreay – but the firm also works with EDF Energy at its operating reactor sites. The company has also supplied bespoke lifting solutions to Berkeley, Sizewell, Hunterston, Hinkley Point, Winfrith and Sellafield.

"If you're in nuclear and you need to move it, that's where our expertise lies," says Falkingham. "We cover the mechanical engineering side, the electrical side and, especially important in this sector, the controls and nuclear safety side as well."



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SCX Special Projects was among the first companies to enter the Fit For Nuclear programme, and was originally awarded the F4N hallmark around seven years ago. With granting now limited to three years, and a tougher assessment to better match industry expectations, the firm has now successfully completed the regranting process.

Falkingham and nuclear sales manager Dave Little worked closely with F4N industrial advisor Nigel Goodrich on the latest assessment to ensure that SCX Special Projects met the latest standards. "Looking back at the action plan that we set ourselves in 2013, the focus was mainly on ensuring that our engineers were briefed thoroughly and regularly," says Falkingham. "This time around, the review had a far wider reach, exploring aspects such as strategy, definition of roles, internal communications and procurement."

The latest assessment identified a few areas to address, largely around the internal communication of safety, health, environmental and quality (SHEQ) information, strategic initiatives, and key performance indicators. The company is now introducing a new intranet to share information and manage many of its business processes, with the launch coinciding with a SHEQ Week to highlight best practice. The firm also upgraded its procurement process, with a new scoring system for suppliers.

Many of the changes are now being rolled out across the whole SCX group to improve performance, Falkingham notes. "The F4N process was brilliant because it didn't just get us looking at SCX Special Projects in the context of nuclear,"

he says. "A lot of things that Nigel asked us to explore have been applied across the whole group, especially on the SHEQ side. The regranting process really was an eye-opener, and it's had long-lasting effects on the way we run our business."

SCX Special Projects is now looking forward to continued business growth in the nuclear sector, and sees particular opportunities in decommissioning work through the new framework agreements now being introduced by the site licence companies.

To meet its growth ambitions, the company is investing in new engineers, working with the AMRC Training Centre to train mechanical and electrical engineering apprentices, and with Sheffield's universities to recruit talented graduates.

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



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.

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