Focus on Facilities Management

Hot money *and how to find it*

YOU DON'T NEED TO WORK FOR A FACILITIES MANAGEMENT COMPANY TO KNOW THAT HEAT LOSS AND ELECTRICAL SYSTEM ISSUES USUALLY EQUAL ENERGY LOSS, WHICH IN TURN EQUALS MONEY LOSS. THAT'S THE EASY PART. THE HARD PART CAN BE SPOTTING THE ISSUE, CALCULATING A VALUE FOR THE LOSS IT'S CAUSING AND, THEREFORE, PUTTING A SPECIFIC FIGURE TO VAGUE 'ENERGY SAVING' PROMISES. THIS IS SERIOUS DETECTIVE WORK – BUT A THERMOGRAPHIC CAMERA WITH AN EXPERIENCED AND TRAINED OPERATOR IS THE EQUIVALENT OF HOLMES AND WATSON, MULDER AND SCULLY, AND MORSE AND LEWIS ROLLED INTO ONE.

Of course detecting an electrical system issue in a data centre, a school, a bank or a hospital is not only about the money. Where electrics are involved it's just as much about safety, prevention of downtime through unscheduled stoppages, and even about fire prevention.

But whatever the reason, the evidence of an issue is always the same, and with a high-resolution thermographic camera it's as clear to the trained operator as a footprint in blood to a TV 'tec.

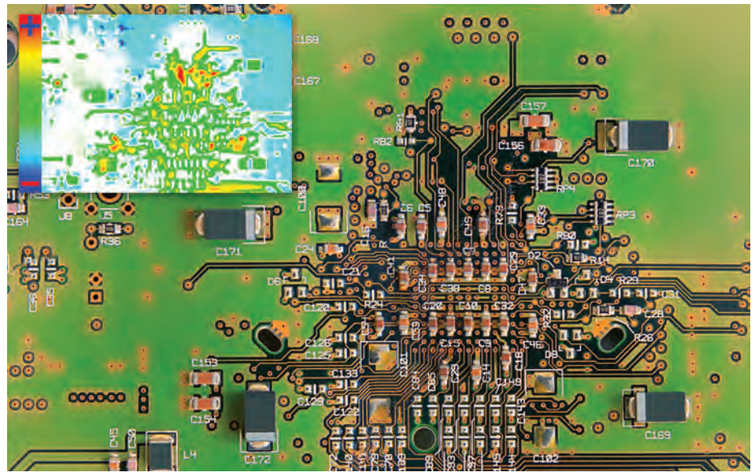
It's the ease of detection, the clarity of the evidence, and the capability for traceability and accountability which has led so many major organisations – from banks to supermarkets, and museum operators to schools – to insist their Facilities Management companies utilise thermography for their condition monitoring activities.

Banking on thermography

A major supermarket chain operates data centres throughout the UK to control its cashpoints and tills. The scale of its operations is such that the failure of one bay in one data centre due to a failed connection or a resulting fire will shut down all the checkouts and all the cashpoints in every one of its outlets across an entire county.

To avoid this nightmare scenario, the company's Facilities Manager subcontracts *ERIKS* Condition Monitoring team to conduct regular scheduled thermographic surveys of all the data centres, to detect any electrical system or climate control system issues.

ERIKS is the preferred thermographic surveyor because of the high quality cameras used (FLIR GF320 thermal imaging cameras) and the highly-skilled operators who use them. No *ERIKS* thermographic camera operator is allowed to conduct a survey alone until he or she has achieved British Institute of Non-Destructive Testing Level 2. This level of training, combined with *ERIKS* twenty-five years of Condition Monitoring experience, means that clients can depend on the detection of all issues in the area surveyed, the capturing of useful data, and the correct interpretation of the thermographic images.



Thermographic surveys are invaluable in identifying energy losses, and therefore energy- and cost-savings.

Better still, a comprehensive survey of an entire electrical system in – for example – a data centre, can be completed in a matter of minutes with no interruption or disruption of operations, compared with the two to three days required for manually checking connections and terminals during a scheduled interruption.

Point and shoot?

Thermographic imagery is an effective way to detect the increased temperature levels which often indicate an electrical fault such as a defective connection. The infrared visual data captured provides a clear indication of the location and nature of the issue.

But these are no point-and-shoot cameras. The information is only useful to an operator trained to interpret it correctly.

ERIKS' highly-qualified Condition Monitoring team uses thermographic cameras to check circuit boards, terminals, connections and even UPS systems, and from the results gathered provide a report – with thermographic evidence – highlighting findings, providing an interpretation of the data, and allocating a 'degree of severity' to each issue, indicating how soon action needs to be taken to prevent a failure.

This report provides written, verifiable and auditable documentation of the survey that has been carried out. A follow-up survey will then be commissioned, to provide similar written and verifiable evidence that repair or maintenance work has been successfully undertaken and the issues resolved effectively.

ERIKS' situation as an impartial third-party ensures the report can be relied on as a true record both of the issues and of their resolution.

Safe bets and easy wins

Whilst thermographic surveys are important in identifying electrical issues which could lead to fire or other safety problems, they are also invaluable in identifying energy losses, and therefore energy- and cost-savings.

ERIKS' ability to put a monetary value – expressed as a cost per hour – on energy losses identified by thermography, means Facilities Managers can now quickly and easily identify where and how savings can be made, can initiate a project to resolve the issues, and can then provide the client with independently verified evidence, for a signed-off cost saving.

So unless a client has money to burn, thermography is the latest hot ticket for Facilities Managers, to saving energy and saving money.