Application Highlights

Portable and fixed Lenox FireSight Boiler Camera Systems enable power generation plants to increase boiler efficiency and reduce shut downs and maintenance costs. By viewing directly inside a boiler you can:

- Monitor combustion light-off
- Identify flame instability and tube leaks
- Optimize fuel/air ratios by viewing burner performance
- View over-fire air
- View slag and ash build-up

Typical locations for installing fixed Lenox FireSight® Boiler Cameras in a corner fired boiler:

A. One FireSight Camera System – (Direct 60° or 90° FOV) installed through an available port (above the burners) in the nose arch section of boiler. - or -

B. One FireSight Camera System – (Direct 60° or 90° FOV) installed through the wall (above the burners). This installation assumes elongated tube bends are available. - or -

C. One FireSight Camera System – (Right Angle 55° FOV) installed through an available port or door located above burners. - or -

D. In a gas fired boiler only - One FireSight Camera System – (Direct 60° or 90° FOV) installed through the floor of boiler.

Why Use Lenox Boiler Camera Systems?

- Designed to be rugged and durable for the brutal atmosphere of the electric power industry.
- Proven reliable 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
BOILER CAMERA SYSTEM
DESIGNED FOR THE ELECTRIC POWER INDUSTRY

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

Fixed and portable Lenox FireSight Boiler Camera Systems are designed for applications up to 3000°F (1649°C) and require a boiler wall penetration of only 2-3/8 in. (61mm). With its small size, the system will normally fit between boiler tubes and can often be used with existing wall penetrations. Lenox FireSight 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. The compressed air-cooling system provides reliable performance while using considerably less air than competing systems. The fixed system Wall Box mounting assembly provides a protective housing for the system and serves as the primary coolant shroud.

Optional fixed system accessories include an Automatic Retract System that automatically pulls the Lenox boiler camera back should a loss of cooling occur, preventing possible over-temperature damage to the furnace lens assembly; a high efficiency compressed Air Filter System for removing oil, water and particulates providing clean air to the FireSight system insuring trouble-free performance and a clear view of the combustion. It uses a self-purging coalescing filter and a pressure differential switch, which may be wired to an alarm, letting the operator know when its time to change the filter elements. Flat CRT or Flat LCD monitors and a Digital Video Recorder are also available.

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