



Northfield Instrument Services

OEM Repair Quality with a  
Higher-Level of Accountability  
and Lower Cost.



Look at the Facts...  
You'll choose NIS.



Northfield's Repair Management Program is structured to provide you with an increased level of accountability and produce savings in time and cost. We guarantee our repairs and your complete satisfaction. Period.

About Us

- Established in 1994, our experienced technicians have repaired tens of thousands of instruments from every major surgical specialty.
- We successfully serve over 800 Hospitals and Surgery Centers in 30 states.
- NIS' Information System produces specific data from each repair. We save you time and money by proactively assisting in managing your repair program.
- Our turn times are the industry benchmark... 2 to 4 days for most repairs. Your valuable assets are returned to service quickly.
- Service Loaners include: Flexible and Rigid Endoscopes, Powered Instruments, Phaco Handpieces, and Video Equipment. There is no charge for this service.
- Utilizing repair data from your facility, NIS provides instrument specific instructional programs designed to proactively reduce repair costs. Working within your protocol, we discuss instrument design, function, limits of use, and provide training on preventive maintenance and repair.

Controlling tomorrow's repair cost today!



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Repair Capabilities

- |                          |                          |                            |
|--------------------------|--------------------------|----------------------------|
| Albarran Bridge          | Headlights               | Resectoscopes              |
| Acetabular Reamers       | Headlight Cords          | Retractors                 |
| Air Hoses                | Hemostats                | Rhinolaryngoscopes         |
| Anspach Systems          | Hysteroscopes            | Rigid Scopes               |
| Arthroscopic Instruments | Infusion Pumps           | Rongeurs                   |
| Arthroscopic Shavers     | Intubation Scopes        | Sarns Saws                 |
| Batteries                | Irrigators               | Scissors                   |
| Bipolar Cords            | Kidney Clamps            | Semi-rigid Endoscopes      |
| Bipolar Forceps          | Kleppinger Forceps       | Sigmoidoscopes             |
| Bifurcated Light Cords   | Laparoscopes             | Sinus Scopes               |
| Biopsy Forceps           | Laparoscopic Instruments | SPO2 Products              |
| Bookwalter Systems       | Lecturescopes            | TEE Probes                 |
| Bovie Cords              | Light Sources            | Telemetry                  |
| Bronchoscopes            | Manometers               | Trocars                    |
| Camera Couplers          | Micro Instruments        | Trays (instrument)         |
| Camera Heads             | Midas Rex Equipment      | Towel Clamps               |
| Castroviejo Forceps      | Modules                  | Ultrasound Probes          |
| Choledochoscopes         | Monopolar Cords          | Ureteroscopes              |
| Colonoscopes             | MPC Scissors             | Video Cables               |
| Cranial Drills           | Nasal Speculums          | Video Cameras              |
| Cryo Handpieces          | Needle Holders           | Video Consoles             |
| Cryostat Knives          | Needle Scopes            | Video Couplers             |
| Curettes                 | Nephroscopes             | Video Printers             |
| Cystoscopes              | Neurodrivers             | Yellow Fin Leg Positioners |
| Dental Handpieces        | Obturator                |                            |
| Dermatomes               | OR Table Accessories     |                            |
| Diamond Knives           | Oscillating Saws         |                            |
| Drills                   | Osteotomes               |                            |
| Duodenoscopes            | Oxygen Blenders          |                            |
| ECG/EKG Cables           | Phaco Handpieces         |                            |
| Electrosurgical Cords    | Pin Cutters              |                            |
| Fetal Transducers        | Power Cables             |                            |
| Fiberoptic Cables        | Power Drills             |                            |
| Gastrosopes              | Power Drivers            |                            |
| Graspers                 | Power Equipment          |                            |
| Grieshaber Instruments   | Rasps                    |                            |
| Handles                  | Reamers                  |                            |
| Harmonic Scalpels        | Rechargeable Batteries   |                            |

"Northfield has saved us in OEM repairs a good 40% over the past year compared to the previous year. They have been instrumental in training staff in our Surgery, G.I. and Pulmonary Suites in the proper handling, storage, and cleaning of flexible scopes. Last year our normal repair was due to massive fluid intrusion of a scope. Over the last 6 months, with the assistance of Northfield, we have all but eliminated this cause of repair."

William R. Rea  
Manager Clinical Engineering  
St. Agnes Hospital, Baltimore, Maryland



## Flexible Endoscopes

Northfield technicians have been instrumental in the design and development of numerous components and repair techniques used throughout the service industry today. With our dedication and attention to detail, you know your scope is being repaired by industry experts.

### Program Highlights

- Each scope received undergoes a comprehensive multi-level inspection process.
- We service large and small diameter scopes from most major manufacturers.
- Replacement parts and materials are tracked by lot number and by scope. This information is backed up and archived indefinitely.
- Ongoing research and development has resulted in over 130 distinct categories of repair and refurbishment.
- Each repaired scope must pass our comprehensive QC inspection performed by three separate departments.
- 6 month Warranty against defects in Materials and Workmanship.

- Bronchoscopes
- Colonoscopes
- Choledochoscopes
- Duodenoscopes
- ERCP Scopes
- Gastrosopes
- Sigmoidoscopes

"Northfield has repaired literally thousands of instruments and hundreds of rigid and flexible scopes for us. We have found their repairs to be of equal quality to the original manufacturer with faster turn times and lower costs. They take a genuine interest in lowering our costs, and I would highly recommend them to anyone."

Cheri Blevins, RN  
Surgical Services Manager  
Lewis-Gale Medical Center, Salem, Virginia

## Rigid and Specialty Scopes

Each rigid and specialty endoscope received undergoes a complete multi-function inspection process. Our technicians restore your scope to original standards using only German made optical components.

### Program Highlights

- We use German made optical components and component assemblies that meet or exceed OEM standards.
- Only FDA approved USP Class 6 epoxants are used. All objective lenses are sealed with an epoxant rated at 400 degrees Fahrenheit.
- Each Scope is evaluated for proper Length, Field of View (FOV), and Angle of View (AOV) to insure replacement lenses and assemblies meet original specification.
- Digital photos record each incoming and outgoing image. These photos are included on the NIS service summary that accompanies each returned scope.
- Most repairs are completed within 48 hours of receipt. Operating Laparoscopes and refiber work may take longer.
- An extensive Quality Inspection that includes Leak Tests, Condensation Tests, Shock Tests, Fine Focus, and Photometer Tests that insure proper light output follows each repair.
- 12 month Warranty against defects in Materials and Workmanship.

- Arthroscopes
- Cystoscopes
- Laparoscopes
- Operating Laparoscopes
- Resectoscopes
- Sinus Scopes
- Ureteroscopes

### Rigid Endoscope Service Summary

We record incoming and outgoing images and post-repair details of each Rigid Endoscope serviced. This detailed report accompanies each repaired endoscope and is a visual indicator of our quality of repair.



## Endoscopic Video Equipment

Camera OEM's do not manufacture the vast majority of the components in their cameras. Principal parts such as prisms and cables are purchased from outside sources. We use these and similar sources for our repair components.

### Program Highlights

- All cameras undergo a series of performance tests to determine control functions, electrical performance, safety, and image quality.
- Camera couplers with leakage or mechanical problems can be repaired. We calibrate alignment, focus, seal, test, and restore couplers to "as new" condition.
- Repaired cameras are compared to new OEM units for performance prior to entering two final quality assurance tests.
- We use state of the art laser welders, molding machines and etchers to assure quality in our repairs that is second to none. Cameras are tracked by serial number, model and date as well as the repair that was completed on each.
- 90 day Warranty against defects in Materials and Workmanship.



- Camera Heads
- Camera Consoles
- Camera Cables
- Couplers
- Light Sources
- Olympus Monitors & Video Printers

"Our partnership with Northfield Instrument Services has resulted in a reduction of repair costs with total savings in the thousands of dollars. Northfield's quality of repair is outstanding and I would recommend their services to anyone."

Michael Hicks  
Director of Materials Management  
Augusta Medical Center, Fishersville, Virginia



## Powered Surgical Equipment

The condition of O-rings, Bearings, Gears, Springs, Blades, Collets, and Switches are inspected for excessive wear and corrosion with each Powered Surgical Instrument we receive. Repair costs are based on only the parts and labor required to restore your instrument to OEM performance standards.

### Program Highlights

- We restore handpieces and attachments that have been deemed obsolete and are no longer serviced by the OEM.
- Diagnostic checks include revolutions or strokes per minute and instrument torque is measured at various RPM or SPM. Readouts are then compared to OEM standards and your instrument is brought into compliance.
- The instrument's temperature is evaluated. We search for hot spots that indicate future bearing failure. Push In/Pull Out Forces are measured to evaluate the force required to install and remove burrs and blades.
- We repair related attachments such as Burr Guards, Chucks, Collets and Air Hoses. Selected Batteries can be refurbished as well.
- Most repairs are completed within 72 hours of receipt.
- 90 day Warranty against defects in Materials and Workmanship.

- Powered Drills
- Drill/Reamers
- Reciprocating Saws
- Oscillating Saws
- Sagittal Saws
- Sternum Saws
- Wire Drivers
- Dermatomes
- Micro Drills
- Micro Saws
- Trauma Drills
- Shavers
- Cast Cutters
- Dental Handpieces





## Specialty Instrumentation

We are experts in restoring and refurbishing the majority of General, Specialty and Micro instruments in use today... even those instruments deemed unrepairable by others.

We stock a vast inventory of new German made replacement parts and have the required skills to reproduce broken, damaged, or missing parts. Your instruments are restored to "as new" condition.

- Restored instruments are chemically "date stamped" for traceability and accountability.
- Specially developed repair techniques allow us to return the majority of damaged .12 Micro Forceps to service.
- Special insulations and in-house powder coating capabilities allow us to properly reinsulate the majority of all Specialty Instruments.
- We pioneered the use of Laser welding to repair "unrepairable" instruments.
- Most repairs are completed and shipped in 2 to 4 days from receipt. Expedited weekend service is available.
- 3 month Warranty against defects in Materials and Workmanship.

## Phaco Handpieces and Harmonic Scalpels

All Phaco Handpieces and Harmonic Scalpels received for repair are completely overhauled. We use only new replacement parts that meet or exceed OEM standards. We service Phaco Handpieces manufactured by Alcon, Bausch & Lomb, Allergan (AMO) and others.

- Repairs are completed and returned to you within 48 hours of receipt.
- Handpieces are calibrated and tested on OEM equipment to insure proper function.
- 90 day Warranty against defects in Materials and Workmanship

Our Repair Program  
builds true traceability  
and accountability into  
each instrument serviced.

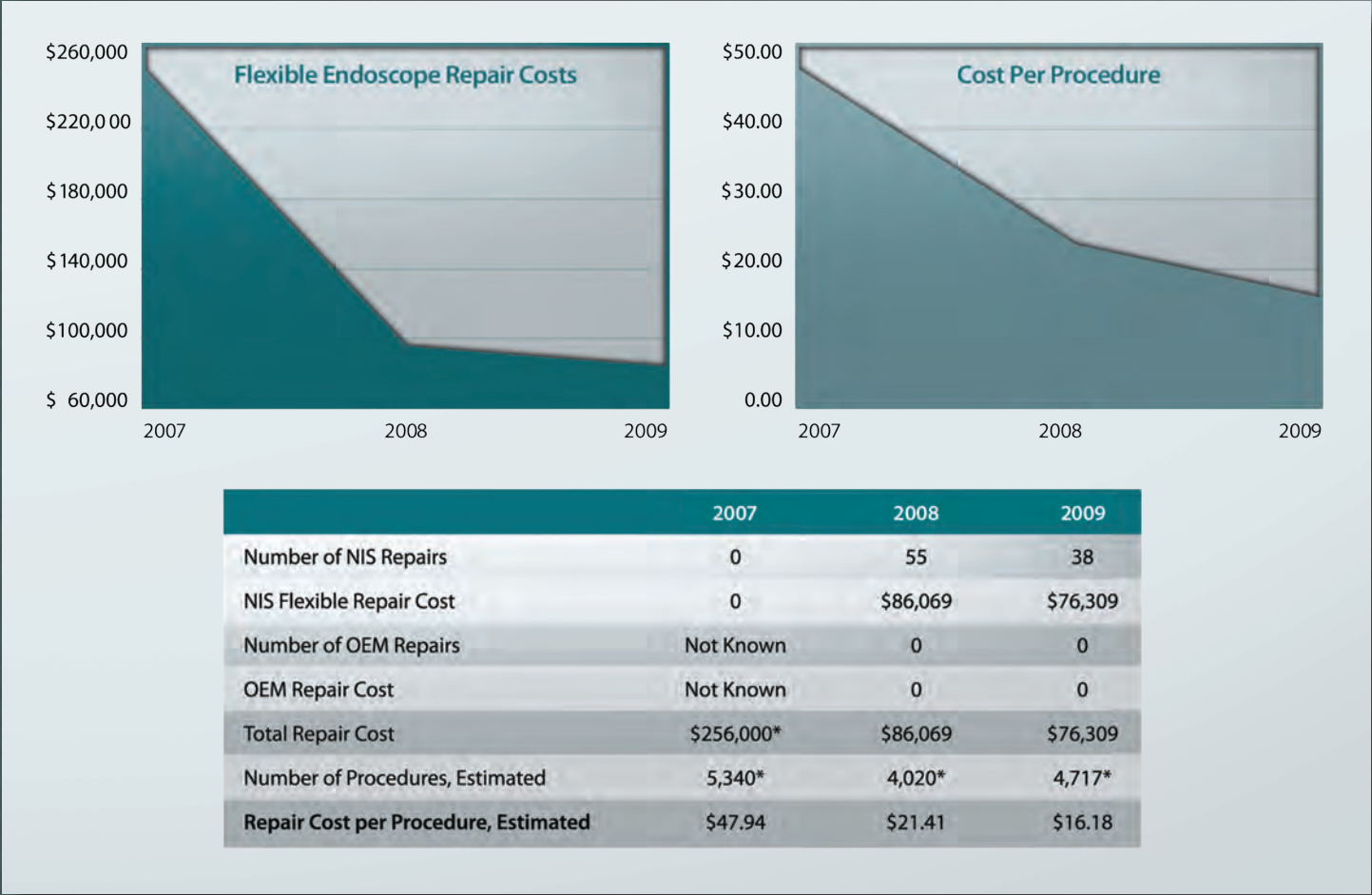
"We would rate Northfield as one of our most trusted vendors. They have provided our hospital with consistent and reliable service and we can see no difference in the quality of their repairs versus any of the original equipment manufacturers. I would highly recommend their services to every hospital and surgery center."

Milan Seifert  
BMET Supervisor  
INOVA Fairfax Hospital, Falls Church, Virginia



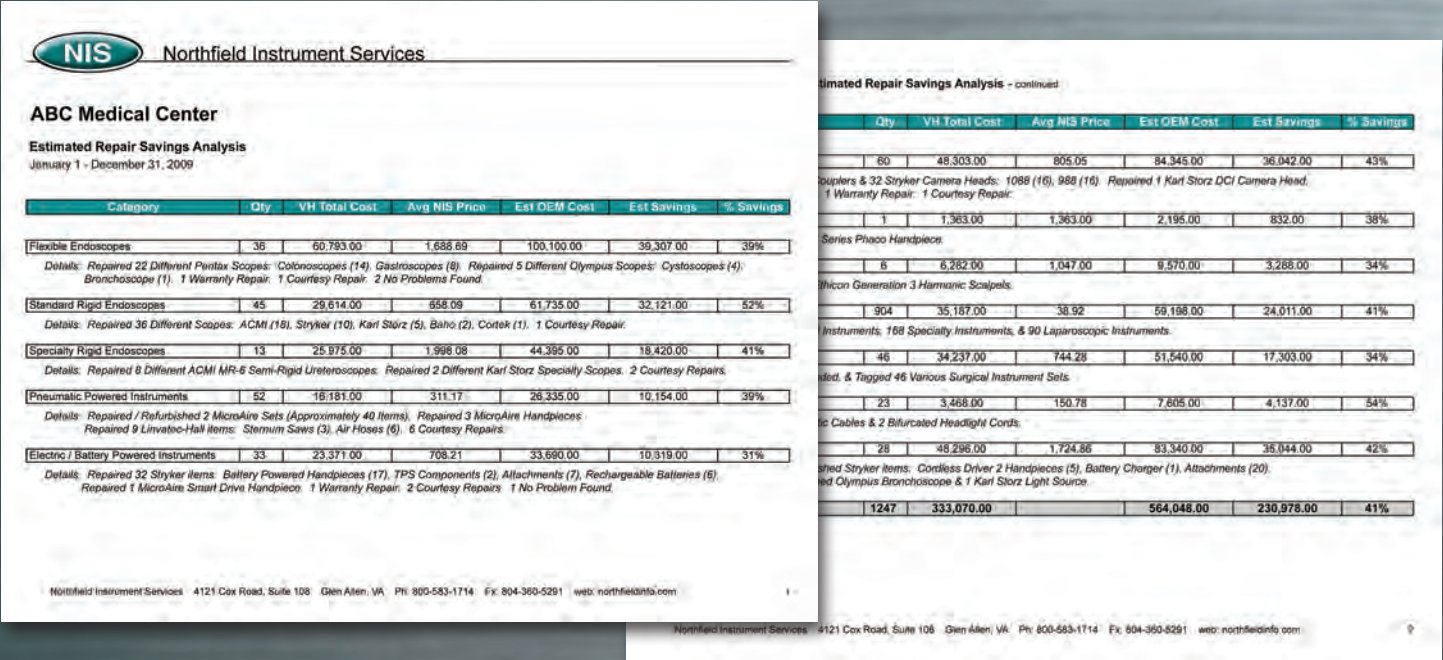
Cost Per Procedure Analysis

Memorial Medical Center  
24 Month Flexible Endoscope Repair Experience



\*Hospital supplied data

Demonstrated Savings







**Northfield Instrument Services**

Look at the Facts...  
You'll choose NIS.

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