# 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 9am.
Classroom will remain open until 4pm 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

# Flexible Endoscope Repair Training Program Class 2 Syllabus Medium/Major 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: 4 days and is based on 4 hours of hands on training beginning at 9am each day
Classroom will remain open until 4pm each day for supervised practice
Location: Our Facility in Bradenton, Florida
Cost: \$6000 USD per student

# Over the Course of 4 days you will be trained on the following:

- Extensive Scope Disassembly and Reassembly
- Biopsy Channel Replacement
- Air/Water Channel Replacement
- Light Guide Bundle Replacement
- Complete Distal End Removal/Installation
- C-cover Replacement
- Light Guide Lens Replacement
- Suction Channel Replacement

Course 1 and 2 Review

Question and Answer Session

Certificate of Completion

# Flexible Endoscope Repair Training Program Class 3 Syllabus Major 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: 5 days and is based on 6 hours of hands on training beginning at 9am each day
Classroom will remain open until 4pm each day for supervised practice
Location: Our Facility in Bradenton, Florida
Cost: \$8000 USD per student

# Over the Course of 5 days you will be trained on the replacement of the following:

- Insertion Tube
- Coil Pipes
- Angulation Wires
- Bending Section Mesh
- Light Guide Tube
- Light Guide Connector
- Control Head Section
- CCD Camera Video Hub Wiring

Course 1, 2 and 3 Review

Question and Answer Session

Certificate of Completion

# **Training Course Order Form**

Please print and fax to 941.761.4613

Please select your desired training		X
<b>Endoscope Training Course 1</b>	\$4000.00	
<b>Endoscope Training Course 2</b>	\$6000.00	
<b>Endoscope Training Course 3</b>	\$8000.00	

Company Name:	
Trainee Name:	
Physical Address:	
Dhara Numban	
Phone Number:	
Email Address:	
<b>Requested Training Start Date</b>	e:/

Recommended Accomodations: Holiday Inn Express 4450 47th Street West Bradenton, FL. 342



Please call 1.800.363.6726 for additional training information and payment.

All course expenses must be paid in full before training begins.