



Uptime  
Institute™



## Case study

# Consultancy Services

### Background



With over 10 years experience operating within the data centre industry, Sudlows has built up an unrivalled reputation for designing and building award winning data centre facilities. Operating with a specialist team of Consultants, Engineers, 3D CAD and Computational Fluid Designers (CFD) in house, Sudlows are able to provide detailed technical analysis and reports of proposed and existing data centre facilities. This forensic approach has been recognised internationally by global standards authority, the Uptime Institute, who have awarded the prestigious, Accredited Tier Designer (ATD) status, to Sudlows staff.

### Data Centre Audit

Sudlows are internationally recognised as one of the worlds leading providers of Data Centre Design and Audit services.

The audit process covers the most critical areas of the data centre, such as power, cooling and resilience. It also casts a wider examination

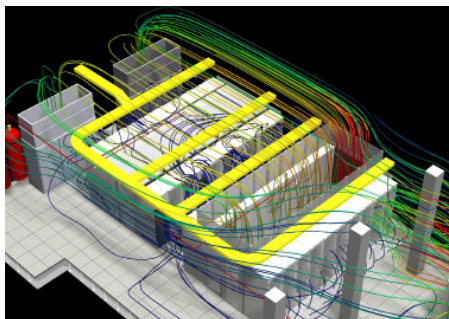
of the data centre facility in terms of the building's physical structure, in particular the environment and geographic location.

Sudlows currently provides consultancy services for clients with facilities based in Poland, Turkey, Riyadh and Jeddah.

## Technical Expertise

Sudlows consultants use the latest technology to forensically analyse every aspect of a data centre facility to accurately report on the operational efficiency of the infrastructure including; power availability and usage, cooling metrics, connectivity, resilience and disaster recovery capabilities.

- Load Bank Testing
- Thermal Imaging Camera
- Power Analyser
- Velocity Meter
- Temp / Humidity Meter
- Decibel Meter
- Lux Calibration
- Integrated System Testing
- Black Start Protocols



## CFD

Sudlows utilise Computational Fluid Dynamics (CFD) as part of an advanced engineering tool for the analysis of cooling architecture, allowing our designers to optimise your data centre to achieve the smallest carbon footprint, demonstrate immediate cost savings, maximise energy efficiency and PUE, all without compromise.

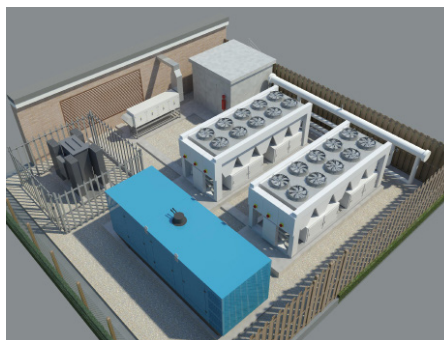
By providing a proof of concept for all cooling technologies early in the design phase, our CFD capability allows us to communicate detailed technical considerations easily to all stakeholders.

As your data centre populates, CFD provides you with the information required to expand intelligently, determining the best location to place high density IT loads, as well as most efficient running conditions at part-load. This ensures your facility has the lowest possible PUE given its current utilisation.

## CAD

Sudlows have invested into developing a bespoke technical design department that employs the very latest in 3D design software and render servers to provide clients with a realistic and accurate representation of any proposed or current data centre. Sudlows CAD specialists use the latest 3D modelling software for the opportunity to demonstrate each client's data centre potential prior to construction. This quickly and precisely develops a physical model of your facility according to the initial brief and gives the prospect for additional modifications. Early visualisation of technical designs means that all clients can envisage any scope for further expansion and benefit from best fit facilities.

**“Global standards are an essential element in the successful operation of a critical data centre”**



“When looking at any facility, compliance with global standards are an essential element in the successful operation of a critical data centre.”

“The ability to identify and accurately measure energy consumption, cooling efficiencies and highlight any weakness within the integrity of the facility can deliver significant benefits. Early intervention can prevent disaster and provide a platform to develop and utilise existing capacity without incurring additional costs.”

Andy Hirst, Technical Director at Sudlows.

## Principal Contractor

Sudlows are able to act as Principal Contractor for any project works, as we are one of few companies to design, build, commission and maintain data centre environments using our complete in-house capabilities. Our experience of acting as Principal Contractor has been extremely successful and enabled us to provide a first class service to the highest technical standards.

Sudlows have delivered projects for:  
**The Co-operative Group, UK Fast, The University of Portsmouth, Bentley Motors and QinetiQ.**

As Principal Contractor, Sudlows also manage all Quality, Health and Safety and environmental aspects via regular audits, contract reviews by the relevant internal and external managers and consultancy personnel at a frequency appropriate to the work activities and in agreement with the client. This ensures awareness of all planned activities throughout the contract.



## Skills and Experience

Our highly trained data centre consultants come from a strong engineering background, with individually recognised qualifications including:

- Uptime Institute - (ATD) Accredited Tier Designers
- Incorporated Engineers (IET)
- CDCDP - Certified Data Centre Design Professionals
- BICSI RCDD Designers
- PRINCE2 Project Management

These data centre professionals operate and advise with extensive knowledge of international standards in best practice and design principles.



CRITICAL INFRASTRUCTURES



ENTERPRISE SERVICES



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ELECTRICAL SERVICES



BUILDING SERVICES



FACILITIES MANAGEMENT