



HIGH-TEMPERATURE BOILER CAMERA SYSTEMS

CORNER FIRED ELECTRIC UTILITY BOILER

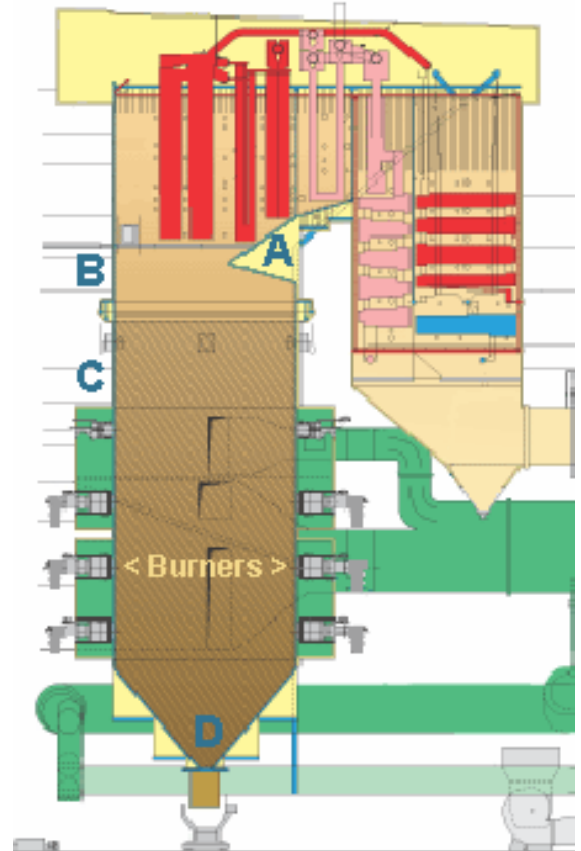
Application Highlights

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.



Model 6515FC Fixed Series

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.



Model 6515FDC Portable Diagnostic Series

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

