

Group expansion with acquisition of Hold Engineering

NIS Holdings have further increased their scope of services with the addition of West Cumbria based engineering firm Hold Engineering. The move comes as part of a strategy to further develop and grow the nuclear service capability of the group, which already includes NIS Ltd, NSG Environmental Ltd and Petrie Technologies Ltd.

Specialising in structural steel, Hold Engineering has been based on the Sellafield site for over 15 years, offering fabrication, installation and decommissioning services to a broad range of clients. Founder John Hold, will be staying on at the helm of the company as General Manager.

Speaking at an event to welcome the company onboard, Group Managing Director Richard Penrose commented, "The Sellafield site, and the wider nuclear

industry, has been key to the success of the group, and we see the purchase of Hold Engineering as being a natural extension to the capabilities we currently provide from our Lancashire bases. All of the firms within the group already share a passion for safety and quality that will

ensure we maintain our high standards in the future, as our plans for growth progress through 2010 and beyond."

Look out for more news from Hold Engineering in the next issue of Aspire.



NSG MD John Morris and Group MD Richard Penrose with John Hold

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More awards for health and safety performance

NIS and NSG are both celebrating winning another of the prestigious RoSPA Occupational Health and Safety Awards in 2010. The win marks NIS' 6th RoSPA award and the 4th Gold in a row. NSG also collected their 2nd consecutive gold medal. The awards were presented to Adrian Woodward, NIS Assurance Manager and Paul Johnson, NSG Safety Officer at a ceremony hosted by Lord Jordan of Bournville, RoSPA President.

David Rawlins, RoSPA's Awards Manager, said "Both companies have shown a commitment to protecting the health and well-being of their employees and others. Organisations which do this deserve to have such dedication recognised and that's where the RoSPA awards come

in. As well as there being clear ethical reasons and legal requirements for good health and safety management, there is



2010 marks NIS' 4th consecutive Gold Award, one more will earn a Gold Medal

also a strong business case. RoSPA is delighted to publicly honour organisations which have demonstrated their work to improve performance in this sphere." These achievements are a reflection of the strong safety culture within the companies and demonstrate a commitment to continuously improve

health and safety standards. This endeavor has also led to NIS being certified compliant with the Contractors Health and Safety Assessment Scheme (CHAS) after completing their health & safety pre-qualification. Additionally, for the second year in succession, NIS has received accreditation from SAFEcontractor, a programme which recognises very high standards of health & safety practise amongst UK contractors.



NIS has been SAFEcontractor approved for 2 years running

Darran Hughes, Operations Director of SAFEcontractor said, "Major organisations can no longer run the risk of employing contractors who are not able to prove that they have sound health and safety policies. More companies need to understand the importance of adopting good risk management in the way that NIS has done. The firm's high standard has set an example, which hopefully will be followed by other companies within the sector".

NSG have been commended for safety performance with a certificate of recognition from AWE, one of the company's major clients. The certificate comes following NSG's contribution to the completion of 1,000,000 hours worked without a lost time incident on the Re-Kit Framework.

New facilities to support major projects at Sellafield

The last few years have been very successful for NSG Environmental Ltd, with growth in both of their business areas. The Site Operations team has expanded significantly at Aldermaston and Trawsfynydd and continues to support decommissioning activities there. In addition to this, the Technical Services team has increased and now has over 60 scientists, engineers and technicians working out of NSG's facilities in Chorley, supporting waste management projects in the nuclear decommissioning industry.

This increase in development activities has led to the requirement for further expansion of NSG's facilities which has included the design and build of a highbay. The facility will be used to run R&D programmes using full scale and prototype rigs to underpin technical solutions proposed by clients. Based on the information provided through the trials, the client can move forward with confidence in their preferred option.

The construction of the highbay began at the end of 2009 and was successfully completed in August 2010. The new facility occupies approximately 1000m² and is serviced by a 15 tonne overhead gantry crane with a minimum height of 16 metres to the crane hook.



NSG's modern facilities in Chorley

Jim Porter, NSG's Director of Science and Technology said, 'This expansion has established NSG as the leading nuclear R&D consultants in the North West and will enable us to respond effectively to the challenges associated with legacy ponds and silos with the necessary scale of test rig.'

NSG will be holding an open day towards the end of the year to mark the official opening of the facility and look forward to welcoming their clients.

Supporting local charity...

NIS and NSG recently took part in some promotional work for Derian House Children's Hospice in Chorley. Five members of the team from NSG and another five from NIS spent an afternoon posting leaflets to promote two upcoming fundraising events.

The first of these was the annual 'Forget Me Not Lunch' which raised over £13,000 for the charity. Both NIS and NSG provided volunteers to help with preparations and to assist with activities on the day at the Pines Hotel in Clayton Green.

The second event that was promoted was the 'Starlight Stroll' which raised over £40,000. As well as promoting this event, NIS and NSG were very pleased to be able to donate some high visibility vests that were used on the night by the marshals and other helpers.

Both companies are delighted to have been able to offer support to this charity and look forward to doing more work with them in the coming months.

For more information about Derian House visit www.derianhouse.co.uk



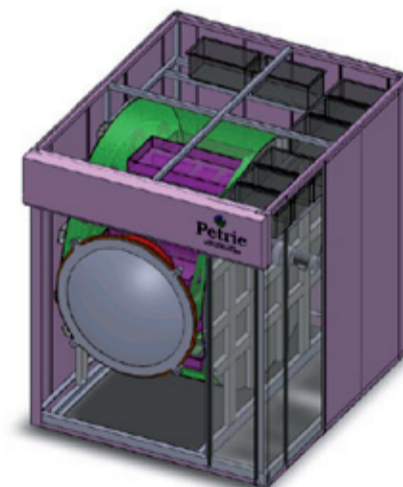
Volunteers from the NSG team promoting Derian House fund raising events

Expansion in China for Petrie and NIS

In 2008 NIS opened a manufacturing and assembly facility in Guangzhou, South China. NIS (China) Ltd is a wholly owned subsidiary company operating out of the base in China with offices in Hong Kong. Since the company was established the team has been steadily growing in number and is still looking to expand further, with vacancies for two additional Sales Engineers still open.

The expansion into China will also see new products added to the lines currently offered. The China division works in unity with Petrie Technologies Ltd, another member of the group, in supplying microwave and radio frequency heating equipment to Asia. Petrie will broaden their portfolio with the launch of two new machines for the Chinese market.

The first machine is a batch microwave oven with vacuum, abbreviated as 'MVAC'. The special heating properties gained by the combination of technologies indicate many potential applications in



A 3D model of the new MVAC microwave vacuum oven from Petrie Technologies

material drying processes. The vacuum lowers the boiling point of water in the material, meaning that it can be dried much quicker than using traditional methods.

The other new product is a modular version of the AMWA system. This is a hot air and microwave assisted continuous oven that can be integrated into a production line. Any length of line can now be built using standard sections, which means that customised versions are available without the cost of a fully bespoke system. Applications include unique ready-meal production, snack products, and defrosting.

New appointments at NIS

NIS are pleased to welcome the following new team members

- ▶ Russell Peake - Programme Manager
- ▶ Alan Green - Design Services Manager
- ▶ John Jenks - Senior Electrical Engineer
- ▶ Jim Hough - Senior Electrical Engineer
- ▶ Scott Clayton - Senior Mechanical Engineer
- ▶ Mike Swift - Senior Mechanical Engineer
- ▶ Martyn Littlewood - Estimating and Proposals Engineer



The team on the NIS (China) stand at the Bakery China 2010 exhibition in Shanghai

Sucess at charity golf day...

NSG are delighted to be able to announce that thanks to the help and support of clients at AWE, they were able to raise £1370 at a Corporate Golf Day which takes place at Wokefield Park, Reading. The day was held in support of the Day Care Ward at Oxford Children's Hospital and was a great success. A cheque was presented to staff at the hospital in August. Jill Thompson, Ward Sister said, 'the money which NSG have given will make a positive difference in the quality of care which our patients receive when they visit us; creating a better experience for the children and families we work with.'



Laura Horne presented the cheque to the hospital on behalf of NSG

Significant decommissioning project on schedule at AWE

NSG is currently undertaking a significant, cross disciplined project to decontaminate, decommission and demolish one of the original two-storey facilities at AWE, Aldermaston.

Completion of the project is on schedule with significant progress being achieved in all areas. The majority of the decommissioning activities on the first floor of the facility are complete and have been aided by the efficient management of the resulting waste through an NSG installed in-facility waste management area. The waste management area allowed the traditional 200l drum to be replaced with a HHISO container for the packaging of LLW. This minimised the need to size reduce items to a size which enables them to be fitted into a 200l drum, therefore helping reduce waste processing

time and bringing additional increased efficiencies.

The decontamination activities have been significantly accelerated through the introduction of a novel piece of technology called "Spongejet", in which grit impregnated foam impacts a contaminated surface, the grit releases the contamination and the foam captures the contamination before falling to the floor for collection. After the inevitable teething problems of introducing a new technology to the site, the process was embraced.

This project is particularly demanding with operations being carried out on several work fronts at any one time. It is essential that the work is meticulously planned and every member of the team knows their role and that of their colleagues so that they are able to operate as a cohesive unit.

In short...

Aerospace component loaders
NIS has won a major contract from Rhodes Group for loading and automation systems in a high tech manufacturing facility

Skills pledge
NIS and NSG have signed a pledge to invest in training and development as part of a government backed scheme to improve vital workforce skills

Supporting local girl guides
NIS recently donated £180 for the purchase of a camping shelter for a local guide unit lead by a member of staff

HVAC expertise
NIS' HVAC specialist Jim Axtell will present a paper at the next quarterly meeting of the Nuclear Ventilation Forum, based on design experiences of the Sellafield B229 Lab 195 project

Recruitment drive
NIS are looking to extend their capabilities and are recruiting across a range of disciplines including design, manufacturing, projects and proposals

Graduate placements
Two university students recently completed summer placements at NSG's Scientia House. Craig Jantzen and Nick Major who are both completing Master's degrees have returned to their studies and are now finishing their final years. NSG send their thanks to both the graduates and wish them good luck in their future careers.

Supporting SAFESPUR
NSG were pleased to be able to host a recent SAFESPUR event at their facilities in Chorley. The event focussed on the application of innovative technologies for the treatment and management of legacy waste, storage, disposal as well as interlinked decommissioning activities and site remediation.

NIS partners with L-3 to provide cargo screening solutions



CX-Pallet rigs are built at NIS in the UK or China; both workshops are ISO9001 certified

NIS Ltd has established a working relationship with US based client, L-3 Security and Detection Systems, to provide X-ray scanning equipment. L-3 are world leaders in advanced screening technologies and NIS has a proven track record in the security market.

In March 2010 a new X-ray scanning gantry, CX-Gantry, was supplied to a Vietnamese customer after being designed and built at NIS' facility in Chorley. NIS Ltd worked in a collaborative manner with L-3 to complete the development, which included the erection

of a temporary testing facility to undertake the X-ray trials.

In the first 3 months of 2010, NIS were on site in Vietnam providing support to ensure L-3's programme was met for the customer. Project Manager Dave Kinsella expressed his thanks for the hard work of all the site team in achieving this.

An updated version of L-3's CX-Pallet scanning rig has also recently been developed. Two of these systems, bound for Australia, have been designed and manufactured by NIS in the UK. NIS are also providing assembly and installation support for the customers in Melbourne and Sydney.

Steve Bushnell-Fowler, L-3 Project Manager gave his thanks to the NIS workshop and projects staff for their effort in the preparations for the factory acceptance test, saying "I am pleased to say that we had a successful outcome, and the customer left happy. This would not have been possible without the dedicated support the team gave us".

NIS' China division were responsible for manufacture and delivery of a third rig, for a customer in Singapore, whilst UK staff have provided the on-site services.



A temporary facility was constructed at NIS to allow full trials of the CX-Gantry.

NIS take part in the Big Bang

The Big Bang is an annual event led by EngineeringUK and the Science Council and developed in partnership with over 70 industrial and governmental organisations from the science, technology, engineering and maths (STEM) community. Featuring the National Science and Engineering Competition, the event was established to engage and inspire young people to consider STEM for their future careers.

Gill Marsden, Head of Business Development, attended the event for NIS and was an exhibitor on the National Skills Academy for Nuclear (NSA Nuclear) stand. Situated in the Northwest Regional Development Agency zone at the show, NIS provided a modified glovebox for the stand that featured interactive puzzle games for the school age visitors.



Gill Marsden from NIS (left) with peers from Babcock at the NSA Nuclear stand

Jean Llewellyn, Chief Executive at the National Skills Academy for Nuclear, thanked NIS for their enthusiastic help and support in making the event such a success and expressed her gratitude for providing the glovebox as an attraction.

The stand generated lots of interest and it is hoped that the event will encourage young people to consider engineering and other disciplines in the nuclear industry as a potential career.

Innovative robotic laser solution

NIS has recently completed a project to improve a production process for a major bathroom equipment manufacturer. A component for one of the client's main products requires multiple holes to be drilled before assembly of the parts. Several issues with this element of the process were leading to a slow and inefficient production line. It was the challenge of NIS to solve all these problems with the design, modification and installation of equipment including a robot effector, control system and software.

The previous process for making the holes used a conventional drilling head attached to a robot. Using this method the material had to be located and supported underneath by pillars to stabilise the surface whilst being drilled. This presented problems with the increasing variety of product shapes. Many types were not able to be located onto the fixture bed, and therefore had to be hand drilled, severely reducing production rates. Also, to increase throughput, two products at a time need to be drilled by the robot. But this resulted in frequently broken drill bits, and the material again having to be drilled by hand.

The innovative solution implemented by NIS was to remove the conventional drilling unit from the head of the robot and fit a high-tech laser drill in its place. Because this method of drilling does not require any complex fixtures, all shapes of product can be easily located onto the machine bed and the process is simplified. The laser drill is also much more reliable and precise, meaning that 2 products can be drilled at once without any problem. These improvements have had huge benefits in dramatically increasing output and improving efficiency by eliminating all manual drilling operations.

NSG team back on site at Trawsfynydd

NSG have been sub-contracted by a partnership of Amec, VT, Costain and Aker Kvaerner (TSIF), who are the preferred framework supplier for the Site Licence Company, Magnox North Ltd, to provide support for a number of decommissioning projects located in the ponds complex.

The contract to carry out modifications to the Resin Vault 2 and Resin Vault 3 plant room will enable spent ion exchange resins, which are to be recovered by a remote deployment arm developed and supplied by a third party, to be recovered and sent for processing at the commissioned resin solidification plant on site.

Additional work, supported by the NSG team in Resin Vault 1 will utilise a Remote Operated Vehicle modified by others to recover the supernatant, resin remnants and sludges which will be followed by washing down of the internal surfaces. As part of this programme of modifications NSG have also been supporting the TSIF partnership and Magnox North Ltd with a number of enquiries for preparatory works in the ponds complex.

A team of eight is currently on site at Trawsfynydd and it is anticipated that this could increase to 12 towards the end of the year once installation and commissioning works commence.

Graham Rogers, NSG Director – Site Operations comments, "We are delighted to be back supporting Magnox North and their principal contractor's operations at

Trawsfynydd. NSG have a long standing history of support to Magnox North at this site which covers ten years, and we are pleased that we have the renewed opportunity to make a positive contribution supporting Magnox North's next phase of decommissioning work at site."



The NSG site team at Trawsfynydd

aspire

Bringing you the latest news from NIS, NSG and Petrie.



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