



## HIGH-TEMPERATURE BOILER CAMERA SYSTEMS

### WASTE TO ENERGY STOKER FIRED BOILER

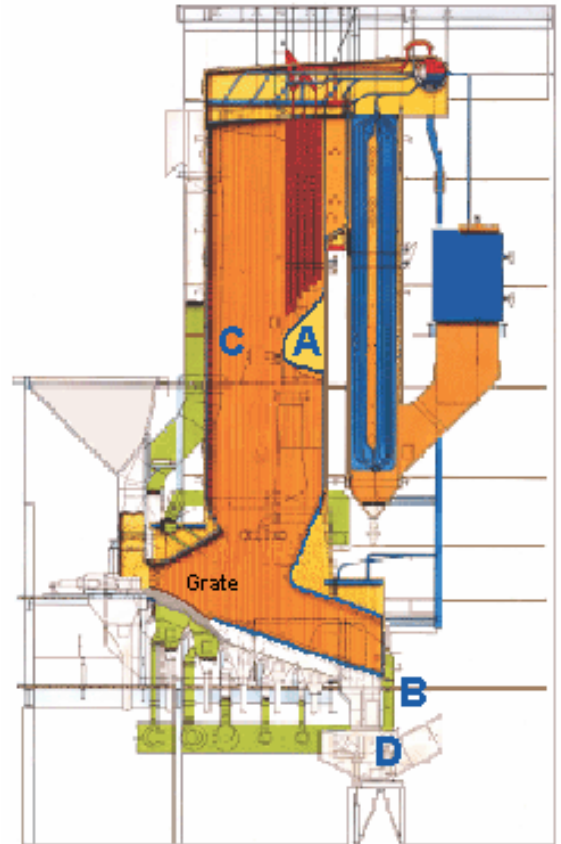
#### Application Highlights

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 the fire line position and complete burn cycle.
- Prevent overheat situations near tube walls or refractory
- Optimize fuel/air ratios by viewing burner performance
- Monitor the conveyance of materials on the grate
- View into the ash hopper to look for bridging

Typical locations for installing fixed **Lenox FireSight®** Boiler Cameras in a stoker 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 90° FOV) installed through door viewing upstream the grate. - or -
- C. One FireSight Camera System – (Right Angle 55° FOV) installed through an available port or door located above burners.
- D. An additional FireSight Camera System – (Direct 60° or 90° FOV) can be installed through the door to view down into the ash hopper to look for bridging.



#### 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.

