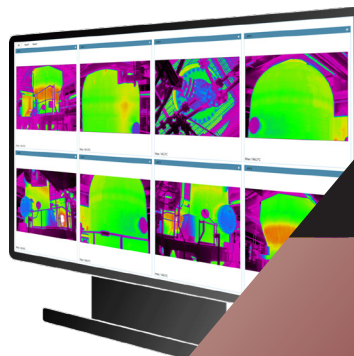


# IMAGEPRO AM

ASSET MONITOR FOR CRITICAL VESSELS,  
GASIFIERS, AND FURNACES



ⓘ A MEMBER OF THE IMAGEPro THERMAL IMAGING SOFTWARE FAMILY



**LAND**  
**AMETEK**<sup>®</sup>  
PROCESS & ANALYTICAL INSTRUMENTS



QUALITY CUSTOMER SOLUTIONS

# IMAGE<sub>PRO</sub> AM

## AMETEK LAND HAS BEEN MANUFACTURING PRECISION MEASURING EQUIPMENT SINCE 1947.

WE ARE SPECIALISTS IN NON-CONTACT TEMPERATURE MEASUREMENT AND COMBUSTION MONITORING WITH APPLICATIONS ACROSS DIVERSE INDUSTRIES SUCH AS STEEL AND GLASS MAKING, POWER GENERATION AND CEMENT MANUFACTURE.

As part of AMETEK Process & Analytical Instruments Division since 2006, our customers benefit from the worldwide AMETEK sales and service team.

### **Refractory-lined vessels and furnaces are common in industrial applications such as petrochemicals, steel production, processing and heat treatment.**

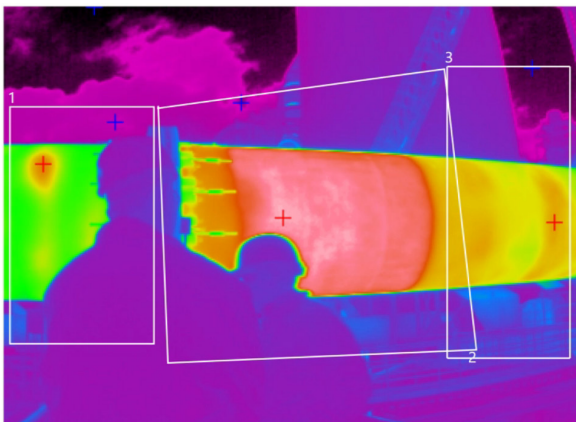
Over time, refractory deteriorates to a point where it has to be relined. Traditionally, the timing of a reline is ad-hoc and based on guidance from licensors, and previous experience of refractory issues.

However, this approach is not data-driven and can lead to critical and dangerous leaks of toxic gases, or an explosion resulting in plant damage, income loss and in the worst case, injury to personnel.

The continuous maintenance and monitoring of vessels and furnaces are therefore essential to production reliability and a plant's throughput.

Automated monitoring of the shell temperatures of vessels' and furnaces' critical areas enables their condition and safety to be continuously assessed to avoid leaks or identify dangerous outbreaks.

AMETEK Land's thermal imaging cameras and advanced IMAGEPro AM software enable 24/7 monitoring of critical vessels and furnaces to reliably identify changes and trends and initiate appropriate early warnings and alarms.



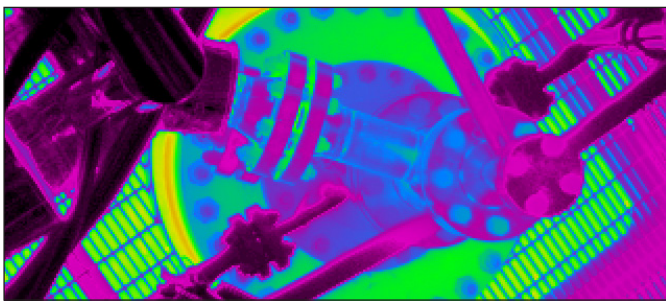
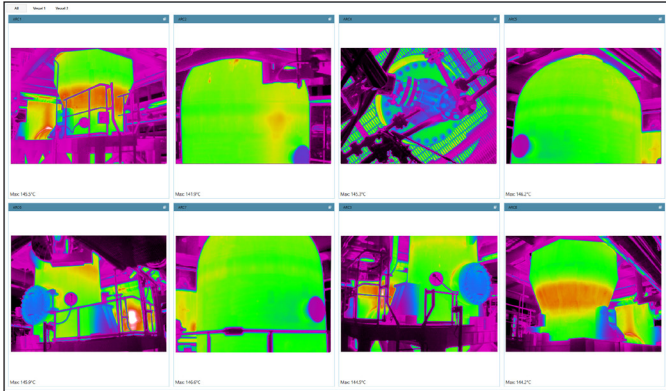
**24/7 MONITORING OF CRITICAL VESSELS OR FURNACES** - Continuous monitoring of critical areas to reliably identify and record changes and trends.

**TRENDING AND ALARMING OF TEMPERATURES AND RATES OF CHANGE** - All camera temperatures, conditions, alarms and change rates are logged in the integrated database and monitored in the trend view function for early and further analysis.

**UP TO 16 CAMERAS CAN BE USED WITH ONE IMAGEPRO AM WORKSTATION** - 16 thermal cameras can be connected to one IMAGEPro AM workstation, while additional workstations and cameras can be added on demand.

**FULLY CUSTOMISED SYSTEM SETUP** - The asset monitoring system is customised to the location and application requirements.

# KEY BENEFITS



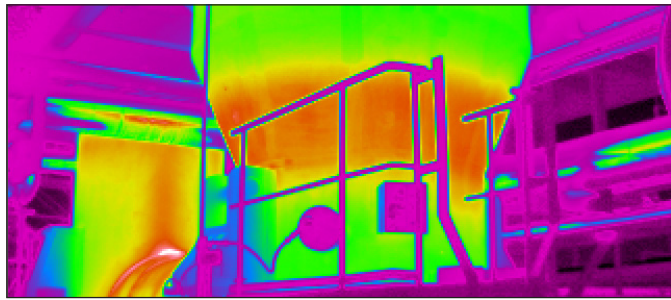
**IMPROVE SAFETY** of the plant by minimising the risk of dangerous plant conditions and potential damage to the plant and personal injury.

**PREVENT CRITICAL LEAKS AND BREAK-OUTS** by detecting developing hot-spots before they result in hot gas or material leaks or even devastating explosions.

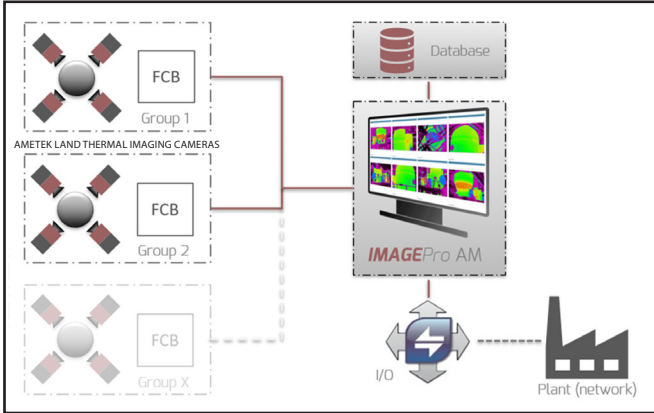
**EXTEND LIFE OF VESSEL AND FURNACES** by locating critical temperatures and undertaking preventative maintenance.

**UNDERTAKE EARLY REPAIRS** by identifying problematic areas before a more expensive, total repair or shutdown is required.

**IDENTIFY FUTURE ISSUES** by measuring and comparing the surface temperatures of vessels or furnace shells to allow the early detection of possible refractory damages or process deviations.



## SYSTEM OVERVIEW ▼



## TYPICAL APPLICATIONS

- /// Critical Vessel Monitoring
- /// Critical Piping
- /// Furnace Shell Monitoring
- /// Gasifier Monitoring
- /// Hot-Spot Detection and Monitoring
- /// Ladle Monitoring
- /// Safety Maintenance Monitoring

# IMAGEPRO AM

ASSET MONITOR – CRITICAL VESSEL & FURNACE MONITORING

## KEY FEATURES

### LIVE THERMAL CAMERA MONITORING

An overview of all cameras installed, grouped by areas, for 24/7 continuous monitoring, data trending and logging.

Up to 16 cameras can be connected to and processed at each IMAGEPro AM workstation.

### CUSTOMISED AREA & THERMAL CAMERA STATUS OVERVIEW

A customised overview provides a virtual view of the installed areas and cameras and their actual conditions.

By selecting a camera, the live camera view window will open and show actual alarm status and conditions for further analysis.

### ACTIVE AND HISTORICAL ALARMS & STATUS

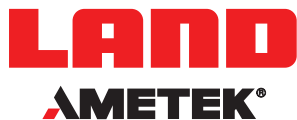
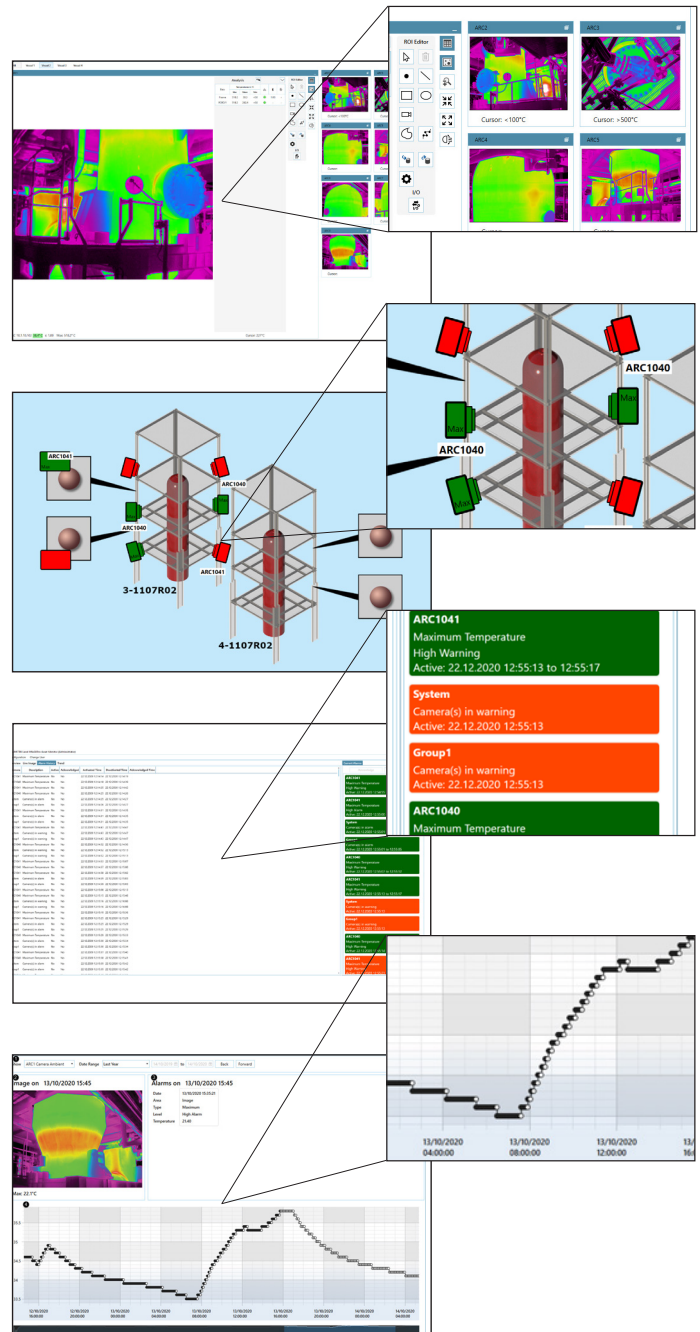
All alarms (active and historical) and system status are logged to the integrated database and monitored continuously.

Active alarms are monitored and can be easily acknowledged in the system.

### TRENDING FOR EACH CAMERA & LOGGED DATA

The trend graph shows the historical temperature trend for each camera and location.


The trend time frame can be custom selected and zoomed, whilst clicking a selected trend data point opens an analysis window, showing the related thermal image and active alarms for further analysis.



MARCOM0616 IMAGEPro AM Rev 2

### CONTACT US

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APPLIES IN THE US