

# THERMAL IMAGING FOR ANOMALY DETECTION AND PREDICTIVE MAINTENANCE

Your business is important. You want to ensure your facilities and equipment remain at optimal conditions and that you aren't losing thousands of dollars due to unnecessary downtime. With EX Services you can safely predict otherwise invisible symptoms of imminent failure through our thermal imaging studies, thereby avoiding expensive breakdowns and saving your company both time and money.

In order to ensure that equipment is running at peak performance, many companies are now turning to predictive maintenance inspections to detect faults at an early stage, allowing them to fix issues before they disrupt the production process.

Thermal imaging is one such diagnostic tool that allows plant managers to pinpoint where the problem component is, in a safe and efficient manner.

By taking non-contact thermal images of your equipment as an integrated unit, EX Services technicians can quickly identify hotspots, then store these images for further detailed analysis with your engineers.

Our experience serving operators and EPC contractors in the design and manufacture of hazardous area electric process heaters and control systems also gives us the expertise to ensure your systems are maintained at optimal conditions.

EX Services provides professional service technicians who are trained in the usage of cutting-edge thermographic camera hardware, allowing you to inspect the temperature of your critical equipment and spend less on reactive maintenance repairs by identifying problems before they arise and ensure your production is kept at peak performance.

EX Services thermal imaging studies detect problems before they arise

Save on repair costs, minimise breakdowns and avoid loss of productivity

Safety is our primary concern

Our staff are certified and trained, with experience in both onshore and offshore industries



# **ELECTRICAL SURVEYS**

Oil and gas plants have facilities and equipment powered by electricity. Sometimes, faults like loose connections or load imbalances can cause overheating in critical equipment and lead to fire outbreaks. EX Services can locate possible problem areas by pinpointing hotspots and classifying faults to allow for repair prioritisation.

## SEPARATOR SEDIMENT LEVEL INSPECTION

Prolonged operation of petrochemical processing systems leads to sediment buildup in vessels, potentially causing contamination of the output gas or fluid. While facilities can assess levels of buildup by monitoring separator vessel volume, this can often be problematic (eg requiring vessel drainage for inspection, etc). Using thermal imaging, EX Services can you help confirm levels of sediment build up.

#### **CORROSION UNDER INSULATION (CUI) SURVEYS**

CUI is any corrosion due to water buildup in the insulating material of equipment, usually due to rainwater or melting snow. Commonly occurring in refineries and processing plants operating at high temperatures, corrosion on insulated equipment leads to piping failure and damages. EX Services can conduct thermographic surveys to detect and report corroded areas.

## HEAT EXCHANGER ANALYSIS

Production facilities using heat exchangers depend on the efficiency of the equipment for peak output. However, due to wear and tear of internal parts, these heaters can sometimes become less effective, resulting in heat or energy wastage. EX Services can perform comprehensive inspections of your units and highlight any problem areas in the operation line to ensure maximum efficiency.

## TURBINE AND EXHAUST STACK SHIELD MONITORING

Turbine systems and exhaust stacks are used to reflect or dissipate heat produced by the operational process. As these systems sometimes run past important plant equipment, faults in the exhaust piping must be quickly addressed. EX Services technicians can detect locations where heat shielding is defective and check the integrity and wear of linings to maintain safe operation.



EX Services PTE Ltd is the maintenance and service arm of the EXHEAT Group. Backed by years of experience, EX Services has the expertise to ensure your systems are maintained by highly qualified and experienced engineers. EX Services delivers solutions that are designed to lower costs, reduce risk, and improve product longevity by eliminating problems before they arise. Whether you require training, technical support or a fully comprehensive preventative maintenance service contract, EX Services will help keep your heating and control systems operational.

## **Contact Us**

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