



Lenox Instrument Company, Inc.
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Glass Melter Furnace Camera System ***Real-Time, High Resolution, Color Video Monitoring and Recording***



Why Use **Lenox Furnace Camera Systems?**

- Designed to be rugged and durable for the temperatures and environment of the glass 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 the choice of penetration lengths and viewing angle options.
- **Lenox** know how, expertise and installation/field service.

The **Lenox Glass Melter Furnace Camera System** is designed to withstand the temperatures and environment of a glass melting furnace and is normally installed high on the centerline of the furnace bridgewall viewing at a slight downward angle toward the batch charging end. The typical system consists of a 42 inch (106.7 cm) water / air cooled camera, automatic retraction assembly, retraction controls, pedestal mount, power supply, LCD monitor and digital video recorder.

The camera's enclosure inserts into a 3.5 inch (89 mm) bridgewall opening and employs a triple wall laminar flow for efficient water-cooling and the latest optical lens technology to provide clear, real time images, enabling operation in hostile environments up to 4250°F (2345°C). The pedestal mounted retraction system withdraws the camera in the event of power, water or air loss.

Lenox Glass Melter Furnace Camera Systems are widely used in the glass industry to optimize burner flame geometry, monitor melter material mix, batch pile and formation patterns, melting point, bubbler operation, and melting furnace refractory wear.



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GLASS MELTER FURNACE CAMERA SYSTEM SPECIFICATIONS	
CAMERA	
Model	Z6935SC- 42W3/1
Type	1/3" CCD Color Camera with 2.6 mm EFL PH lens and Green Glass Filter
Direction of View/Field Coverage (Approx)	Straight / 62°V x 78°H x 95°D
Enclosure Construction	Water-cooled enclosure with through air purge and RTD for monitoring internal enclosure temperature - Diameter 3.5" (88.9 mm) - Length 42" (106.7 cm)
Max Temperature	4250°F (2345°C)
Cooling/Lens Purging Requirements	Good quality, sediment – free water / Instrument quality air
RETRACTION SYSTEM	
Model	Z6935A - 207/30
Construction	For Pedestal Mounting - Assembly Length 53" (134.6 cm) with 30" (76.2 cm) of retraction - remote mountable, Retraction System Controls in NEMA enclosure and Reserve Air Tank with hose assemblies
PEDESTAL MOUNT	
Model	6935TT - 2832
Construction	Tilt and Telescopic Mount - Adjustable from 28" (71.1 cm) to 32" (81.3 cm) high with quick disconnect clamp

Glass Melter Furnace Camera Systems are supplied with a NEMA junction / interface box that houses the following:

1. 12 volt camera power supply and line power interface
2. Interface & temperature readout for camera housing RTD (available 4 - 20 mA, 0 - 20 mA or 0 - 10 V transmitter outputs)
3. Digital (RS232) camera interface for remote adjustment of gain control, shutter speed and color
4. RS170 analog video - standard
5. Retraction control interface connections

Optional System Accessories:

1. Air Filter System with mounting plate (removes oil, water and particulates)
2. Optional Outputs - Ethernet 10/100 Base-T or Fiber Optic - 1 multimode fiber 62.5/125µm
3. Color LCD Video Monitor
4. Digital Video Recorder

