



The newsletter for the nuclear & nuclear medicine professional

AQUILA DELIVERS £1M DECOMMISSIONING CONTRACT

Nuclear engineering specialist Aquila is delivering a pair of waste posting facilities to one of the largest companies in the world.

The containment facilities are built to safely package and remove legacy waste radioactive materials from two existing shielded facilities in the UK. The new shielded containments interface with the client's existing plant and are one of the key stages in their decommissioning site strategy.

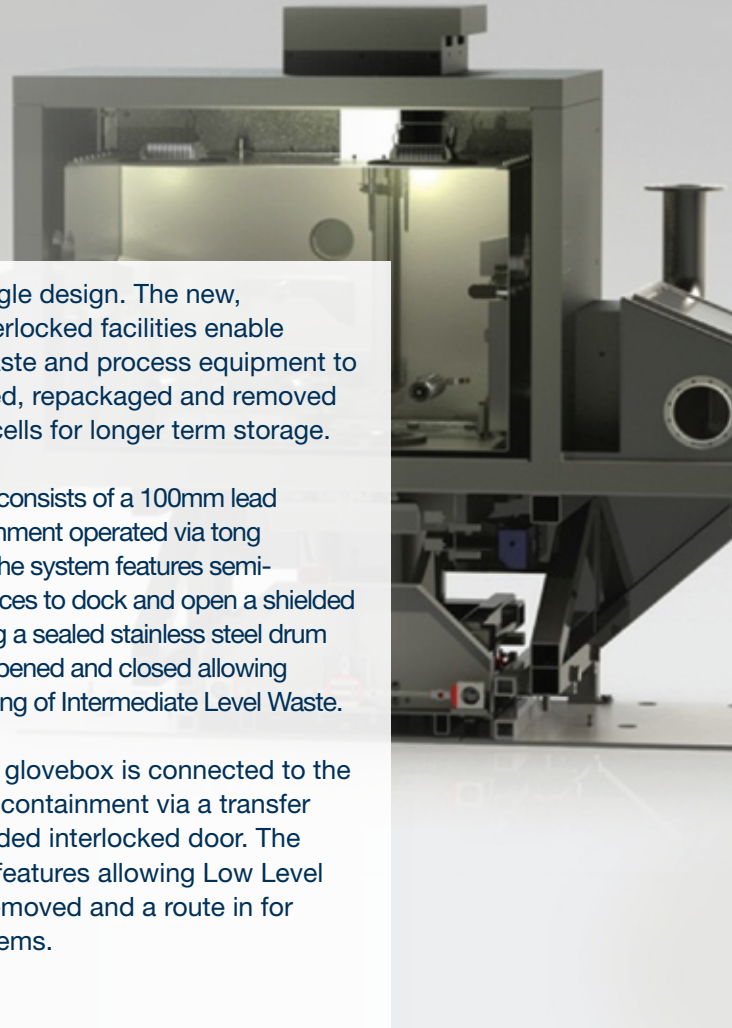
Aquila's Project Manager, Richard Freeman, said: "This important decommissioning project has presented some interesting installation challenges which have been overcome by a committed Aquila team."

The Aquila team has designed, built and installed two shielded containments with

a common single design. The new, SIL- rated, interlocked facilities enable radioactive waste and process equipment to be size reduced, repackaged and removed from existing cells for longer term storage.

The main plant consists of a 100mm lead shielded containment operated via tong manipulators. The system features semi-automated devices to dock and open a shielded flask, presenting a sealed stainless steel drum which can be opened and closed allowing access for loading of Intermediate Level Waste.

An unshielded glovebox is connected to the main shielded containment via a transfer tube and shielded interlocked door. The glovebox has features allowing Low Level Waste to be removed and a route in for consumable items.



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ISSUE NUMBER:



↑ Fred Ballarin, Managing Director

WELCOME

WELCOME TO THE FIRST EDITION OF *EAGLE NEWS*, THE NEWSLETTER PRODUCED BY AQUILA NUCLEAR ENGINEERING LTD FOR NUCLEAR & NUCLEAR MEDICINE PROFESSIONALS IN EUROPE.

These are exciting times in nuclear engineering. In new build, international supply chains are being developed by Areva, EDF and other world leading companies to solve increasingly complex nuclear challenges in the UK and continental Europe. In nuclear decommissioning, focus is on delivering high standards in a safe, controlled and effective way to deal with the legacy and secure a bright future for the industry. In nuclear medicine, huge advances are being made in shielding, containment and processing of radioactive material including bespoke equipment to produce long-lived isotopes.

Aquila Nuclear Engineering is at the heart of this nuclear revolution. One of the fastest growing companies in the industry, Aquila brings together world class engineering expertise from Britain and France to deliver bespoke, pragmatic solutions to Tier 1 and Tier 2 companies in new build, decommissioning, and nuclear medicine.

Our strength lies in our resources. Aquila employs the most talented people in Europe to develop advanced engineering solutions for radioactive material processing, containment, shielding, remote handling, transport and packaging. We are part of the Calder Group, the €180m pan-European engineering group with nine operating subsidiaries in five countries. We not only understand the need for European supply chains, we manage them.

Eagle News provides a platform to share news on both the industry and our company with you – the industry experts. We hope you find it informative.

↓ AQUILA NEWS IN BRIEF

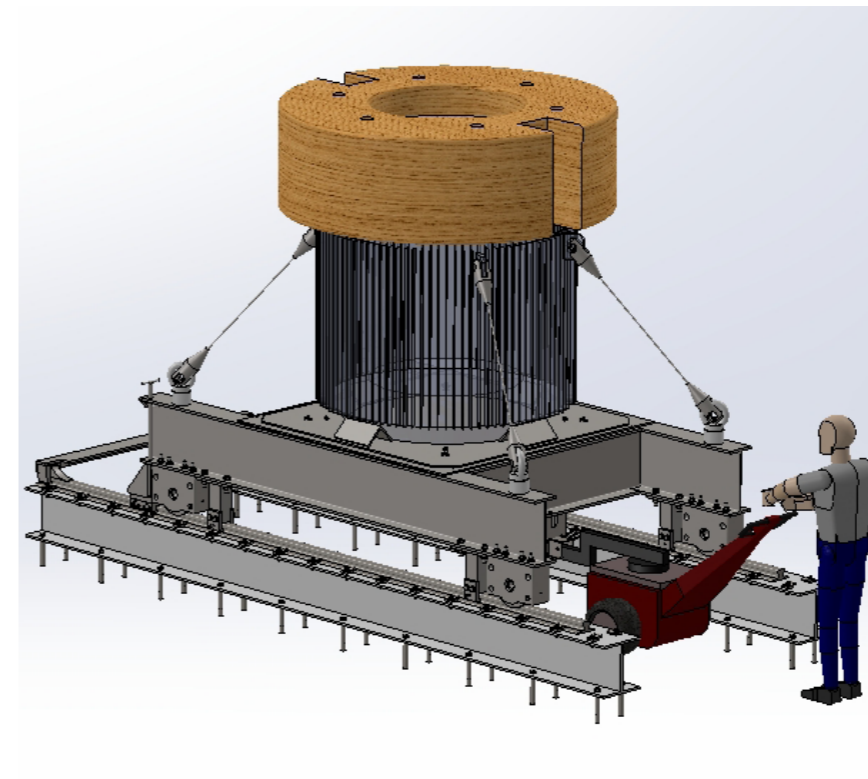
LAUNCH OF AQUILA NUCLEAR FRANCE

Aquila continues to expand in Europe with the launch of Aquila Nuclear France (ANF) last month. The new company is based South West of Paris at the “Pôle de Compétitivité du Plateau de Saclay”, close to the French Atomic Energy Commission. ANF provides safety case studies, risk management and regulation

compliance assessments to Tier 1 and Tier 2 companies in France.

ANF is headed up by Antoine Claisse who has worked within this field for over 20 years and has an enviable reputation in the French nuclear industry for delivering robust practical safety cases. In addition to

establishing itself in France, ANF will work closely with parent company Aquila Nuclear Engineering and the Calder Group in the UK. This unique Anglo-French team will support both nuclear build and solutions for the nuclear medicine industry.



AQUILA IN POLE POSITION

Aquila has completed the first phase of a major project to position a 28 tonne cask for Imperial College London.

The challenge facing engineers is to develop a system capable of not only supporting the payload but moving it into a precise location and supporting it during processing.

In phase one of the project, Aquila specialists produced a detailed design incorporating a special purpose bogie. This is designed to run on standard crane rails and powered by a proprietary tractive power unit. The bogie will be manufactured from standard section heavy steel beams and plates, and includes features to manually locate and lock the bogie in position.

John Adams, Aquila Senior Projects Manager, said: “The design process included calculations to ensure the system is capable of supporting the 28 tonne payload under both normal and seismic load conditions. Due to the high forces involved, the job also required analysis of existing ground conditions and subsequent design of a load spreading system and new reinforced concrete apron.”

PROJECT UPDATE

CONTAINMENT WORK GROWS

The last 12 months have seen a rapid expansion in the number of shielded facilities designed, manufactured and installed by Aquila.

High end projects have been completed for research and development purposes and to facilitate decommissioning at important sites in Europe.

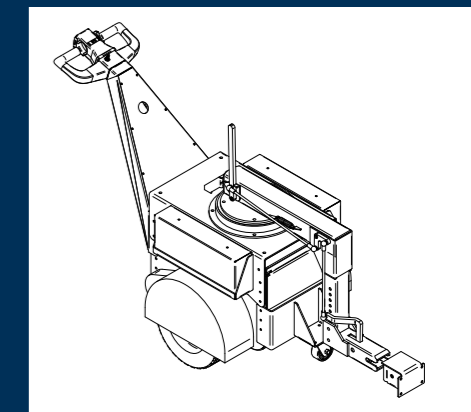
Latest projects include the delivery of two shielded cells with high integrity containment and posting features to one of the largest companies in the world (please turn to page 1).

SAFE TRANSFER OF EIGHT TONNE SHIELDED FLASK

How do you transfer an eight tonne shielded source flask while navigating gradients and tight corners? Aquila engineers rose to the challenge by developing a self propelled cradle that is both innovative and cost effective.

The cradle was designed, built and delivered by Aquila to enable a European client to transfer the heavy source flask from an external unloading point to a processing facility.

The Aquila equipment comprises of a heavy construction steel framework with locating features and lockable brakes and is powered by a COTs* Pedestrian Pusher Unit. A mock up was built and tested on site to prove the concept. As is customary for Aquila, the project was completed on time to client satisfaction.





AN INTERVIEW WITH

DAVE BARKER

DAVE BARKER, CEO OF AQUILA NUCLEAR ENGINEERING AND COMMERCIAL DIRECTOR OF CALDER GROUP, EXPLAINS WHY AQUILA AND CALDER REPRESENT THE PERFECT FIT.

“Calder Group’s decision to form Aquila Nuclear Engineering in 2011 was taken after detailed and thorough market assessment in the European nuclear power and nuclear medicine sectors. With Calder manufacturing facilities already operating

in the UK, France and Germany it made good sense to knit these sites together with an engineering team capable of offering engineering solutions in the host countries working closely with each of the existing Calder Group companies. “The Aquila Nuclear Engineering team has quickly built a reputation for delivering sound engineering solutions in the areas of containment, shielding, remote handling and transport packaging. Vertical Integration within the group is now working to the benefit of our clients in terms of timescale and commercial offering with quality never being compromised.

“The Calder Group is a €180m turnover business with a strong balance sheet. It means Aquila can act autonomously with accountability in the knowledge that we are financially secure. Our plans are to grow the business over the next 5 years both organically and by acquisition. This will be achieved by the Group companies working together on compatible projects and sharing skills, capabilities and not least European culture.”



“VERTICAL INTEGRATION WITHIN THE GROUP IS NOW WORKING TO THE BENEFIT OF OUR CLIENTS”

NEW STAFF

Aquila continues to invest in engineering talent with the appointment of: [Jonathan Bone](#), an electrical project engineer; [Ken Crockford](#) a mechanical project engineer; [Duncan Metcalf](#), a senior mechanical designer; and [John Adams](#) a senior project manager. These new employees have joined the team at Aquila’s UK headquarters in Hampshire, and Antoine Claisse is heading up the new company Aquila Nuclear France, based near Paris.

INDUSTRY NEWS



NUCLEAR AND NUCLEAR MEDICINES



EDF DEMONSTRATES COMMITMENT TO BUILDING NUCLEAR POWER STATIONS IN ENGLAND

EDF Energy plans to begin its formal public consultation for a proposed nuclear power station at Sizewell in Suffolk, England, in November 2012.

A draft statement of community consultation (SoCC) is being sent to local authorities in Suffolk to invite feedback for the Sizewell C project - marking the first formal stage in the consultation process.

EDF Energy Nuclear New Build planning and external affairs director, Richard Mayson, said the start of the consultation process “demonstrates our clear intent to progress our role at the forefront of the UK’s nuclear renaissance”.

The company has also announced that the six-month examination of its application for Hinkley Point C power plant in Somerset has concluded.

“During this period a landmark agreement was reached with the local authorities to mitigate the impact of the development and support services such as education, training, transport and housing,” said Richard Mayson.

“As well as helping to supply new low carbon electricity for ten million homes, both these projects offer massive employment and economic opportunities for local residents and firms. We now look forward to the planning decision for Hinkley Point C and to working with the communities in Suffolk to develop our proposals at Sizewell including mitigating identified impacts.”



PHASE III STUDY INTO DRUG ALPHARADIN

Everyman scientist at the ICR, Dr Chris Parker, is leading an international Phase III study into the drug alpharadin. More than 100 hospitals throughout the world, including more than 20 in the UK, are involved in this study.

The drug has been discovered, developed and licensed to therapeutics company, Algeta. Alpharadin has completed Phase I/II studies in men with advanced and aggressive, hormone resistant prostate cancer which had spread to the bone. Taken in conjunction with conventional treatments, alpharadin has been shown (in these early studies) to have a benign side-effect profile and to extend the lives of patients.



RENEWED INTEREST IN NUCLEAR PLANT IN NORTH WALES

ENERGY Secretary Ed Davey has said he is “very confident” a consortium will take forward plans for a new nuclear reactor in Anglesey, North Wales.

In a keynote speech at the Liberal Democrat conference in Brighton, the Energy and Climate Change Secretary said he expects new investors will be found for Horizon, the vehicle for developing the Wylfa B site on Anglesey.

German energy groups E.ON and RWE pulled out earlier this year. A consortium involving French nuclear reactor manufacturer Areva and China Guangdong Nuclear Power Corp is keen to take over Horizon, with another group, led by Japanese-owned Toshiba Westinghouse also thought to be interested.



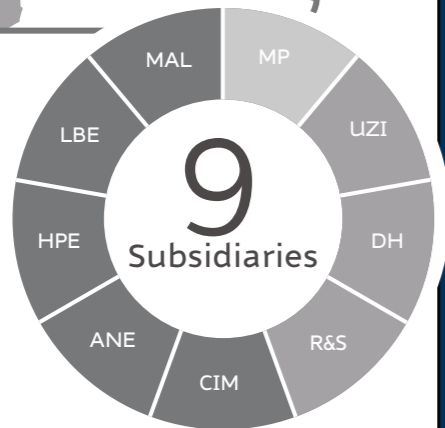
Hinkley Point Nuclear Power Station in the UK

WHAT'S HAPPENING IN THE CALDER GROUP



UNIQUELY POSITIONED

Calder Group is a €180m pan-European engineering group with nine operating subsidiaries in five countries. The Group is uniquely positioned to provide world class engineering solutions at every stage of the nuclear fuel cycle and waste management process throughout Europe.



- United Kingdom
- Mainland Europe
- Republic of Ireland

From decommissioning to new build and from option studies to delivery, Calder Group provides consultancy, design, materials, manufacture, equipment, technology and project management for the entire project lifecycle.

The Group's European subsidiaries provide a large range of mission critical engineering solutions to world leading companies in the most demanding industries including:

- Nuclear
- Oil & Gas
- Healthcare
- Aerospace
- Defence

CALDER GROUP NEWS

HELANDER OPENS NEW FACTORY - "FIT FOR NUCLEAR"

Helander Precision Engineering is pleased to announce the opening of a third factory unit - Helander Energy Products Division - located just 400 metres from the main site.

This new facility allows expansion of manufacturing floor space of 40%. Significant investment in upgrading the premises and in the acquisition of a range of new Mazak CNC machines and a fully equipped temperature-controlled quality department gives Helander a world class manufacturing facility, which is truly "Fit For Nuclear".

Helander is now well positioned to serve the UK nuclear new build programme in addition to the existing decommissioning and life extension project work.

CALDER GROUP REFINANCING

Calder Group has announced the successful completion of the financing of its debt facilities. The €45m refinancing was made through a multi-jurisdictional Comprehensive Asset Based Lending ("CABL") facility. The facility was provided on a bilateral basis by Burdale Financial Limited, and secured against the company's property, equipment, inventory and receivables in the five European jurisdictions in which it operates.

COMMENT FROM

Ben Travers, CEO, Calder Group.

"With the growing level of activity in decommissioning and new build in the nuclear industry across Europe, the launch of Aquila is a very exciting new venture for us. It means Calder Group is uniquely positioned to offer a truly European mix of business experience in design and manufacture of radiation protection throughout the nuclear fuel cycle and waste management process."

"Calder's lead engineering businesses are Europe's leading manufacturer of radiation shielding for the nuclear energy, healthcare and other markets. The addition of the Aquila team adds specialist design and engineering skills to the group, not only to act as a discrete profit centre, but also to offer additional capability to our existing client base."

AQUILA NEWS IN BRIEF

PRODUCT CATALOGUE COMING SOON

Probably the most comprehensive guide available to nuclear equipment for the civil nuclear and nuclear medicine markets is about to be launched by Aquila.

Aimed at engineers and buyers, the guide will be split into four main sections:

- Containment and gloveboxes
- Shielded systems
- Remote handling
- Transport and packaging

Each section will include proprietary information and details of reference plant already installed and operational. To order your copy please contact: Lee Pratt, LPratt@aquilaeurope.eu, +44 (0) 1962 717 000

TEAMING ARRANGEMENTS

Aquila has formed teaming arrangements with companies where, combining resources and capabilities, we can add value to our clients.

Due to current and future demand in the the nuclear industry for special lift and crane solutions throughout Europe, Aquila has teamed with Pelloby Cranes a specialist for many years within the nuclear industry. The combined resources and facilities enhances our offering to the nuclear industry as proven nuclear solution suppliers.

In France and the UK, Aquila is working with ALTRAN, the French engineering services giant, to offer an alternative approach to design, project management and nuclear safety engineering. The partnership involves setting up suitably qualified and experienced platforms on client sites and remotely.

At Sellafield in Cumbria, Aquila is now an approved supplier within the Design Framework Agreement (DFA). It allows Aquila to work on design packages directly for the Sellafield site.

INTERNATIONAL NEWS

COLLABORATION HOLDS KEY TO NUCLEAR GROWTH



With a French MD (Frederic Ballarin), a Scottish CEO (Dave Barker) and an English Board (Matthew Unwin and Matt Castle), Aquila's senior management brings together the best of British engineering expertise with renowned French flair in nuclear technology.

This British-French collaboration hasn't happened by accident. Dave Barker says it's the result of a long held belief that world class nuclear engineering solutions can only be achieved by pooling proven talent from Europe's leading nuclear nations.

Aquila's strength lies not only in its people but its vision, Dave Barker says. "We are strongly aligned in our plans and goals and the route to achieve these has been well thought out. We are unanimous that the development of the nuclear power industry and the advance of nuclear medicine engineering can and should be driven by a collaboration of British, French and German expertise, and Calder Group is embracing this 100%."

The strategy to pool European talent is already being born out. As Eagle News went to press, Aquila, in association with Calder subsidiaries in France and Germany, had secured invitations to tender for both ITT (for the CEA) and EDF for remote handling equipment for decommissioning and new build.

EVENTS

Aquila and the Calder Group companies have been extremely active during the past 12 months exhibiting or attending the most important events in the nuclear calendar worldwide, including events organized by the European Nuclear Society, the Nuclear Institute and the European Association of Nuclear Medicines. In addition, Aquila and Calder Group companies have attended most of the nuclear site licence exhibitions held throughout the UK and managed by Nu Tech Associates.

Forthcoming events include:

EANM:

Milan, 27-31 October, 2012

NIA DWG:

Sellafield, 6 November, 2012

NUCLEAR EXHIBITION:

Sellafield, 7 November, 2012

ENERGY CHOICES:

London, 6 December, 2012

ENS:

Manchester, 9-12 December, 2012

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