



Enertechnix

PyrOptix ST Camera System Innovative Technology for Maximum Efficiency and Safety

The Enertechnix PyrOptix™ ST infrared camera system provides enhanced visibility, allowing operators and engineers to monitor key developments throughout the steel making process.

Comprehensive Observation and Analysis at Full Load



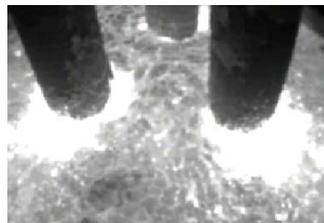
The PyrOptix ST fixed camera system is well-protected and provides unprecedented operational views of the Ladle Furnace, Basic Oxygen Furnace and Electric Arc Furnace. It also allows for an unobstructed view of the entire tapping process—virtually unaffected by dust, steam, arc flash, UV light or fireball.

Specially designed for industries using extreme high-temperature processes—including steel, power, pulp and paper, and petrochemical—PyrOptix infrared cameras are engineered for durability and longevity.

Examples of PyrOptix Real Time Views



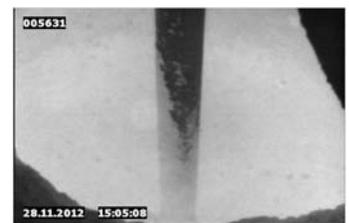
Ladle Furnace (LF)
Stir and Wire Feed



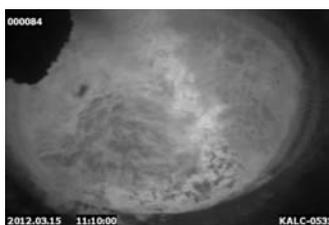
LF Electrodes Arcing



Basic Oxygen Furnace
(BOF) Unmelted Scrap



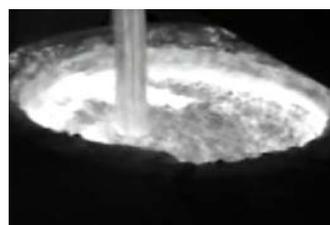
BOF O₂ Lance Inserted



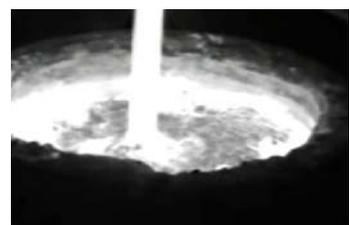
LF During High Stir



LF During Low Stir



Furnace Tap Stream—Steel vs. Slag



Caster Secondary Cooling



Fixed Mount Camera



Reheat Furnace





PyrOptix Infrared Camera Systems

Plant-wide solutions for superior online visibility and temperature analysis

Our durable line of infrared imaging cameras and accessories includes the following high-quality products:



Mobile Camera

The PyrOptix™ Mobile infrared camera kit contains everything an engineer or operator needs to inspect a boiler from any accessible port. The core of the mobile inspection camera kit is an infrared camera designed to see through smoke and ash at temperatures of 700°F to 3500°F. With the addition of a Low Light Lens, the camera sees in the 200°F to 700°F range, enabling inspection of surfaces exterior to the boiler.



Fixed Mount Camera

The PyrOptix Fixed Mount infrared camera is designed to see through smoke and ash at temperatures of 700°F to 3500°F. The camera aids in visual observation inside the furnace environment, providing information about slag buildup, burner operation, flame position and heat exchanger tube pluggage.



Dual Use Camera

Our dual use infrared camera provides the benefits of both the fixed installation camera and mobile inspections. The fixed installation includes the infrared camera, air-cooled electrical enclosure, lens tube of choice, auto-retract and port rod. The infrared camera can be removed from the electrical enclosure as desired, and used with the mobility kit and a shorter lens for inspections at any accessible boiler port.



PyroTemp™ TLP

The addition of an infrared pyrometer instrument to the lens assembly allows for greater observation and analysis.



Off-Axis Lenses

Our off-axis lenses provide a rotating 360° view of the boiler walls during mobile inspections.



Straight Lenses

Lens tubes come in lengths from 20 inches and longer and are available with 20°, 30°, 64° or 120° fields of view.



Image Processing Software

We offer a core set of software programs that provide specialized information to operators.



About Enertech

Enertech develops and commercializes innovative technologies for process and environmental monitoring to improve the efficiency, cleanliness and safety of large-scale energy conversion processes.

Learn more at www.enertech.com or call (360) 753-8831.

Contact Enertech for a complimentary PyrOptix demonstration.

If you're interested in seeing your furnace or boiler under full-load conditions, contact us to schedule your free on-site demonstration of PyrOptix camera systems.

Enertech, Inc.
9730-B Lathrop Industrial Dr SW
Olympia, WA 98512-1064

Phone: (360) 753-8831
Fax: (216) 503-4685
Email: sales@enertech.com