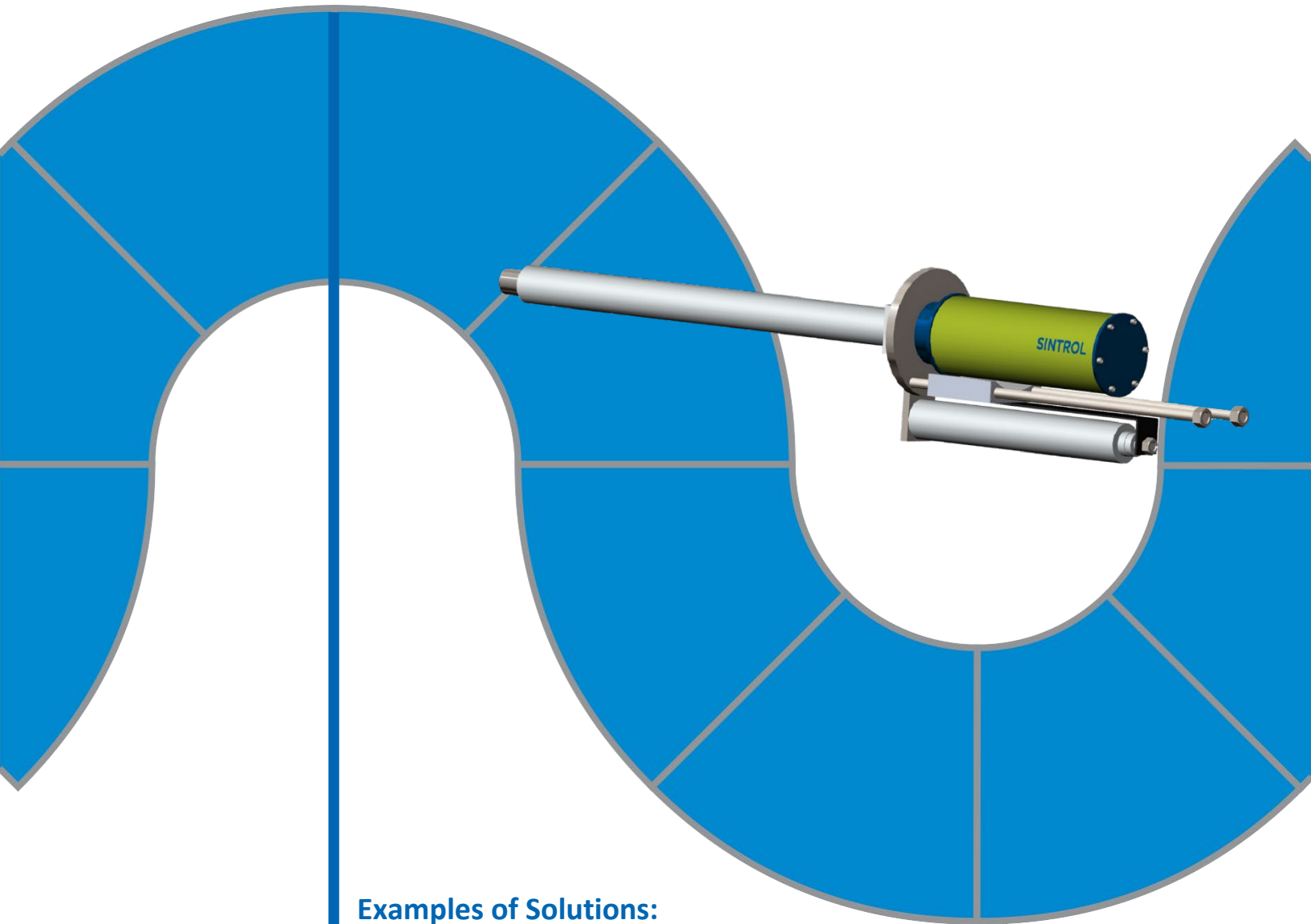


# SINTROL VULCAN

## High Temperature Imaging Systems



### Examples of Solutions:

- Recovery Boilers
- Lime and Cement Kilns
- BFB boilers
- Grate incinerators
- Smelters

+ Temperature Analysis Software

# Sintrol Vulcan

## The Most Advanced Imaging Systems for High Temperature Processes

- **Reduced emissions by improving performance**
- **Temperature Analysis Software for real-time temperature measurement and control**
- **Accommodates the reduction of build-up resulting in fewer shutdowns and lower maintenance costs**
- **Helps maximize efficiency and capacity**

### System Features

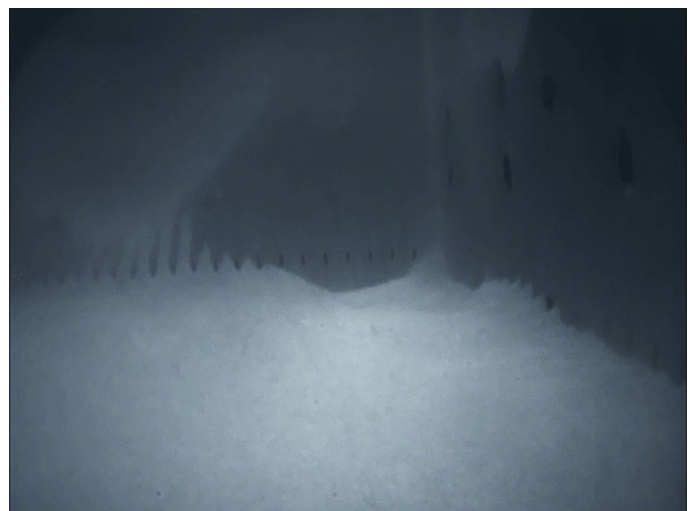
- Quick-change system design for easy installation and maintenance.
- Proprietary Bright Image Optical System for sharp video.
- Wavelength optimized electro/optical system.
- Indestructible STEELON™ housings.
- Advanced lens design for low air consumption.
- Wide field of view.
- Easy assembly/disassembly.



Lime Kiln (Vulcan 12C-2C)

### System Options

- Analysis software for temperature measurement, image processing and data management.
- Automatic retract assemblies.
- Automatic Deslagger.
- Portable system configuration and cart assembly for diagnostics and testing.
- Air filtration systems.
- Digital recorders, monitors, switchers and other video equipment.
- Fiber optic, coax, Ethernet, or wireless options for video and data transmission.



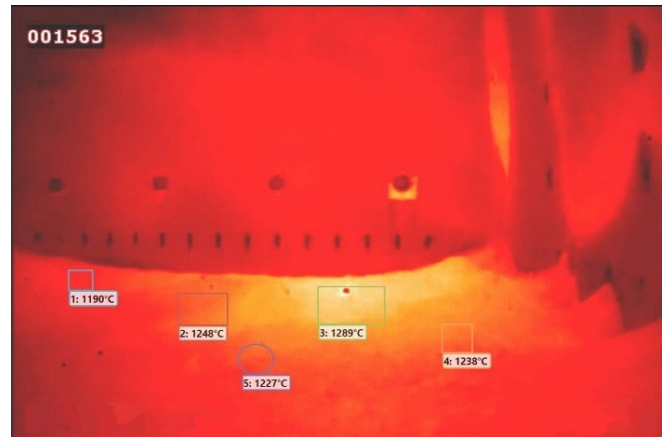
Recovery Boiler (Vulcan 12MP)

**All Vulcan camera systems are custom designed to match your needs.  
From the process all the way up to control room.**

# Vulcan 12MP

The Ideal System for Recovery Boilers.  
Forerunner in difficult conditions.

- The Vulcan 12MP's wavelength optimized infrared optical system is designed to see through flames, smoke and haze produced within even the most volatile boilers and furnaces.
- Typically used in conjunction with Temperature Analysis Software.
- Used as smelt bed cameras in the world's largest recovery boilers.



# Vulcan 12C-2C

High Quality Video with Embedded Temperature Data

- Provides excellent video quality with temperature data using double camera core technology.
- Can be used to adjust the flame shape and direction using visual data and temperature shape and info.



# Vulcan 12CS

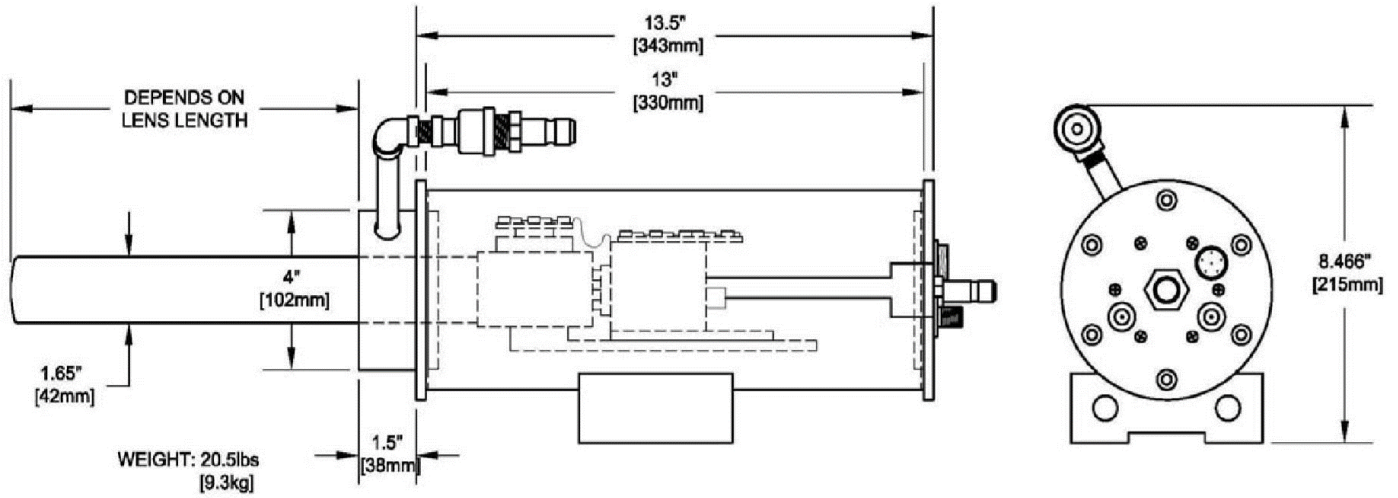
High Quality Video - nothing more, nothing less.

- Optimal solution for process monitoring and flame adjustments when temperature data is not necessary.

## Other solutions

Sinrol offers a variety of imaging opportunities including also CCTV and IPTV equipment.

**Solutions are always customized to the customer's specific needs.  
Contact us for more information.**



VULCAN090620

Product Name	
Sintról Vulcan High Temperature Cameras	
Sensor	Solid State IR and/or CCD
Power	12 VDC with 100-240 VAC adapter – 50/60Hz
<b>Available Lenses</b>	
Overall length	Custom. Usually 24" - 60"
Diameter	42 mm (1,650")
Field of view	Custom. See Lens Selection Guide
Line of Sight	Straight ahead (standard). Obtuse (45°) and Right Angle (90°) available
Process Temperature	Temperature measurement from 600°C up to 2000°C
Air purge	34 m <sup>3</sup> /h @ 1bar - straight ahead line of sight lens
<b>Instrument quality air only &lt;40°C</b>	
<b>Enclosure</b>	
Material	PHASE III = STEELON™ (stainless steel over high temperature synthetic) Nylon (IP66) available
Installation temperature	Ambient temperatures up to 290° C
Air purge	5 m <sup>3</sup> /h @ 0,2 bar
<b>All Cameras Include</b>	<ul style="list-style-type: none"> <li>• High resolution sensors</li> <li>• Air cooled stainless steel furnace lens (wavelength optimized)</li> <li>• Quick change lens system</li> <li>• High temperature camera housing (IP66) with slide tracmount</li> <li>• Quick change back plate</li> <li>• 12 VDC power supplies with NEMA 4X enclosure</li> <li>• Factory assembled, pre-adjusted and ready for installation</li> </ul>
<b>Options and Accessories Include</b>	<ul style="list-style-type: none"> <li>• Wallbox mount and customized mechanical installation equipment</li> <li>• Air Filtration System</li> <li>• Automatic Retract System</li> <li>• Automatic Deslagger System</li> <li>• Video and data transmission system with all the necessary components (coax, Ethernet, Fiber Optics)</li> <li>• Recording devices and monitors</li> <li>• Thermal Imaging Software</li> </ul>

**SINTROL OY**

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