Application Highlights

The Remelt / Reverberatory Furnace is widely used for smelting, refining, or melting of copper, tin, nickel and aluminum in which the fuel (normally oil or natural gas) is not in direct contact with the contents but heats it by a flame blown over it from another chamber. This heat is then radiated from the roof and side walls back (reverberates) onto the contents. They can range in capacity from 15 to 100 tons.

Lenox High-Temperature Remelt Furnace Camera Systems are used to remotely monitor and record, in real-time, the push of the batch charge into the hearth and to observe melt surface conditions as well as the effectiveness of the electromagnetic stirring / mixing operation, a prerequisite for higher productivity and improved process performance. Burner over firing and flame impingement onto the surface metal can be observed and corrected by the furnace operator. Dependent on the type of Reverberatory Furnace, Lenox Remelt Camera Systems can also be used to monitor the tapping process.

Why Use Lenox Furnace Camera Systems?

- Designed to be rugged and durable for the brutal atmosphere of the metals 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.
The 1 and only
FURNACE CAMERA SYSTEM
DESIGNED FOR THE METALS INDUSTRY

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

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.

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