



IrMonitor

- **Turnkey solution for Infrared Surveillance**
 - *Early fire detection in waste bunkers*
 - *Detection of burning parts on conveyor belts*
 - *Critical vessel monitoring*
 - *Steel ladle check*
 - *Pipeline leakage detection*
 - *Substation monitoring*
 - *Flare monitoring*

Application Examples

**Detection of
Burning parts
on conveyor belts**



**Waste Bunker
Monitoring**



**Flare
Monitoring**



**Steel ladle
Check**



**Substation
Monitoring**

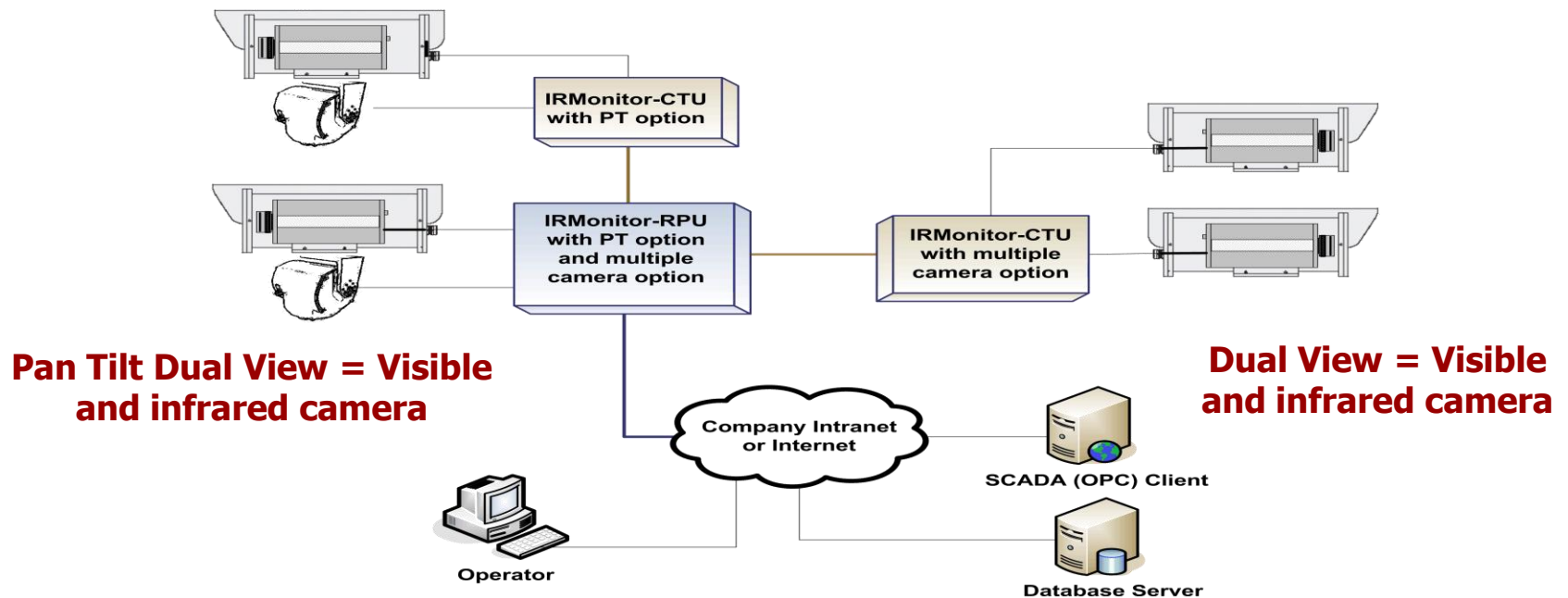


**Critical
Vessel
Monitoring**

System Description

Pan Tilt IR-Camera

Fixed IR-Camera



Camera Options

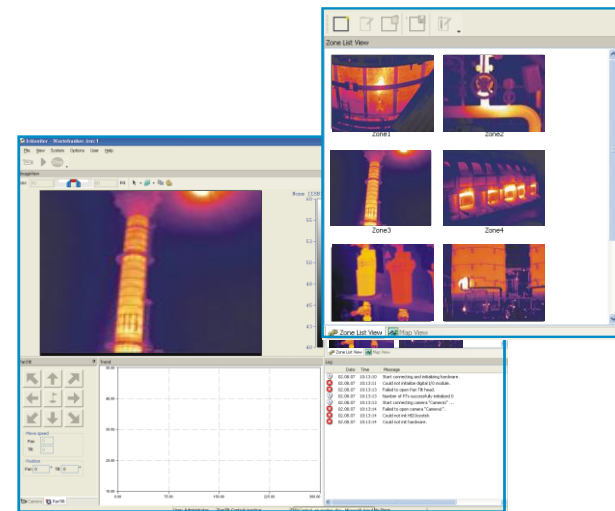
IrMonitor Standard: Fixed mounted infrared camera

- IrMonitor Dual View: Fixed mounted visible and infrared cameras
- IrMonitor Standard PT: Pan Tilt infrared scan camera
- IrMonitor Dual View PT: Pan Tilt visible and infrared scan camera
- Accessoires: cooled housing, window air barrier, air purge for ex-proof, wiper, stainless steel housing, ex-proofed housing...



Main Features

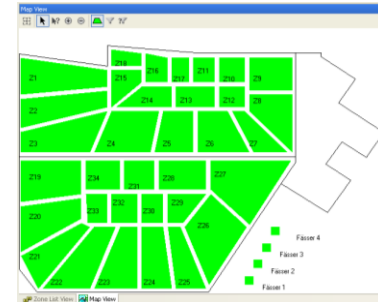
- Multiple Monitoring Zones per Camera
- Unlimited Number of ROIs per Zone
- Automated Evaluation and Alarm Generation
- Temperature Trend Analysis
- Automated Database Storage
- Storage of all Settings in Workspace Files
- Web based Backend for Customer Data Access



Main Features

- Fail-Safe Design:
- Automatic self-test of the whole system by attached blackbody
-

Map view of the monitored area. Important Function for DXF-files (AutoCAD)



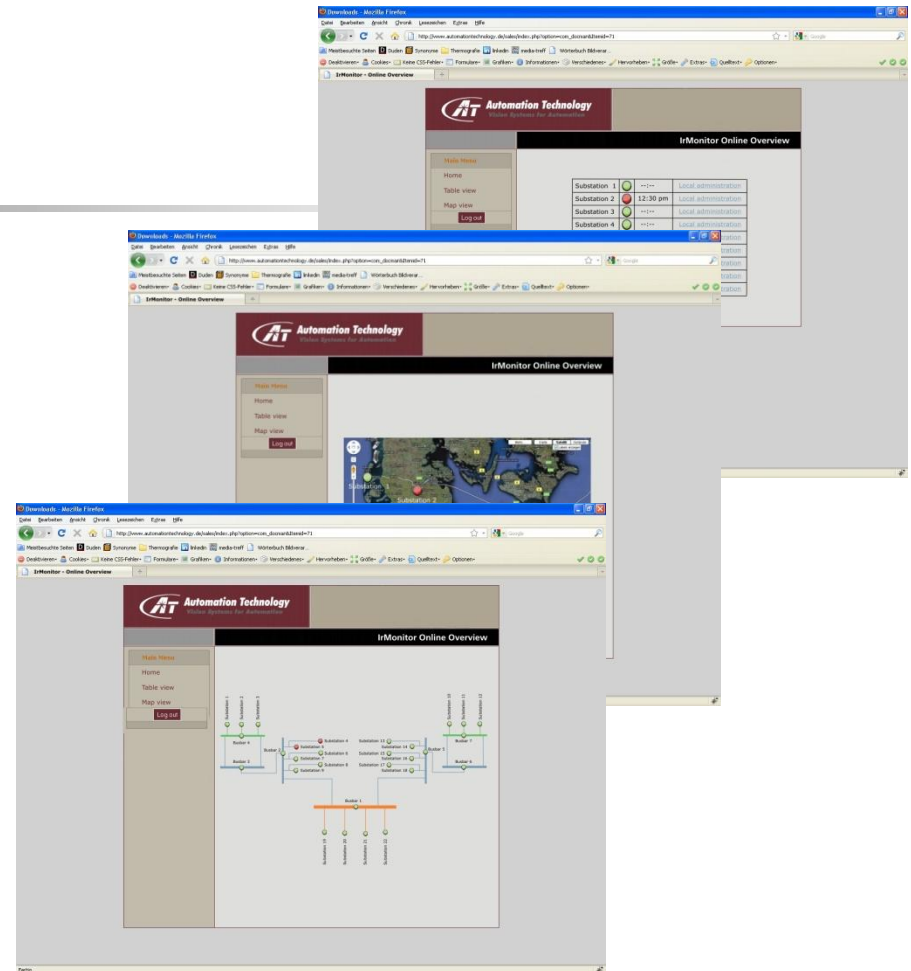
Main Features

- Interfaces for input devices like joysticks or touchpanels
- Supports digital I/O for control and Alarming purposes with a variety of boards from National Instruments
- Multiple User Levels, Password protected

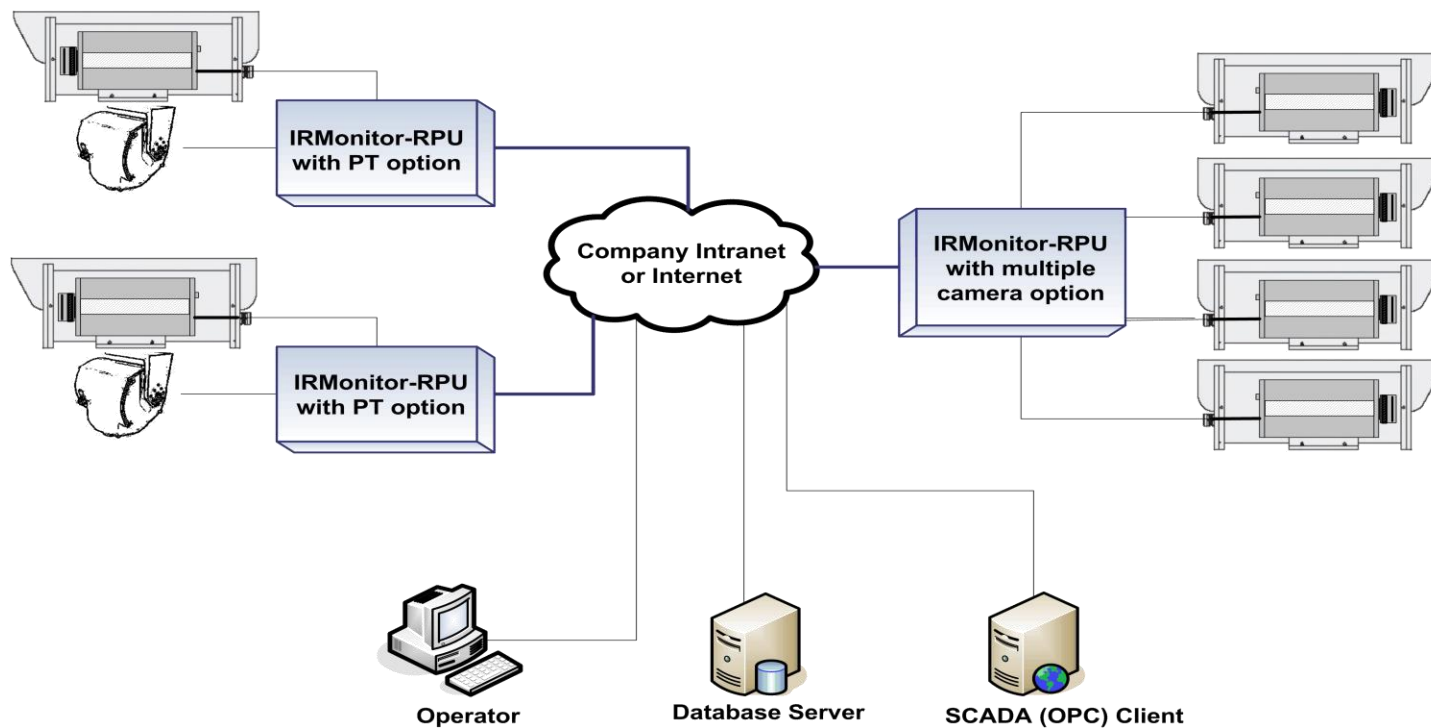


Main Features

- **Online overview for all**
- **IR camera terminals (SCADA)**
- World-wide access
- Login for multiple user levels
- With table view
- and map view
- Direct forwarding to local system administration

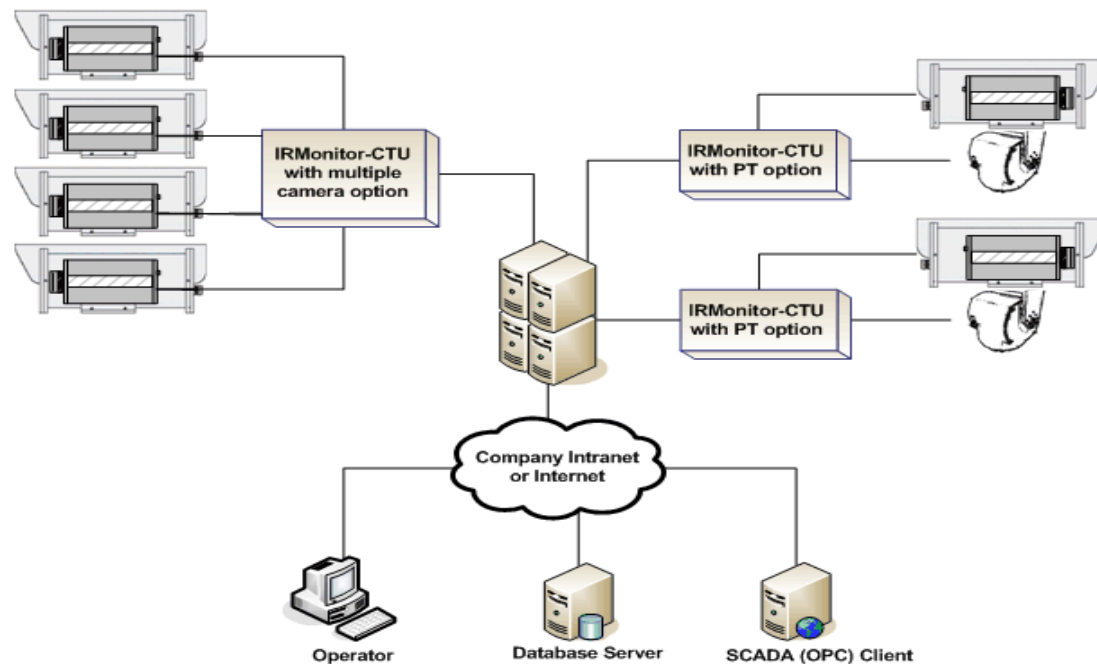


IRMonitor Remote Processing Units (RPU)s



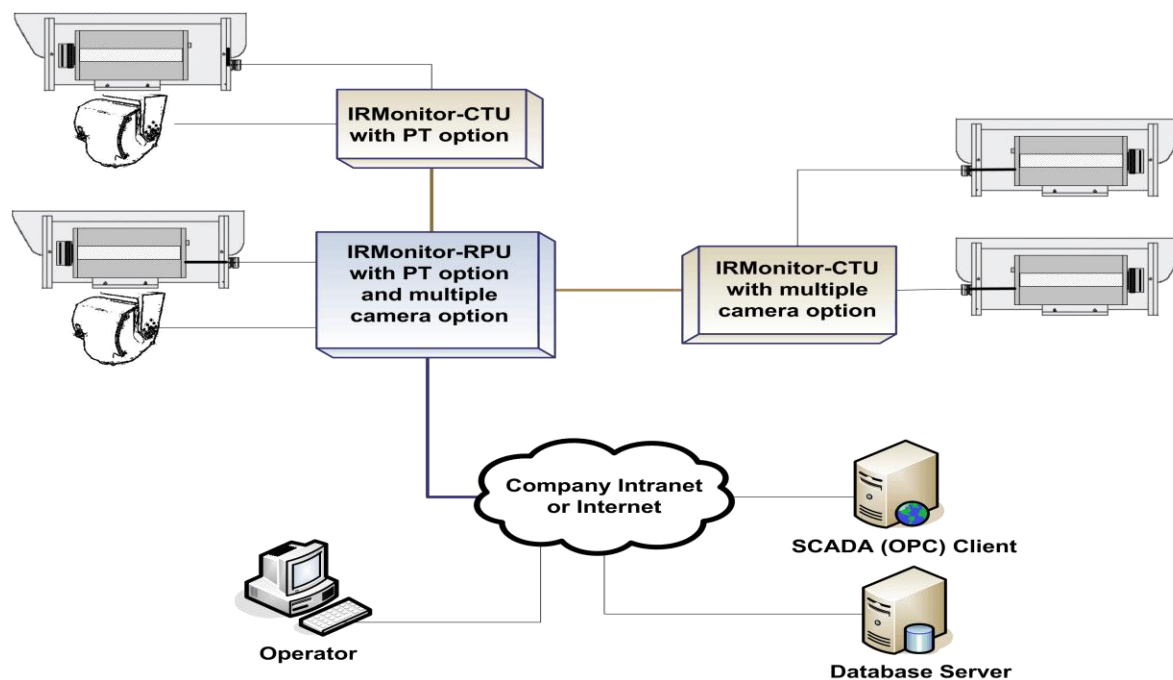
IRMonitor Packages

System Configuration with IRMonitor Central Computing Unit (CCU)



IRMonitor Packages

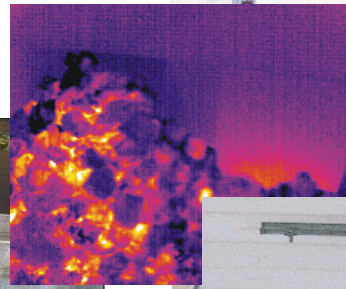
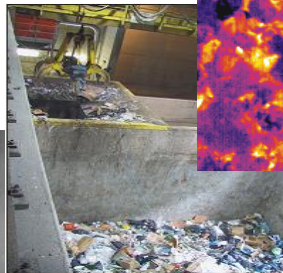
System Confiuration with IRMonitor RPU + CU Extesion



References

Monitoring of Waste Bunkers and Storage Areas

- Automated Detection of open fires and pockets of embers
- One Camera + PT per storage area
- User defined monitoring zones
- Fail safe design





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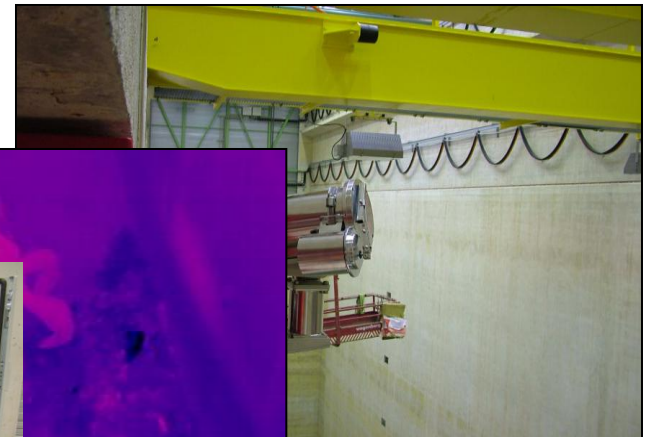


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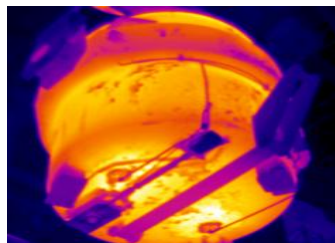
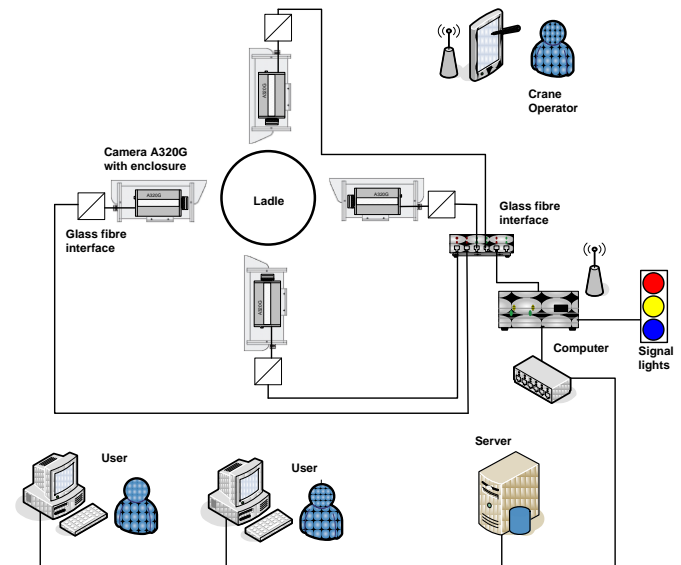
Twence[®]
Afvalverwerking



References

Steel Ladle Inspection

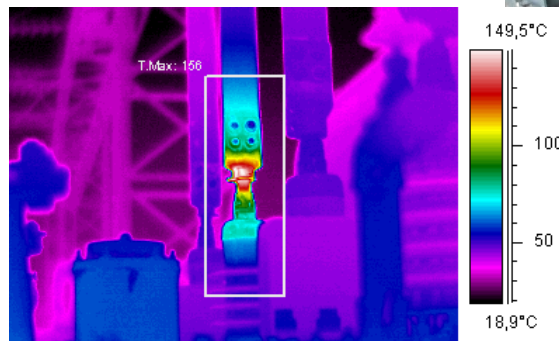
- Ladle inspection with four A - cameras
- Running 7 / 24h
- Refractory repair only when necessary
- Saves time and money
- Increased Safety



References

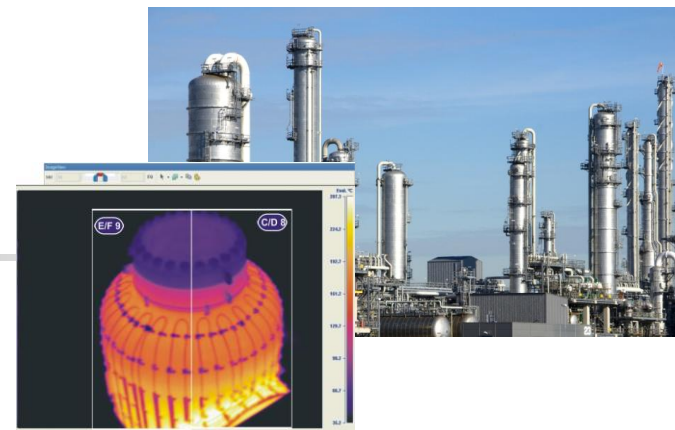
Substation Monitoring

- Automated Detection of Failures in critical Components of Substations
- Prevents Short Circuits, Overloads and Burn Outs
- One Camera + PT per storage area
- User defined monitoring zones
- Fail safe design



Other Applications

Critical Vessel Monitoring



Automated Monitoring of Flares



Other Applications

- Leakage Detection in
- Petrochemistry



Fire Detection in Tunnels and Mines

