

Insertec DIGITAL SERVICES

Enhancing Control, Safety, and Efficiency

FURNACES MONITORING SYSTEM \

Cameras:

- InshTec
- 4VCS

Application:

- 4WMS

insertec
Furnaces & Refractories



Enhancing Control, Safety, and Efficiency

Tailored to your needs.
Our System is fully adaptable to your
equipment, providing tailored
dashboards and analysis to meet
your specific requirements.

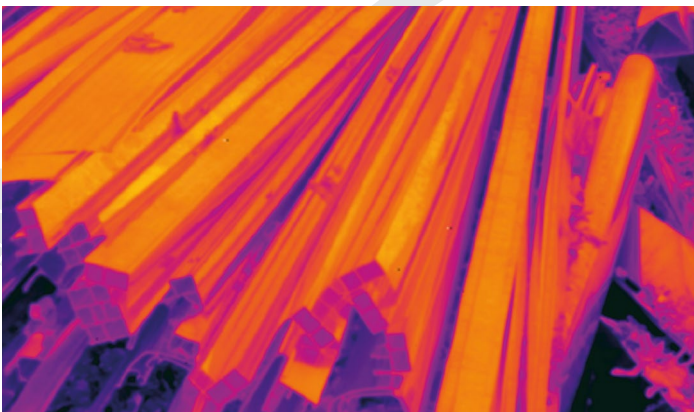
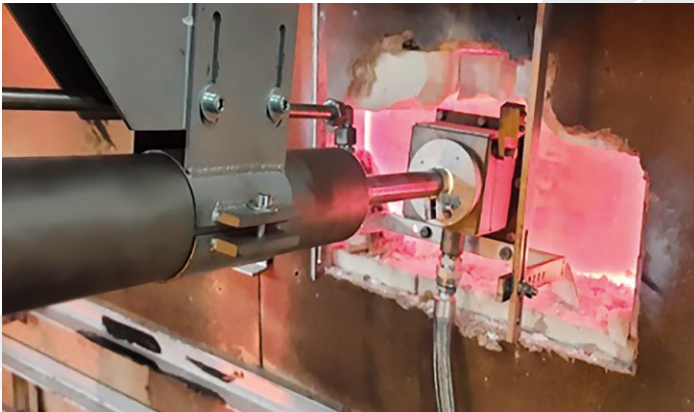
InsighTEC \

- Internal Video Camera System

Basic Installation

Internal cameras for bath analysis and Process Monitoring

A collection of cameras located inside the equipment making it possible to observe what is happening inside the locations where workers do not have access to.



- Precise non-contact temperature measurement between 600 °C and 1250 °C
- Uncooled microbolometer array with 640 × 480 pixels
- Spectral range about 3.9 μm
- Numerous optics with motor focus
- Measurement frequency 50 frames per second
- Gigabit Ethernet interface (1 GBit/s)
- Large dynamic range and 16-Bit analog digital converter
- Camera in small compact+ housing (IP54) or industry protection housing (IP65)
- Integration in customized system solutions
- Including hard- and software adjustment

● Basic

A technology enabling visualization of internal processes within furnaces.

● Advanced

Incorporating image analysis tools, enhancing the solution by enabling extraction of valuable information from the visualized processes within furnaces.

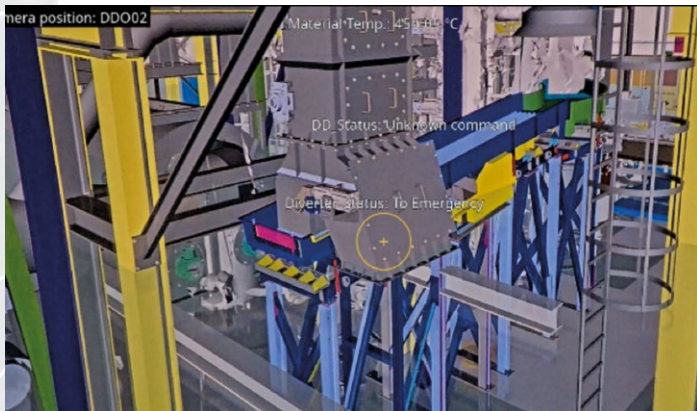
4VCS I

- External Video Camera System

Basic Installation

Design of a completely autonomous Video Monitoring System for equipment, areas and auxiliaries.

INSERTEC's 4VCS is a comprehensive system designed to provide enhanced control, safety, and efficiency for industrial furnaces. With a focus on real-time monitoring and intelligent analysis, our solution offers a range of features tailored to meet the unique needs of industrial environments.



- **Remote Monitoring and Control:** Operators can remotely access the 4VCS from any location, allowing for continuous monitoring and control of industrial furnace operations. This remote access ensures that operators can respond promptly to any situation, regardless of their physical location.
- **Historical Capabilities:** Our solution provides the ability to store generated images and access them later, ensuring traceability of processes and enabling control over both present and past situations.
- **Compliance and safety:** Our solution facilitates compliance with safety regulations by controlling access to restricted areas and identifying the presence of operators in critical zones. This enhances safety measures and helps maintain regulatory compliance standards.
- **Seamless Integration:** Our solution seamlessly integrates with existing infrastructure and equipment, minimizing disruption to operations and facilitating rapid deployment. This integration ensures a solution can be quickly implemented and scaled to meet evolving needs.

● Basic

A collection of cameras located in strategic points to be able to visualize the situation of the equipment.

● Advanced

Include basic Artificial Intelligence model capable of detecting values and situations, adding significant aggregated value to the solution.



4WMS \

- Web Monitoring System

4WMS is a centralized computing solution designed to optimize operations across various domains. It offers a range of features aimed at improving control, quality management, and decision-making processes.

Tailored to Your Needs: Our system is fully adaptable to your equipment, providing tailored dashboards and analysis to meet your specific requirements.

- **Seamless Integration with IIOT Gateway:** Our IIOT Gateway seamlessly integrates with existing infrastructure, facilitating the capture and transmission of data from PLCs to the Central LAU Server. Communication is simple via Ethernet or 4G, with minimal configuration required.
- **Reliability Redefined:** With robust Store & Forward mechanisms and local storage buffers, 4WMS ensures uninterrupted data availability, even in the event of communication failures.
- **Predictive Quality Management:** Our solution allows for the early identification and resolution of potential failures, reducing downtime and ensuring consistent quality standards throughout the supply chain.
- **Control and Optimize Production:** With 4WMS, businesses gain real-time visibility into their production processes, enabling better resource allocation and optimization of manpower, equipment, and materials.
- **Accessible Anywhere, Anytime:** Supervise equipment effortlessly with our web-based interface, accessible on a variety of devices, including laptops, tablets, and mobile phones.
- **Maximize Productivity, Minimize Costs:** 4WMS focuses on extracting value from data through customizable dashboards and key performance indicators (KPIs), aimed at maximizing productivity and driving economic benefits.
- **Historical Traceability:** Enhance decision-making capabilities by leveraging historical process data. Our solutions empowers you to make informed decisions not only based on real-time data but also by analyzing previous similar situations. This enables a deeper understanding of trends and patterns, leading to more effective decision-making.

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