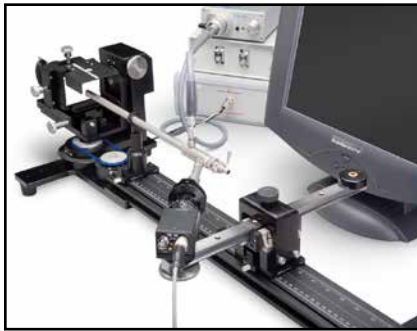




Verify  
endoscope  
image quality  
before and  
after repair

EndobenchXTB allows you to quantitatively measure and verify clinically relevant optical characteristics with the widest range of rigid and flexible endoscopes.

EndoBenchXTB is an endoscope image quality test system for scope manufacturing and repair QC testing, suitable for high production work environments. The instrument consists of a custom designed opto-mechanical system and software to evaluate and report the parameters that are central to a clinical environment. Adapters and fixtures are included for measuring a wide range of rigid, flexible and video endoscopes.



Offset eyepiece camera mount

## Specifications

Diameters: 2 - 16mm

Lengths: 90 - 550mm

Angles of view: 50°-140° Field of view,  
-30°-115° direction of view

### Endoscope types that can be tested:

- Rigid endoscopes (laparoscopes, arthroscopes, etc.)
- Flexible fiberoptic endoscopes
- Video endoscopes (with VCR/NTSC output)

### Available measurements:

- Field of View (FOV)
- Direction of View (DOV)
- Apparent field of View (AFOV)
- MTF (image sharpness)
- Distortion
- Transmission
- Vignetting
- Coloration
- Eyepiece diopter
- Fiber optic illumination brightness and distribution

## EndoBenchXTB™

EndoBenchXTB is configured as a bench-mounted system for users that do not require portability and prefer a heavy-duty, user friendly opto-mechanical assembly.

Base model P/N 9800087 includes:

- EndobenchXTB test bench system w/rail assembly and components
- Windows 7 based PC
- Endobench software; MS Access database; Excel file support
- 15 inch touch screen display
- System connection modules (2 ea.) and cabling
- Keyboard & Mouse
- Accessory case
  - Schott LED Light Source w/ power supply, RS-232 adapter, lightguide, light guide adapters
  - Source adapters - Instrument Adaptor(s) - 4 each
- 17mm Diopter Scale Coupler; 27mm Diopter Scale Coupler; 40mm Diopter Scale Coupler
- Digital encoder for direction of view (DOV) and field of view (FOV) measurements (P/N 8900083)
- Target book

Professional system P/N 8900087 includes:

- Fixture for mounting camera at offset or off-axis position for measuring offset or angled rigid scopes (P/N 8300001)
- Side-load scope tip mount for small diameter or flexible scopes (P/N 8300002)
- Eyepiece runout - measures image wander when scope is rotated in video coupler (P/N 8300003)
- Diopter at infinity - measurement of eyepiece diopter error for object at infinity (P/N 8300004)
- Small size CCD sensor camera w/mount (P/N 8300005)

## We set a higher standard

Lighthouse Imaging Corporation is a leading provider of optical engineering and design services for the medical device industry.

We design, develop and manufacture optical assemblies for the medical device industry and are the leading provider of test and measurement equipment for verifying the optical quality of endoscopes.

Lighthouse Imaging is an ISO 13485:2003 and ISO 9001:2008 certified, FDA registered medical device manufacturer specializing in minimally invasive surgical applications.