



→ Maintenance of Rotary Kilns



# Kilnscan

**KILN SHELL****TEMPERATURE MONITORING**

## ➤ THERMAL SCANNING TO EXTEND KILN LIFETIME

Kilnscan infrared scanner monitors rotary kiln shell temperature, continuously, in real-time, with a high thermal sensitivity and definition. By providing early warning of failures, Kilnscan improves kiln efficiency and its long-term reliability. It contributes to increasing production rates, reducing operating costs, improving the burning process, and saving energy.

## ➤ HIGH-RESOLUTION DIAGNOSTIC SYSTEM

With the highest spatial and thermal resolution, Kilnscan keeps permanent surveillance on each individual refractory. It tracks hot spots, tyre slippage, rings formation, brick losses, thermal warp, to prevent irreversible damage. With more than 1000 units in operation around the world, HGH thermal scanners are used in most cement plants to warn of potential failures and trigger preventive actions.

## ➤ FEATURES

- High spatial resolution to detect single brick failure
- High thermal sensitivity to warn of any suspect temperature change
- Automatic calibration with internal blackbody: no drift over time
- Unique scan angle, up to 140°, to scan long shell
- Unique external reference blackbody for unsurpassed accuracy in adverse weather conditions
- Fibre optic link to the control room to avoid electromagnetic interferences
- Rugged system, designed for demanding environments



→ KILNSCAN SCANNER HEAD



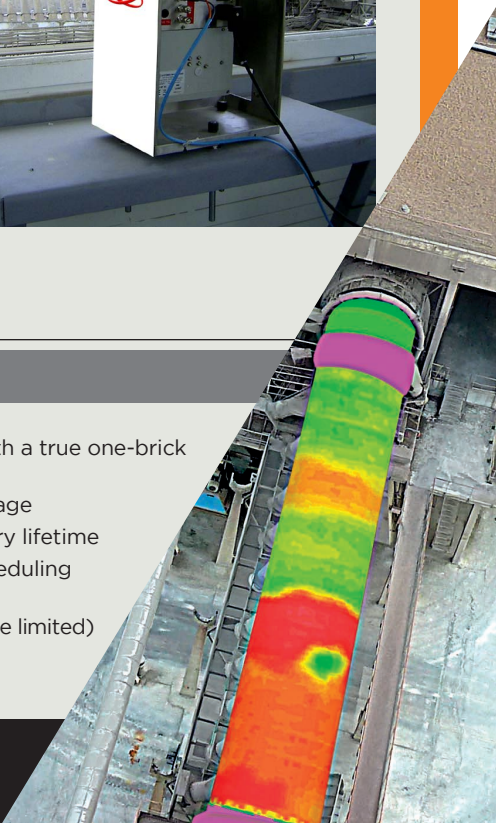
→ Kilnscan in operation

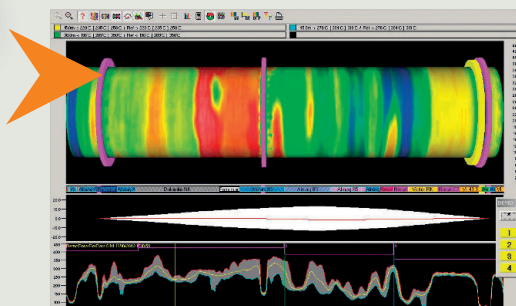
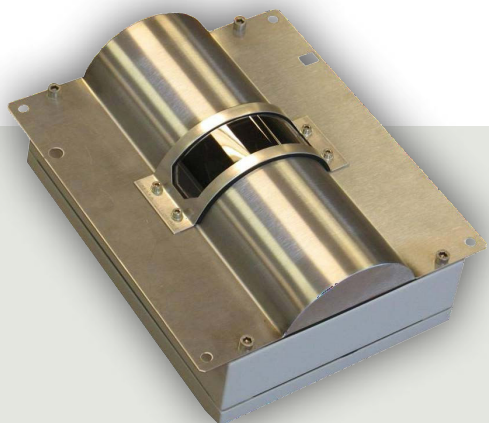


→ Preserving kiln shell lifetime

## ➤ BENEFITS

- Continuous full temperature map, with a true one-brick resolution
- Hot spots early warning, before damage
- Monitoring and extension of refractory lifetime
- Reliable preventive maintenance scheduling
- Solution adapted to any requirement (multiple shadows - long kiln - free space limited)
- Scanner data directly linked to Plant Control System

[www.hgh-infrared.com](http://www.hgh-infrared.com)



→ Kiln monitoring with Kilnscan software



→ Scanner installation

## KILNSCAN SOFTWARE

On control room screens and maintenance team workstations, Kilnscan software takes advantage of Kilnscan very accurate measurements, to display at a glance all necessary information to preserve kiln shell integrity. In addition, thanks to valuable unique features, Kilnscan software enables analysis on long-term basis and reliable trend drawing.

- Real-time 3D thermal profile
- Brick and coating thickness
- Advanced refractory management
- Kiln rotating speed
- Tyre slip monitoring
- Heat loss calculation
- Unique thermal warp monitoring, a must for predictive maintenance
- OPC server & client configurations
- Multiple alarms management, with cooling fans control
- Automatic data recording
- Historical data management, to monitor events evolution

## EXPERT SERVICES - TRAINING & COMMISSIONING

Our team of highly qualified engineers has been internationally recognized for years as experts in infrared technologies. We are proud to deliver cutting-edge products, high-end solutions to extend kiln lifetime. Our commitment is to ensure that you can maximize the profit from your equipment, as fast as possible, and for years.



→ HGH service - Training &amp; commissioning

*Above information is subject to changes without notice*



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