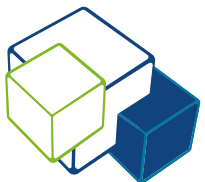




Maintenance & Support Services

Optimised Availability
Electrical Thermal Survey
Service Schedule



Workspace
Technology Limited
Data Centre Solutions Expertly Engineered

workspace-technology.com
mobiledatacentre.com



Consult... Optimisation, Audit and Survey Services

Data Centre Services

Workspace Technology provides data centre operators unprecedented levels of expert help 24/7, anywhere in the UK. We deliver planned preventative maintenance and emergency callout on a wide range of AC, chilled water, UPS, generator, fire suppression and associated infrastructure. In order to complement onsite maintenance services Workspace Technology provides a range of assessments, surveys, audits and services specifically designed to help improve data centre performance and reduce operation costs for our clients.

Electrical Thermal Imaging Survey

Infrared Thermography is non-contact temperature measurement technique and has the ability to see and measure temperature differences in a non-intrusive manner with the use of an infrared thermal imaging camera.

Electrical circuits and components often fail because of fatigue, defective components, contamination, or just loose connections due to poor workmanship. Failing components have one thing in common, they will always have a rise in temperature or 'hot spot' prior to failure. Infrared thermal imaging cameras allow Workspace Technology to quickly identify anomalies before components fail.

Typical faults that the imaging survey will detect include:

- Loose cable connections.
- Unbalanced circuits.
- Corroded connections.
- Internal faults within a circuit breaker.
- Internal faults and overheating within a fuse.
- Connections with high resistance.
- Internal faults or overheating of contactors.
- Overheating lighting circuits.



Faults on data centre electrical systems cause expensive business downtime, damage, loss of data or risk from fire. These problems can be prevented by undertaking a regular thermal imaging survey on your data centre electrical systems and equipment.

Systems covered under the Data Centre Thermal Survey include:

- Switchgear.
- LV Distribution Boards.
- AC Control & Power Panels.
- Control Panels.
- UPS and battery systems.
- Busbar systems.
- Electrical Distribution System.

The deployment of Workspace Technology's Electrical Thermal Imaging Survey will help stop costly breakdowns by spotting deteriorating components before they fail.



Thermal Imaging Survey Schedule of Works

Frequency - Yearly (minimum recommended frequency)

Item	Service Detail
1	Identify and create an 'Electrical Components Schedule' of all equipment to be included within the electrical thermal survey. This schedule will include equipment location / reference, equipment type and ID.
2	Each item surveyed or inspected will be documented together with its average temperature onto data sheets. This allows the item to be monitored and trended accurately during future surveys or inspections.
3	Where faults or problems are detected they will be thermal imaged and photographed to aid identification and detailed on fault sheets which appear within the report.
4	Complete fault sheets which will contain an analysis of the fault or problem, its criteria rating (Low-Medium-Severe) with advice and timescale for corrective and remedial action should it be required.
5	Generate detailed report document to include all thermal data, relevant information and recommended actions.



Additional Data Centre Services

Workspace Technology offers a range of data centre audit and survey services. These services may be specified as result of a Data Centre Audit or included as part of a comprehensive Data Centre planned preventative maintenance and support package.

Service	Details
3D Modelling and CFD Service	The 3D Data Centre Modelling and CFD service enable clients to visualise interactive 3D data centre models of existing or prospective data centre infrastructure.
Airflow and Thermal Imaging Survey	The Airflow and Thermal Imaging Survey enables data centre manager to identify problems with cooling capacity and airflow efficiency.
Data Centre Audit Service	The Data Centre Audit will provide a comprehensive review of the existing data centre or server room facility designed to help identify both good and bad practice, help clients increase reliability, and deliver the best value by reducing total cost of ownership through reduced capital, operating and energy costs.
Data Centre Optimisation Service	The Data Centre Energy Optimisation Service will address data centre imbalances by fine tuning system settings and configuration arrangements to achieve improvements in energy efficiency and deliver maximum performance within ASHRAE recommended environmental operating range.
Power Quality Survey	<p>The Power Quality Survey provide customers with a clearly laid out summary of load, power factor and harmonic data findings. When quality issues are identified the report will include recommendations to correct problems.</p> <p>The implementation of survey recommendations will help customers reduce energy bills and can prolong life and prevent premature failure of equipment.</p>
Power Usage Effectiveness (PUE) Assessment	The PUE Assessment enables IT and data centre managers to accurately benchmark the Power Usage Effectiveness (PUE), Data Centre Infrastructure Efficiency (DCiE) and usage of the server room environment through direct analysis of power and energy consumption.

Further details on audit services can be found in individual audit and survey schedules.

Notes on Service Schedule

All work mentioned in the schedule is carried out subject to Workspace Technology's Terms and Conditions of sale.

The audit schedules shown are based on a standard and will not be applicable to every installation for every item listed. Consequently each task has to be qualified by the term; 'if it is safe so to do', 'if applicable', 'if possible' and 'if appropriate'.

It is possible that your specific installation may have additional or specialised equipment not mentioned in this schedule. In that case, the specific equipment would be the subject of addenda to the main contract.

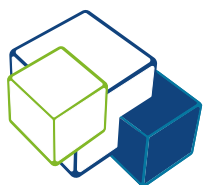
Tasks mentioned in the schedule may also be omitted if Workspace Technology's engineers or its appointed agents deem that it is unsafe to carry out that task or that it may jeopardise the security of electrical supply.



Interested in finding out more?

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