



## HIGH-TEMPERATURE FURNACE CAMERA SYSTEMS

### REHEAT FURNACE

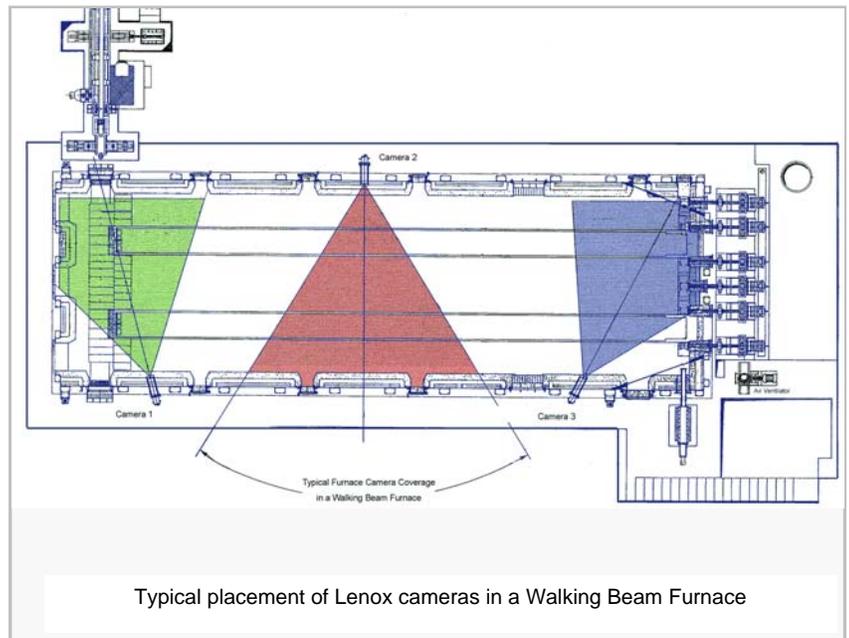
#### Application Highlights

The Reheat Furnace is designed to efficiently heat the incoming material to rolling temperatures with temperature uniformity for further processing. In a Walking Beam Furnace, the material is moved through the furnace via a series of walking cycles (lift, traverse, lower and return). **Lenox** Furnace Cameras are used to observe slabs or billets at the entrance of the furnace as they are set on the beam.

The center of the furnace is monitored for proper distance between slabs or billets and to ensure that the discharge machine has the material properly held before it is lifted out of the furnace exit and placed onto the rolling line.

**Lenox** Furnace Cameras are used in a similar manner in Pusher Furnaces except for Pusher Furnaces that utilize a peel bar to push the material in and out of the furnace.

In these instances it is essential that the operator have a good view of the peel bar to ensure that it is centered on the material before pushing.



#### Why Use **Lenox** Furnace Camera Systems?

- Designed to be rugged and durable for the brutal atmosphere of the steel industry.
- Proven reliable dual cooling system and the highest camera resolution with superior optics.
- Minimal maintenance and operating cost once correctly installed.
- Backed by an industry leading **two year warranty**.
- Flexibility in choice of penetration lengths, viewing angles, water or low consumption air-cooling and a selection of portable water-cooled or air-cooled models.
- Lenox know how, expertise and installation/field service.



**LENOX FURNACE CAMERA SYSTEM SELECTION GUIDE**

**The 1 and only**  
**FURNACE CAMERA SYSTEM**  
**DESIGNED FOR THE STEEL INDUSTRY**

with extreme durability, higher resolution, a time-tested cooling system, a longer warranty, and a much lower average cost to operate.



Model 6900SC Series

*Lenox / Pultz* high-temperature, video furnace camera systems are designed to be mounted either directly through the wall or flush with the exterior wall of a furnace. The stainless steel camera housing employs a steel triple wall laminar flow for efficient water-cooling of the color CCD camera and PH lens technology to provide clear, real time high-resolution (540 line) images, enabling operation in hostile environments up to 4250°F (2345°C). An integral air-purge prevents fouling of the lens system. The furnace camera is available in lengths of 18" (457mm), 24" (598mm), 31" (762mm) and provides direct viewing with a choice of 30°, 45°, 90° field of view and zoom capabilities up to 5X.

**Lenox FireSight** furnace camera systems consist of a high-resolution (540 line), color CCD camera and sophisticated light volume control, a Lenox exclusive that allows an operator to remotely adjust the amount of light transmitted to the camera eliminating the flaring / blooming common with other systems. Quartz optics, another **Lenox** exclusive, are used and can withstand temperatures up to 1200°F (649°C) higher than the glass lens used in other systems. In addition, a water-cooled lens jacket and CCTV camera housing provides cooling and protection for the furnace camera and air-purging of the lens system to prevent fouling by deposition. Designed to be mounted directly through the furnace wall these furnace cameras can be used in applications up to 3500°F (1927°C). Available with either a 24" (610mm) or 36" (914mm) lens in either direct (60° or 90°) or right-angle (55°) view configurations. Special lengths up to 126 inches (329cm) are available.



Model 6555FC Series

Please contact us for more information about our products and capabilities and to discuss your specific application.

