

**MIDES**

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**WE ARE**

**ULTRASOUND**

The MIDES logo is located in the top right corner of the slide. It consists of the word "MIDES" in a bold, blue, sans-serif font. The letter "M" is stylized with a vertical bar on its left side.

**MIDES**

Four overlapping, semi-transparent blue circles are arranged in a horizontal line on the left side of the slide, creating a decorative background element.

# ENDOSCOPE REPAIRS

## Facts and Figures



Modern Headquarters in Graz



27 years experience  
in ultrasound



ISO 13485 and ISO 9001  
certified



90 qualified employees



Analysis within 48h



Satisfied customers in  
more than 50 countries



economically successful  
company - equity > 50 %



Company owned  
innovation department for  
research and development

## Our repair offers

Up to 70%  
Cost savings



STANDARD PROBES



3D/4D-PROBES



TEE-PROBES



FLEXIBLE ENDOSCOPES



ULTRASOUND ENDOSCOPES

## Customised repair offers

- BASIC-Repair
  - Repair or replacement of non-functional parts and rectification of patient-threatening defects
  - 3 – 6 months warranty on repaired parts, up to 80 % cost savings
- SMART-Repair
  - Repair or replacement of all parts that are at the end of their life cycle
  - 6 months warranty on repaired parts, up to 70 % cost savings
- REFURBISHED by Mides
  - Crystals as well as technically and optically defective components are exchanged with new components
  - 12 months warranty for the whole probe, up to 50 % cost savings

## Endoscope-Repair

- Gastroscope, Coloscope as well as Bronchoscope
- brands
  - Olympus
  - Pentax
  - Fujifilm
- Repairing and recognising preventive damage through years of repair experience
- Average repair time: **5 - 8 working days**





## Loan endoscopes

During the repair time to continue the work in the hospital

- Large pool of loan endoscopes of the 3 brands
- Requests until 14:00 h will be sent the same day
- Loan scope should arrive until 12:00 h in the hospital
- Loan scopes can be required per email, phone call or via our online analysis tool
  - <https://www.mides.com/> or
  - <https://customer.mides.com/>

## Detailed incoming inspection

Leakage test with Mides Endo Air System:

- Leakage current test and picture protocoll

Technical function test:

- Video picture
- Ultrasound pictures
- Function switch
- Valve functions

Creation of a comprehensive input test protocol





## Cleanroom

For a dust-free and sensible repair of

- filigree and optical parts
- Fibre optic bundles
- Fibre optic cover lenses
- Objective lenses



## Disinfection

Certified Endowash system for

- Disinfection
- Single channel monitoring
- Creation of an output protocol
- Disinfection by means of aldehyde disinfectant
- Annual microbiological examination by a hygiene institute



## Ultrasound Endoscopes

- Coating of radial or convex ultrasonic heads
- Renewal of ultrasonic and supply tubing
- Repair of any leaks
- Adjustment of the bending mechanism incl. BN rubber
- Renewal of all channels:
  - Biopsy channel
  - Balloon channel
  - Air-water channel
  - Suction channel
- Renewing the insertion tube incl. bending section



## Flexible Endoscopes

- Preparation of the complete distal end:
  - Renewal of the light guide cover lenses and lens rinsing
- Reprocessing of the CCD video unit
- Renewal of the insertion tube incl. bending section
- Repair of any leaks
- Adjustment of the bending mechanism incl. BN rubber
- Renewal of all channels:
  - Biopsy channel, air-water channel, suction channel
- Renewal of the supply hose



## Test protocol

with indication of the operating hours

Videobild (CCD) / Okular	<input type="radio"/> ohne Funktion	<input checked="" type="radio"/> gut	<input type="radio"/> mangelhaft	<input type="radio"/> ungenügend
Bildleiter	<input checked="" type="radio"/> n/a	<input type="radio"/> gut	<input type="radio"/> mangelhaft	<input type="radio"/> ungenügend
Funktionsknöpfe		<input checked="" type="radio"/> gut	<input type="radio"/> mangelhaft	<input type="radio"/> ungenügend
Ventilfunktionen		<input checked="" type="radio"/> bestanden		<input type="radio"/> nicht bestanden
Blickrichtung Distalende		<input checked="" type="radio"/> bestanden		<input type="radio"/> nicht bestanden
HD-Funktion	<input checked="" type="radio"/> n/a	<input checked="" type="radio"/> bestanden		<input type="radio"/> nicht bestanden
Betriebsstunden	534 uses, 9244 minutes			
Prüfung: Live Test		<input checked="" type="radio"/> bestanden		<input type="radio"/> nicht bestanden
<b>Winkel</b> <span style="float: right;">APu</span>				
Stiffness Funktion	<input type="radio"/> n/a	<input checked="" type="radio"/> gut	<input type="radio"/> mangelhaft	<input type="radio"/> ungenügend
Spiel rechts/links		<input type="radio"/> n/a	<input checked="" type="radio"/> bestanden	<input type="radio"/> nicht bestanden
Spiel oben/unten			<input type="radio"/> bestanden	<input checked="" type="radio"/> nicht bestanden
Prüfung: Winkelverstellung		<input type="radio"/> bestanden		<input checked="" type="radio"/> nicht bestanden
Anmerkung	Angulation failuere			
Abwinkelung	right		left	
	Soll / °	Ist / °	Soll / °	Ist / °
	<input type="text" value="160"/>	<input type="text" value="160"/>	<input type="text" value="160"/>	<input type="text" value="160"/>
	<input type="checkbox"/> N/A			

Test protocol

**OLYMPUS**

Scope information

Device data **Maint. data** Equip. data

**Maintenance data**

Checkup period

Service contract

**Warranty period**

Cumulative uses 534

Cumulative time 9244minutes

Operating hours

## Corrosion damages

Which can be avoided by preventive measures



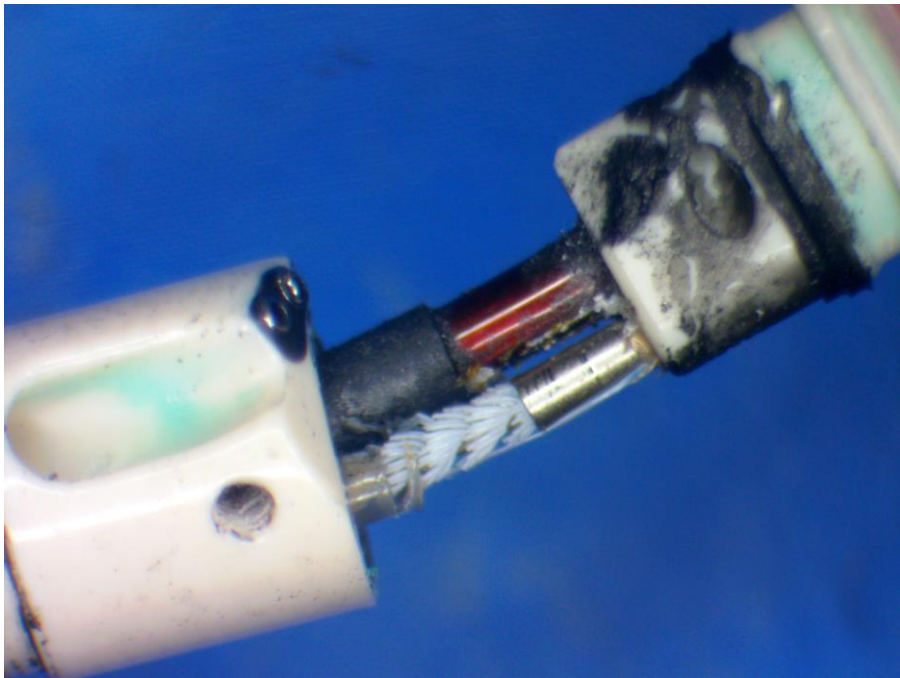
Control unit under the side cap



Supply plug

## User errors

Which can be solved with a repair

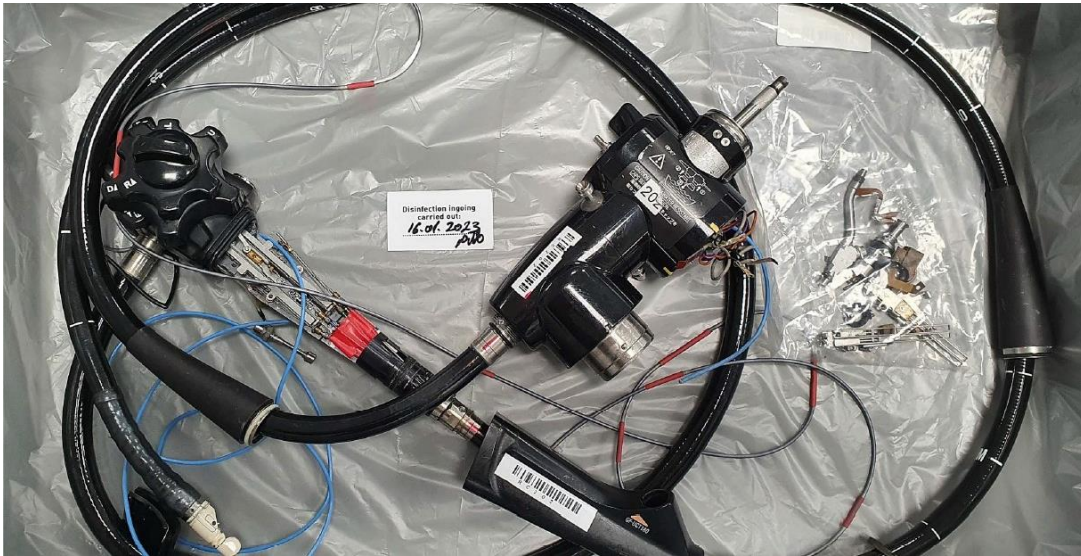


Unsuitable cleaning brush used



Aggressive disinfection fluid

## More pictures of damages which can be repaired



dissambled endoscope



Moisture penetration in the supply plug



# Repair

## Ultrasound endoscope lamination



BEFORE



AFTER

# Repair

Ultrasound endoscope insertion tube



BEFORE



AFTER

# Repair

Flexible endoscope distal end



BEFORE



AFTER

# Repair

Flexible endoscope angulation section



BEFORE



AFTER

**Thanks a lot for your attention**

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