Aesculap Service Systems

Aesculap Technical Services

One source for all your repair services
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A tradition of excellence since 1867.

The company was founded in 1867 by master craftsman Gottfried Jetter in Tuttlingen, Germany. For more than 140 years, the name Aesculap has been synonymous with quality throughout the world.

Each instrument is individually forged from German stainless steel and crafted by trained instrument makers into consistent patterns.

With over 20,000 time-tested patterns, Aesculap prides itself on meeting the world’s growing need for a broad range of general and specialized surgical instruments.

Committed to ensuring quality performance throughout the life of every instrument.

Aesculap’s commitment to quality doesn’t end when you purchase an instrument. Aesculap Technical Service is designed to extend the Aesculap quality commitment through the entire life of every instrument. With Aesculap instrument repair and refurbishment, you can be sure every instrument functions properly and will be available when you need it.

The highest quality repair.

Skilled craftsmen and trained instrument makers will refurbish your surgical instruments to “like-new” condition, quickly and conveniently.

Precision repair equipment enhances Aesculap’s repair performance level because it is the same as that used in the original manufacturing process.

Factory spare parts give Aesculap the ability to properly repair your instrumentation with quality materials that match the original. This protects your instrument from contamination and corrosion, further reducing repair, replacement costs and down time.

- Instrument costs are reduced by extending the useful life of your instruments through regular servicing
- Repair costs and instrument down time can be limited by scheduling routine repairs around your schedule
- The highest instrument performance is maintained through regular service and repair
To satisfy our own high demands as well as our users’ expectations, Aesculap’s quality requirements are extraordinarily high. With over 20,000 products covering practically all indications in separate specialties, this is no easy undertaking.

- Aesculap’s manufacturing tolerances are tighter than the standard tolerances permitted by DIN and ISO
- Aesculap’s manufacturing combines high technology and precision craftsmanship with knowledge and expertise. This enables instruments to be produced that are always true to pattern, extremely precise and of consistent high quality
- Nothing is more economical than high quality

The Aesculap Craftsman
Trained craftsmen and experienced instrument makers refurbish your instruments to “like-new” condition. The instrument restoration process is entirely dependent upon the expertise of the craftsmen. Factory-trained master technicians must complete a three and one-half year apprenticeship. During this time, the technicians learn the art and science of instrument making, beginning with raw materials and culminating with finished goods. Extensive testing and certification at the end of the apprenticeship assures that each technician meets the rigorous standards set for all Aesculap service technicians. After the apprenticeship, continuous training requirements for the master technicians ensure that their skills remain at a high level. Highly-skilled Aesculap technicians bring your instruments back to life.
Aesculap Technical Services is your partner in the professional preservation of value for your surgical assets: general instruments, rigid and flexible endoscopes, motor systems, containers and electronic equipment. Aesculap has a full-service repair system which provides comprehensive repair and refurbishment services. It makes no difference whether the products concerned were manufactured by Aesculap or by another company.

Surgical assets comprise a large proportion of a hospital’s total assets. For this reason, the Aesculap repair is based on the same strict quality standards applied to the original instrument production. This guarantees the value and function of each instrument is maintained for as long as possible to your satisfaction.

In addition to carrying out individual repair orders, Aesculap offers capitated maintenance contracts. These contracts provide repair services for a fixed monthly amount.

**Capitated maintenance contracts**
- Reduces operating expenses
- Improves resource management
- Simplifies the budgeting process
- Extends life of hospital assets

Aesculap repair and refurbishment programs are recommended because of these reasons:
- Refurbishing sets brings the instruments to “like-new” condition thus increasing the useful life of the instruments and maintaining their optimal function
- Removes surface corrosion and stops further damage from rust, poor water quality, or long term exposure to corrosive agents such as saline of bodily fluids
Aesculap warrants that any repair or refurbishment service will be performed in a workmanlike manner, in accordance with industry standards. This warranty is for 90 days following the completion of the repair service.

Aesculap Technical Service advocates personally handle your orders from start to finish. Special handling is provided to expedite repair turnaround.

Distinctive Aesculap Instrument Repair (A.I.R.) boxes transport instruments safely, and Aesculap provides express shipping free of charge. Instruments are carefully wrapped and packaged for safe and prompt delivery. The AIR Box program assures reliable, expedited delivery of instruments to and from your facility with complimentary UPS shipping labels and materials delivered by your local Aesculap Representative.

If you have any questions or concerns about Aesculap Technical Services, please contact your Aesculap representative or call 1-800-214-3392.
Aesculap offers two levels of service for its general instrument maintenance programs. The Repair Option Program (RO) is a basic service that repairs an instrument so that it is functional. The Repair and Refurbishment Program (RR) is a higher level service that brings an instrument back to “like-new” condition. The Repair and Refurbishment Program restores the functionality and surface finish of an instrument.

**Both of these programs:**
- Assure top instrument performance
- Lengthen instrument life
- Provide significant cost savings over new instrument purchase

A general instrument will go through the following process steps depending on which level of service is chosen:

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<tr>
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<th>Repair Option Program</th>
<th>Repair and Refurbishment Program</th>
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1** Sharpening** Large diameter wheel sharpening provides precise cutting edge curvature of extended “sharp” usage.

2** Alignment** Skilled and experienced craftsmen perfectly align instruments.

3** Repair with Original Spare Parts** Original spare parts are used to assure proper fit and minimize reaction between different metals.
General Instrument Maintenance Programs

4 Surface Refinishing Three surface finishes offered: matte finish, satin or mirror.

5 Gold Dipping Ring handles of tungsten carbide instruments are gold dipped for easy identification in the OR.

6 Etching Electrochemical etching for instrument identification

7 Cleaning – Oiling Ultrasonic cleaning and lubrication for “like-new” operation.

8 Final Inspection Quality inspection and certification ensures the highest levels of performance.
General Instrument Maintenance Programs

Color Coating – Aesculap’s color coating process delivers a long lasting solution for hospitals looking to differentiate instruments belonging to various sets. It is a safe and simple process that does not compromise the feel or balance of the instrument.

16 Colors to Choose From

Please order by number:

1. Baby Blue
2. Royal Blue
3. Navy Blue
4. Mint Green
5. Kelly Green
6. Baby Pink
7. Rose
8. Orange
9. Yellow
10. White
11. Black
12. Brown
13. Gray
14. Red
15. Lavender
16. Dark Purple
Endoscopic Instrument Repair and Re-Insulation

- 48-hour turnaround on instrument repairs minimizes set downtime
- Service available for instruments from all manufacturers
- Extensive spare parts inventory available to assure highest quality repair

Re-Insulation: Re-insulation of Endoscopic, Monopolar, Bipolar instruments ensures proper working condition. Insulation defects will allow electric currents to escape which may result in patient burns, latent infections and extended recovery times.

- HiPot testing procedure ensure proper insulation
Aesculap Technical Services offers quality repairs on all brands of power instruments.

- Instruments are refurbished to perform "like-new"
- Only the highest quality components are used in the repair process
- Extensive Aesculap and competitor loaner inventory available
- Prepaid express shipping

Offering a full line of power surgical instrument repairs for small bone, large bone and neurosurgical applications.

Aesculap services a variety of power types such as pneumatic, electric and battery for major manufacturers including:
- 3M
- DePuy
- Dyonics
- Hall/Linvatec
- Midas Rex
- MicroAire
- Sarns
- Stryker
- Synthes
- Zimmer
Power System Repair

Products Repaired:

Handpieces
- Drills
- Saws
- Shavers
- Dermatomes

Accessories
- Hoses
- Power Cords
- Foot Switches
- Batteries

Electric Consoles

Mobile Stands

Service Capabilities:

Handpieces

Preventative Maintenance
- Testing
- Disassembly
- Cleaning
- Inspection
- Replacement of seals, gaskets and o-ring
- Assembly
- Lubrication
- Final test

Minor Repair
- Includes preventative maintenance
- Replacement of bearings and other parts

Major Repair
- Includes preventative maintenance and minor repair
- Major parts replacement
- Electrical component repair
SterilContainer™ Repair Services

Repair and Refurbishment of Containers:
- Extends useful life by providing repair or replacement of damaged parts and professional inspection to assure optimal performance of each container
- Reduces set downtime by having instrument sets repaired at the same time containers are being refurbished

Container Servicing Procedure

Container Bottoms
- Visual inspection
- Re-align corners
- Replace pins and change handles as necessary
- Remove nicks and rough spots on edges
- Refurbish and clean with environmentally safe cleaner to remove tape, ink, etc.

Container Lids
- Visual inspection
- Check latches, pins and rails
- Tighten or replace latches, rivets and retention plate pins
- Tighten or replace rails
- Replace gasket
- Re-align corners
- Remove nicks and rough spots on edges
- Refurbish and clean with environmentally safe cleaner to remove tape, ink, etc.

Baskets Repairs
- Visual inspection
- Replace all handles and feet as necessary
- Spot weld brackets
- Re-align
- Refurbish and clean as necessary
Aesculap Technical Service offers quality repairs on all models of rigid scopes.

- Only the highest quality components are used in the process
- Extensive loaner scopes available

Aesculap repairs all types of Endoscopes:
- Laparoscopes
- Arthroscopes
- Hysteroscopes,
- Operating scopes with offset eyepieces
- Cystoscopes
- Resectoscopes
- Sinoscopes
- Bronchoscopes
- Laryngoscopes
- Universal Endoscopes

Aesculap services the following Scopes:
- ACMI/Circon
- Comeg
- Cabot
- Concept
- Dyonics
- Endolap
- Guidant
- Karl Storz
- Linvatec
- Olympus
- Richards
- Scholly
- Solos
- Stryker
- V Mueller/Baxter
- Richard/Wolf

Service Capabilities
- Complete interior cleaning
- Polish lens tip
- Optical adjustments
- Complete AC test (hot/cold) liquid
- Vacuum and seal
- Objective lens repair
- Repair and replace optical window
Rigid Scope Repair

Photos of the Rigid Scope Repair Process

Before and After Repair Photos

The photos below show the clarity and distal tip before and after repair. These photos will be included with the Scope Repair Form.

Incoming Clarity

Incoming Distal Tip

Outgoing Clarity

Outgoing Distal Tip
Flexible Scope Repair

Flexible Scope Repair

Aesculap Technical Service offers quality repairs on all major brands of flexible endoscopes

- Only the highest quality components used in the process
- Prepaid express shipping
- Loaner scopes available

Types of Flexible Scopes Serviced

- Bronchoscopes
- Choledochoscopes
- Colonoscopes
- Cystoscopes
- Duodenoscopes
- ENT Scopes
- Enteroscopes
- Gastroscopes
- Hysteroscopes
- Intubation
- Sigmoidoscopes
- Ureteroscopes

Brands of Flexible Scopes Serviced:

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model</th>
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<tbody>
<tr>
<td>ACMI</td>
<td>Olympus</td>
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<tr>
<td>Fujinon</td>
<td>Pentax</td>
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<tr>
<td>Karl Storz</td>
<td>Welch Allyn</td>
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<tr>
<td>Machida</td>
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</tbody>
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Typical Repairs

- Adjust angulation
- Replace insertion tube
- Replace suction channel
- Replace biopsy forcep channel
- Remove major fluid
- Clear air/water nozzle
Mobile Service Lab

Outstanding Service
- Same-day repair turnaround
- Instruments repaired at your facility
- Knowledgeable repair technician on site
- Reduces instruments replacement costs
- Customized repairs and immediate quality control

Premium Quality
- All instruments are repaired by our trained craftsmen on precision equipment ensuring the consistent quality you have come to expect from Aesculap
- Inspection, repair, sharpening, cleaning and lubrication of all general surgical instruments
- Complete tray and set refurbishing available
- Ophthalmic instrument repair
- Sterilization container repair
- Electrosurgical instrument repair and re-insulation
- Insulation testing of your endoscopic instruments

Mobile Service Lab
Custom Modification Service

Aesculap Technical Services features a full machine shop and trained technicians to develop and modify surgical instrumentation.

- Modification services such as lengthening, shortening and changing instrument angles to meet specific needs of surgeons
- Consultation services, design and development of prototype instruments
- Quick turnaround
- Quality service and workmanship
- Only the highest quality, certified materials are used (titanium, stainless steel and composite materials)
The Sonastar XS-E Surgical Aspirator System features the state-of-the-art ultrasonic technology.

The system is sold with a one year warranty. Protect your valuable investment by purchasing an Extended Warranty service from Aesculap. Extended warranties are offered in one and three year durations and cover the following services:

- Annual system "performance verification"
- Repair and recalibration as required to bring system into proper performance
- Handpiece electrical testing as required
- Physical check of all systems and equipment to verify mechanical conditions
- Loaner product when applicable
- 24-hour / 7-day technical support 800-314-9498

Aesculap also provides off warranty service and repairs.

Please call the Sonastar Repair Hotline 800-314-9498 for all service and repair needs.
OrthoPilot®

Warranty
OrthoPilot is sold with a one-year warranty. This includes all necessary visits for repairs and parts including the camera.

Talk with your sales representative about an extended warranty service. Aesculap offers extended warranties in one and three year durations.

The Extended Warranty includes:
- Updates and upgrades of the OrthoPilot software
- Upgrade of instruments for the system
- Annual service maintenance
- Technical support by the OrthoPilot Hotline
- Examination of the calibrated system instruments inclusive if necessary re-calibration
- Maintenance and systematic test for camera
- Function and safety-relevant examination of the overall system
- Exchange of individual defective system instruments
- Documentation of the maintenance work
- Transmitters and consumables are excluded from the service contract

Aesculap also provides off warranty service and repairs.

Please call the OrthoPilot Hotline 866-787-4259 for all your service and repair needs.

- All service will be performed by an experienced factory certified service engineer
- Safety testing will be performed in compliance to the latest regulatory standards IEC 60601/VDE 0751