



CASE STUDY

AC&E

ac&e located to Sci-Tech Daresbury in 2009 and moved into Vanguard House in 2013. The company came to the campus with a 20 year international track record of delivering world class design and manufacturing simulation software, along with high performance computing solutions.

GROWTH

Since then, it has grown further by engaging effectively with organisations on campus and in its wider network, as well as through spearheading developments in specific technologies.

Examples include developing the market for simulation within the steel construction industry and providing solutions for companies using non-destructive inspection. As these new areas of business continue to develop, new opportunities will be created for additional technical staff to join this creative forward thinking company.

ROBOTICS SOFTWARE

ac&e, with its subsidiaries in the US and France, has developed a suite of robotics software products that enable major manufacturers to deliver ever faster, more accurate results.

These products are used for programming robots and to reliably simulate the manufacturing process in order to avoid downtime when the production pattern is altered.

Clients using this technology include Nissan, Boeing, Lockheed Martin and Spirit Aerosystems. Alongside this are UK and EU distributorships for fluid dynamics solutions, with clients in this area including Formula 1.

In addition, ac&e brings powerful technical computing resources and expertise to these and other clients with high performance computing requirements, working with leading edge solutions from Dell, Fujitsu, CIARA Technologies, Fusion-io and Teradici.

COMPUTE POWER MANAGEMENT

It has also developed packages that enable the management of this compute power, including workload management (allocating the optimal resource to a given job), shared computer resource and managed clusters of computers and processors.

This combination of services enables ac&e to ensure that its software clients receive the very best hardware configuration and its hardware clients get the most appropriate optimised solution for them. Both are underpinned with dedicated support and service, an area the business is particularly proud of.

LIFE AT SCI-TECH

While at Sci-Tech Daresbury, ac&e has benefitted from continued value-adding collaboration and knowledge exchange on the campus. ac&e engineers received input from STFC scientists on the development of its non-destructive inspection technology using ultrasound.

In addition, it is critically involved in the 'Engineering Cloud' – a collaboration with Liverpool University's Virtual Engineering Centre and STFC which aims to commercialise high performance computing resources at Sci-Tech Daresbury.

EXPERT COLLABORATION

In 2013 ac&e directors presented a paper at the World Congress of NAFEMS (International Association of the Engineering Modelling, Analysis and Simulation Community) on how this cloud infrastructure could enable 'Expert Collaboration as a Service', bringing together, in one cloud-enabled hub, the resources to deliver game changing solutions to critical design and manufacturing problems.

ac&e's ModelCenter® software would sit at the centre of such an initiative, providing a collaborative platform for integrating design applications and codes from multiple partners for multidisciplinary design and analysis.

VANGUARD HOUSE

The Vanguard House location provides ac&e with a larger dedicated one-stop facility of office, workshop, server and meeting space, enabling it to further enhance its offering to clients. It also consolidates ac&e's technical computing capability at the heart of the campus' world-leading high performance and super-computing community.

The locations also means that ac&e has retained access to the wider campus and its R&D, conference, leisure and catering facilities. In addition, being close to the region's airports and motorways offers easy access to its UK and international client base.

Sci-Tech Daresbury also provides ac&e with the advantages of being in one of the country's most innovative Enterprise Zones. Locating within the Enterprise Zone enables the company to benefit financially which releases funding for development of new markets and products.

“

We are delighted with being located at Vanguard House and being part of the broader Sci-Tech Daresbury community, and look forward to this being a major step forward for ac&e and its clients. The facility enables us to design our working processes around client requirements, bringing greater efficiencies and added value.

”

– JOHN BAXTER,
DIRECTOR, IT SERVICES AT AC&E