



**Flexible Endoscope Repair Training Program
Class 1 Syllabus
Minor Repairs**

*Designed for: Any Endoscope Technicians and Any Biomedical Engineers
Style of Training: Training will be a combination of verbal instructions and hands-on training
Course Length: Course length is based on 4 hours of hands on training starting at 10am.
Classroom will remain open until 5pm each day for supervised practice.
Location: Our Facility in Bradenton, Florida
Cost: \$4000 USD per student*

DESCRIPTION: This course is to learn how to perform minor repairs such as endoscope body disassembly and reassembly, fluid removal, switch replacement, and basic angulation system repairs.

OBJECTIVE: To train a biomedical/endoscope technician or engineer to have a broader understanding of the functionality and operation of the interior components of flexible endoscopes and the minor repairs that can be performed on-site. The individual will also be able to determine if repairs are beyond on-site capabilities.

DAY 1

Nomenclature

Basic explanation of parts of an endoscope and their name and function

Full Inspection

- Leak Test
- Function Test

Image Test

Test image and explain how to check CCD for flickering, image stains, RGB dots and dead pixels.

Bending Sheath

- Bending Sheath Tie
- Bending Sheath Cutting
- Bending Sheath Removal

DAY 2

A/W O-Ring

- Symptoms
- Replacement

Nozzle

- Clear
- Replace

Fluid Invasion

- How to Prevent
- Symptoms
- How to Remove

Bending Sheath

- Bending Sheath Tie / Practice
- Bending Sheath Glue Application

DAY 3

Angulation Adjustment

- Soldering Technique
- Applied Soldering Technique
- Manual Adjustments

Elevator Adjustment

- Minor Adjustment
- Push-Rod Replacement

DAY 4

Control Switch

- Switch Cleaning
- Switch Replacement

Control knobs

- Identify Problems
- Troubleshooting
- Rebuilding

Question and Answer

Inspection/Nomenclature Test

Certificate of completion