

Nominee: Sudlows

Nomination title: Sudlows - Data Centre Design and Build Specialist

Sudlows is a multi-award winning datacentre specialist, dedicated to designing and building robust critical IT environments. We combine unparalleled experience and engineering capabilities across many business sectors and have progressed to exporting datacentre consultancy services internationally.

Sudlows directly employs over 130 professionals serving clients throughout the UK, Europe, the Middle East and Asia. We employ a range of technical experts ranging from specialist project directors, project managers, engineers and support teams.

Sudlows provide the full scope of professional services including auditing, consultancy, design, project management, installation, commissioning and maintenance for innovative and cost effective design and build projects. We are also one of the few UK companies able to design, build and maintain datacentres using a complete in-house capability covering consultancy, design, install, commission and management.

Building on 100 years of innovation, knowledge and talent, Sudlows have developed a key position in the datacentre market whereby we operate across all market sectors including; Technology, NHS, Education, Construction, Finance, Retail, Manufacturing, Industrial and Defence. The company have developed an enviable track record and have proudly consulted, designed, built and managed datacentre's for many high profile organisations.

Recent award winning datacentre projects include; The Co-operative Group, Blackburn with Darwen Council, University of Portsmouth, The BelleVue Data Centre and Bytemark Hosting.

Endorsement of global datacentre initiatives; such as The Green Grid consortium and European Code of Conduct for Data Centre Energy Efficiency, successfully contributes to the development of next-generation, sustainable projects. Operationally, our own strict environmental compliance is independently audited and operates to the stringent ISO: 14001 international standards, for which Sudlows is fully accredited.

Our aim is to achieve low environmental impacts, whilst maintaining uptime and high Tier performance. This strategy has enabled us to install the most cutting edge products emerging on the market. This has included the deployment of the latest in energy efficient datacentre technology including; EDRUPS Flywheel (Electronic Diesel Rotary UPS), Free Cooling and Evaporative Cooling technologies.

Technical achievements form the building blocks of Sudlows, giving us a real edge within the industry. Our specialist teams include; the prestigious Uptime Institute Accredited Tier Designers (ATD), BICSI RCDD and Certified Data Centre Design Professionals (CDCDP) with

extensive knowledge of best practice design principles. Sudlows employ in-house engineering teams who are certified to the highest of electrical and mechanical qualifications, as standard, ranging from City and Guilds up to HNC and IEng level.

Sudlows technical staffs are frequently invited to speak at data centre conferences on topics ranging from; cooling, power, monitoring and design. This passion for knowledge sharing and commitment to raising standards across the datacentre industry, has also led Sudlows to host a series of free seminars, around the UK, on key technologies. By bringing together the world's leading manufacturers in an open and honest environment, the wider benefits, in terms of efficiency and security of the various technologies, can be discussed without prejudice.

Unlike many other datacentre management businesses, we employ an in-house Computational Fluid Dynamics (CFD) engineering team to analyse, optimise and develop our client's unique datacentre configuration using the most cutting edge simulation technologies.

Built upon comprehensive data acquisition from existing datacentres and validated during our previous projects, our CFD modelling process optimises cooling architecture by predicting pressure, momentum and temperature distributions at millions of discrete locations within the facility, ensuring the datacentre cooling is fit for purpose and as efficient as possible.

Once a description of the datacentre has been generated, the model can be augmented to assess the capability of the cooling architecture to adequately cool our client's datacentre as it grows. The model can be continually updated during the lifecycle of the datacentre to reflect infrastructure changes, ensuring the CFD model always represents the clients dynamic datacentre environment.

Sudlows datacentre technicians are in demand around the world to provide audit and design verification skills on datacentre facilities throughout the Middle East and Europe.

Quality, safety and technical competency are integrated into our datacentre services with technical auditing from CHAS, Constructionline and SAFEcontractor. Compliance to internationally recognized Occupational Health and Safety Management systems such as ISO 9001:2008 and OHSAS 18001 provide the foundation of our competency in the workplace.

Sudlows' has developed a collaborative approach to achieve low environmental impacts, whilst maintaining uptime and high tier performance. However, it takes a lot more than good innovation; it takes genuine passion and determination to challenge traditional practices established within our industry.

To enhance this client led experience, Sudlows most recently launched the Data Centre Innovation Pod (DCiP), considered to be one of the most pioneering micro data centre facilities in the UK.

The DCiP functions as a live testing environment to exhibit the latest emerging products from a range of leading manufacturers, and demonstrates how complex engineering challenges for power, cooling and security can be overcome by incorporating high performance, green technologies.

This 'innovation in practice' is reinforced by our renowned global associations who work closely with Sudlows in the process of creating the most resilient data centres. These relationships reinforce our active involvement in the integration of energy efficient technologies and environmentally sustainable facilities.

The Pod is designed to test components and innovative prototypes to see if they meet their intended requirements. In addition, the whole Pod aims to demonstrate best practice when designing and implementing datacentres.

This award winning facility was recently filmed by the Institution of Engineering & Technology (IET) for broadcast internationally on the IET.tv channel and shown to engineers around the world keen to learn more about the specific technologies contained within this unique datacentre.

Sudlows sets itself apart from other datacentre design and builders by the fact it invests into its own directly employed workforce. Sudlows are not simply a project management business that has to rely on sub-contracting essential construction elements of the critical build. Sudlows entire workforce is focused on the design and build of datacentres as a profession. This culture of expertise is shared within the company creating a unique craftsmanship approach to bespoke datacentre design and build. Such critical engineering knowledge and expertise is constantly refined so that every single datacentre is delivered, without issue, to a critical deadline and fully operational.

Why nominee should win

- Sudlows has a long and established proven track record of delivering truly innovative award-winning datacentres.
- Sudlows are active ambassadors for the datacentre industry, delivering free seminars that promote technical standards, energy efficiency and resilience internationally.
- Strong commitment to reducing environmental impact by deploying the latest 3D technology and software to help create the most energy efficient datacentres possible.

- Sudlows have established an award-winning experimental datacentre called the Data Centre innovation Pod (DCiP). This is an open platform test facility that is completely vendor neutral and is a unique collaborative space for manufacturer's and engineers to visit and test proprietary datacentre equipment and technology.