

# Furnace Camera

## High Temperature Imaging System

### Applications

#### Pulp & Paper

- Power boiler (looking down at grate)
- Power boiler (mounted at grate level)
- Lime kiln
- Upper furnace (clinker, carryovers & tubes)

#### Power & Utility

- Power boiler (fireball, ashpit & burners)
- Gasifiers
- Upper furnace (clinker, carryovers & tubes)

#### Waste Incineration

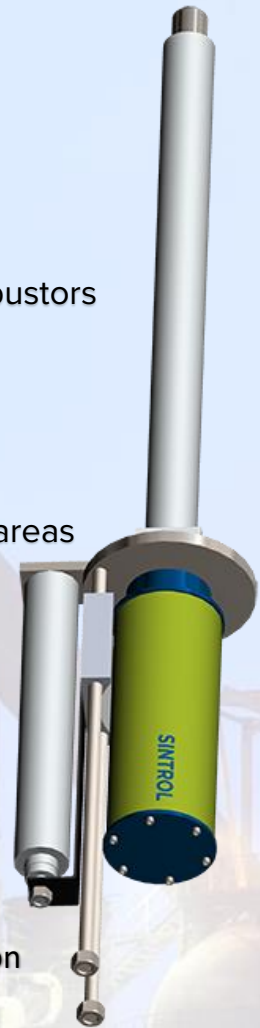
- Refuse boilers and combustors
- Biomass boilers

#### Steel and Glass Industry

- Reheat furnaces
- Glass furnace
- Conveyors and transfer areas

#### Cement, Lime & Coke

- Hot end of kiln
- Clinker cooler



### Typical Installation helps in

- Mitigate the risk of explosions
- Control slag build up
- Avoid tube damage
- Improve efficiency
- Control unwanted formation / build up
- Reduce emissions
- Minimize fuel consumption
- Troubleshoot problems
- Aid in start-ups
- Confidence in process

### Customized Models for

**Recovery Boiler**

**Power Boiler**

**Kiln Monitoring**

### The Payback

- Reducing Fuel Costs
- Helps in Optimizing Performance
- Improve Product Quality
- Control Efficiency
- Reduce Tube Leaks
- Environmental Advantages
- Reduce Kiln Upsets
- Improve Refractory Life
- Increase Personnel and Plant Safety
- Decrease Maintenance Costs
- Give Operators the Confidence
- Fewer shut-downs



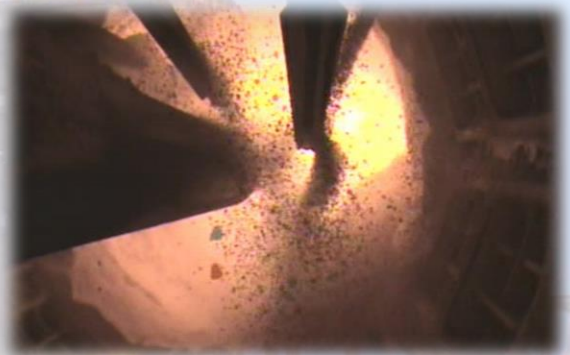
# Custom Software

- Pyro-ViperTM-HD image processing and analysis software
- To see and capture images and measure temperatures from infrared cameras
- To define custom regions of interest, alarms, and report status to a control room using analog 4-20mA (2...32) and / or OPC output (optional)
- Alternate functionality also allows for calibrated use of Carryover Counter.

## Sintrol Vulcan12C-2C

*The Most Advanced Imaging System for Lime Kilns*

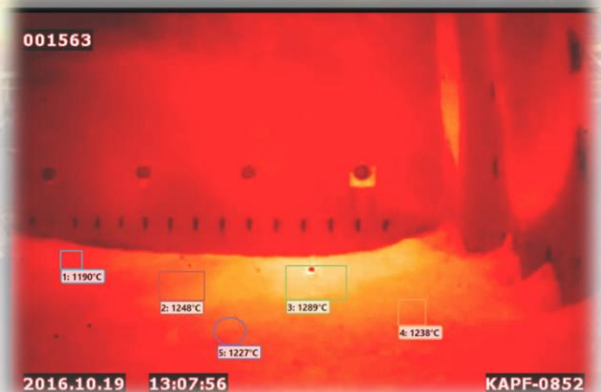
- High Temperature Imaging System for kilns monitoring
- Reduced emissions by improving performance
- Allows multiple cameras/detectors operating in different spectral wavebands to share a common furnace lens
- Helps maximize efficiency and capacity by showing fuel and air flow in the burning zone inside the kiln in color video
- Allows utilization of a broad spectrum from visible light to mid-wave infrared on a common optical path
- Helps reduce build-up resulting in fewer shutdowns and lower maintenance cost
- Helps in shaping and positioning clinker
- Typically used in conjunction with Pyro-Viper-HD-software



## Sintrol Vulcan12MP

*Advanced Imaging System for Recovery Boilers*

- High temperature combustion control and monitoring for recovery boilers
- Each system utilizes a high-tech combination of electronics, optics and protection to produce high quality, reliable video and temperature data of boiler furnace.
- Typically used in conjunction with Pyro-Viper-HD - software
- The Vulcan12MP's wavelength optimized infrared optical system is designed to see through the smoke, ash and haze produced within even the most volatile boilers and furnaces



## NEVCO ENGINEERS PVT. LTD.

🌐 [www.nevcoengineers.com](http://www.nevcoengineers.com) ✉ [sales@nevcoengineers.com](mailto:sales@nevcoengineers.com) ☎ +91-11-41717112/3/4/5

90A-2nd Floor, Opposite Iskon Temple, Amritpuri-B, Main Road, East of Kailash, Delhi - 110065