

# INFRARED CHAMBERSCOPE 25

- CONTINUOUS MONITORING OF THE INTERIOR OF THE SPECIMEN CHAMBER FROM ANY POSITION
- I-R ILLUMINATION CAN BE USED WITH SEM OPERATING
- HELPS AVOID PHYSICAL DAMAGE TO SPECIMEN, DETECTORS & MANIPULATORS
- CONSIDERABLY SPEEDS UP SPECIMEN EXCHANGE PROCEDURES

**INFRARED CHAMBERSCOPE 25** is similar to the well established Infrared Chamberscope. With a mounting hole of just 25mm the system is designed to be mounted on the smallest of ports. Its demountable camera head ensures the availability of all of the benefits of a Chamberscope system even when a port in direct line with the specimen is not available.

The use of a television camera to give a clear view inside the SEM's chamber has revolutionised the way that modern SEM's. are operated, by giving confidence to the operator when moving the specimen and inserting detectors. In particular. specimen exchanges are considerably speeded up, as the specimen can be brought into the operating position during the vacuum pumping period. There is no longer any need to set the specimen low, just in case it should collide with



#### Infrared Chamberscope 25

something, then readjust again to find the actual working distance once the beam is switched on.

#### **INFRARED CHAMBERSCOPE 25**

may be used continuously, even with the SEM operating, giving that extra degree of confidence. Whilst SE and scintillator detectors are unaffected, certain detectors such as solid-state backscatter and EDX, may be infrared sensitive, and in cases where these are to be used, the illumination level may be reduced or turned off completely.

**INFRARED CHAMBERSCOPE 25** is designed with its lens, CCD chip and IR illuminators *inside* the chamber. These parts are normally mounted on a swivel head giving either up/down or left/right adjustment. If this proves insufficient to achieve the desired view, the camera head may be demounted and positioned virtually anywhere in the chamber so that the required view can be achieved. The camera head and illuminator are compact allowing mounting in restricted Making spaces. the illuminator separate from the camera further enhances flexibility and largely overcomes the problem of bounceback reflections. When making use of this flexibility it is necessary to assemble the illuminator from the inside of the chamber.

Where remote mounting is required, the wiring to the camera and illuminator may be extended. The **INFRARED CHAMBERSCOPE 25** is therefore suitable for mounting virtually anvwhere.



## Control Unit & Monitor

K.E.Developments is continually striving to keep its products at the leading edge of current technology. The product supplied may therefore differ in detail to that described in this brochure



The camera and illuminator may be mounted separately inside the chamber

#### **SPECIFICATIONS**

Camera Body.	
Outside Chamber	94mm long
	45mm wide
	37mm high
Mounting Flange to	
Lens	44mm
Port (min size)	25mm dia

#### **CCD-TV** Camera.

Scanning System 525 or 625 Lines (please specify) Output 1V, 75  $\Omega$  composite video

## Illuminator.

Size Illum Wavelength 880nm

37mm high 35mm wide

# **Control Unit**

Free standing as illustrated Size: 142mm(W) x 60mm(H) x 240mm(D) (Compatible modules for some SEM's). Internal video switching so that Infrared Miniscope 25 may share its monitor with another application

Power Supply 100,120, 220 & 230V ac., 50/60Hz

Warranty Period. Two years from date of purchase.



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