Put Your Process to the Test

Neogen® Clean-Trace®
Adenosine Triphosphate (ATP) Monitoring System

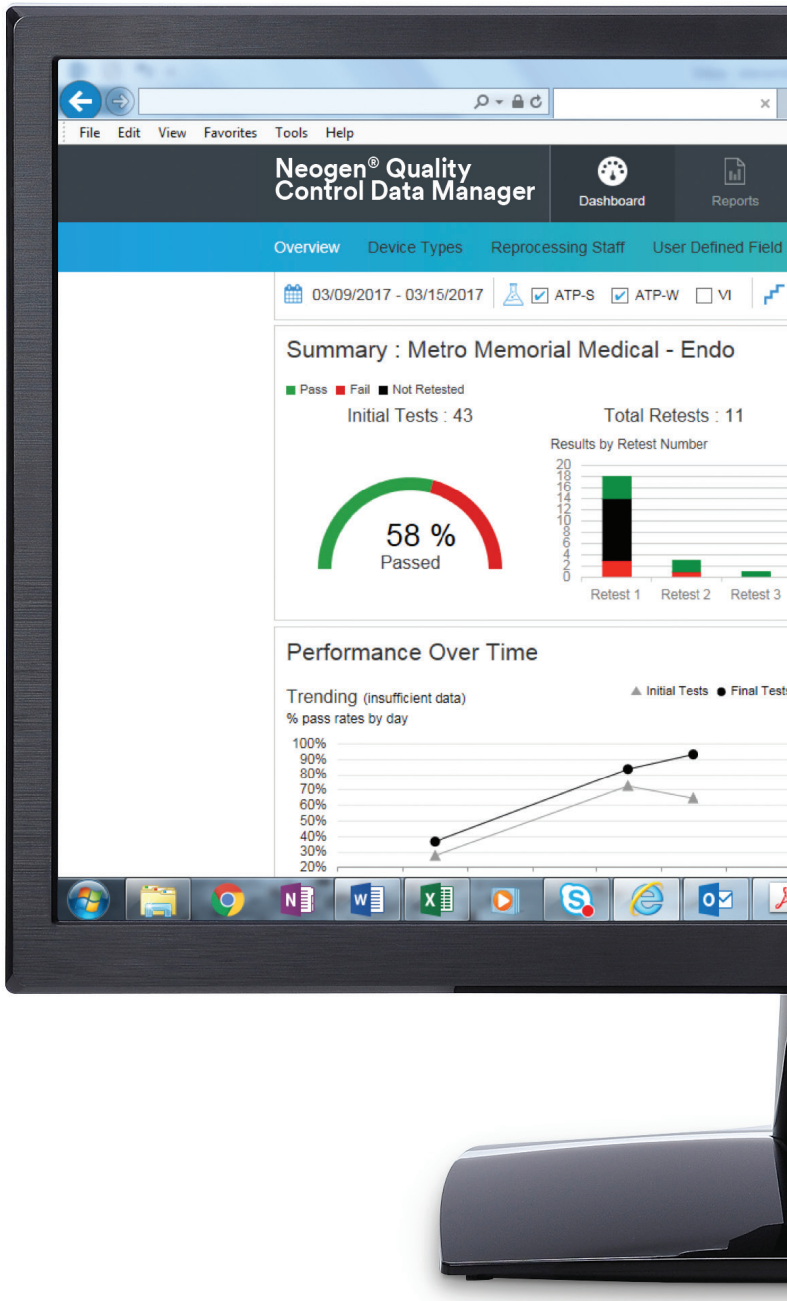
Implement a World-Class Cleaning Monitoring Program

We all know the dangers that inadequately cleaned surfaces, endoscopes and other devices present to patients, and to your healthcare facility's reputation. Here's what's really concerning: clinical evidence tells us that current cleaning and cleaning-monitoring practices just aren't effective enough.[1] Fortunately, it's been proven that cross-contamination is significantly decreased with improved and consistent cleaning and monitoring.[2]

A reliable and complete cleaning monitoring system.

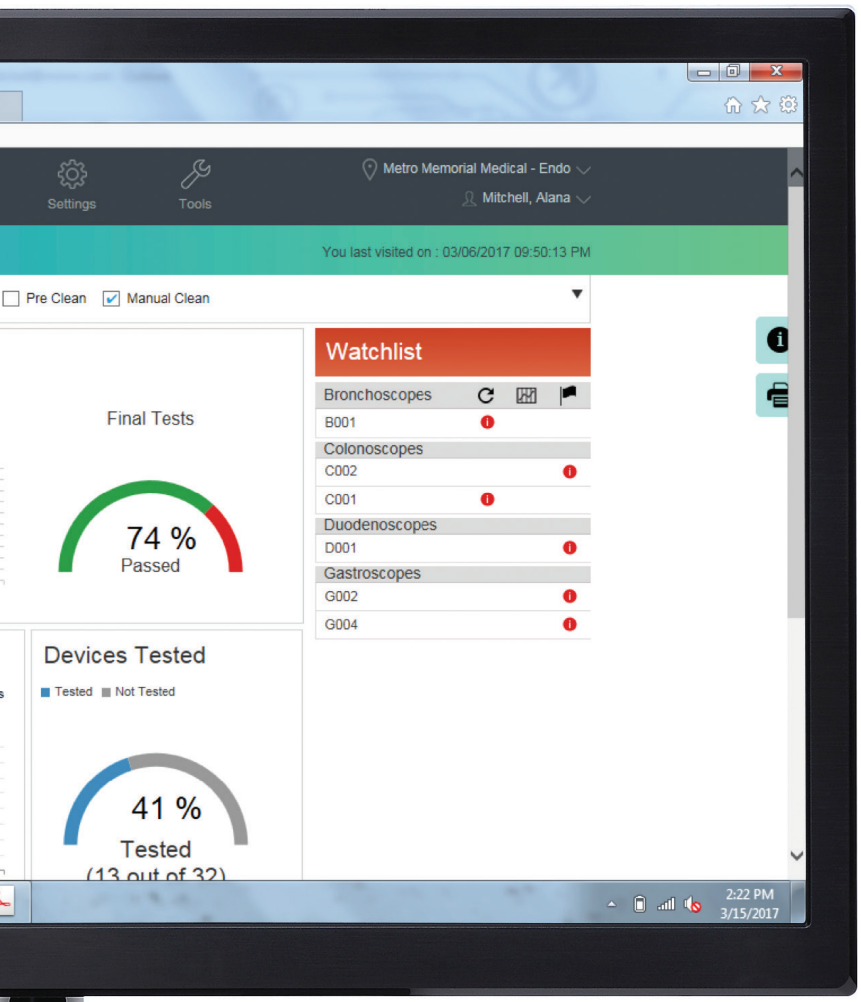
The Clean-Trace ATP Monitoring System provides rapid, real-time results and quantitative data and reporting. The system includes:

- Clean-Trace ATP Surface UXC and Water H2O Tests: to sample surfaces and channels of lumened instruments, like flexible endoscopes.
- Clean-Trace Luminometer LX25: to provide rapid and quantative measurement of cleaning adequacy.
- Clean-Trace Quality Control Data Manager (QCDM): to track results, generate reports, and identify issues and trends.
- Total set-up and application training, education, technical expertise and support.



Clean-Trace System finds residual clinical soil consistently.

All organic matter contains Adenosine Triphosphate, or ATP. The Clean-Trace ATP Monitoring System uses ATP bioluminescence technology to “see” contaminants. When ATP is combined with the reactants in the Clean-Trace test, light is produced whitch is invisible to the naked eye, but easily read by the Clean-Trace Luminometer. The results are expressed in Relative Light Units (RLUs), which are representative of the amount of clinical soil on the surface or device.



Flexible Endoscopes: the Most Common Cause of Healthcare Device-Associated Outbreaks[3]

A routine ATP monitoring program can help provide peace of mind.

With devices and flexible endoscopes in particular, studies have shown that clinical soil can withstand the manual cleaning process and prevent high-level disinfection or sterilization from doing its job.[3] It's impossible to accurately assess the instrument's cleanliness visually, especially inside the long narrow lumens. As a result, potentially deadly bacteria and pathogens can be passed on to patients. Contaminated endoscopes are a bigger, more persistent problem than you may realize:

- Between 2005 and 2012, an estimated 30,500 people were exposed to contaminated endoscopes.[5]
- Every year, 20 million+ gastrointestinal endoscopy procedures are performed in the U.S. Because the same scopes are used on multiple patients, the risk of cross contamination and transmission of potential pathogens increases exponentially.[6]
- The flexible endoscope design makes it difficult to clean the instrument thoroughly, giving it the potential to remain contaminated with pathogens even after reprocessing.[7]

Surgical instruments are critical, too.

Residual material like blood, tissue and bone can compromise the sterilization process[3], allowing potentially deadly bacteria to remain. Recent outbreaks have been linked to contaminated instruments in the Operating Room (OR) Because of this, Association of periOperative Registered Nurses (AORN) has updated their recommended cleaning practices, including using ATP testing, and tracking cleaning performance trends over time.[8]

Examples where Clean-Trace ATP Monitoring System is recommended:

Bone Impactor	Bone Mill
Curettes	Dermatome
Kerrison forceps	Mosquito Clamp
Reamer	Rongeur
Sagittal Saw Scissors	

Test every endoscope, every time in four easy steps.

Step 1: Sample surfaces and channels

- **Surfaces:** sample the distal end and elevator mechanism (if applicable)
- **Channels:** flush the suction/biopsy channel and any elevator guidewire channel to collect a water sample

Step 2: Click/Shake

- **Surfaces:** click to activate and shake
- **Water:** dip the test into the water sample, activate the test and shake

Step 3: Measure*

- **Pass:** it meets your facility-determined threshold and is ready for the next step.
- **Fail:** ATP level is above your facility-determined threshold and the device should be re-cleaned and re-tested.

Step 4: Monitor and Report

Test data is wirelessly uploaded to the Neogen® QCDM to compile test data for reporting and analysis.

The Clean-Trace ATP System provides a quality control monitoring tool for difficult to clean medical devices, like flexible endoscopes.

*Pass/Fail RLU threshold values are determined by each health care facility.

An Infection Can Begin with a Light Switch

Just because it looks clean doesn't mean it is.

The patient care environment is a superbug haven. Bed rails, tables, switches, buttons, frequently used mobile equipment—virtually any high-touch surface—can harbor bacteria and cause cross contamination. In fact, there's an alarming 50% chance that a patient will contract an multi-drug resistant organism (MDRO) if the patient room is not properly cleaned.[9]

The good news? Consistent cleaning monitoring can greatly decrease that risk—it's been proven time and again.[10, 11]

How do you know if your environmental surfaces meet your standards? You can't tell simply by looking. That's where the Clean-Trace ATP Monitoring System comes in. It accurately assesses cleanliness in real time, and, generates data that's invaluable over time. The information gathered helps you identify problem areas, develop solutions and better train your staff on proper cleaning techniques. The data can send you into audits more confidently and improve your organization's cleaning monitoring effectiveness and efficiency.

Find out if environmental surfaces really are clean in four steps.

Consistent monitoring is the key to more thorough cleaning. That's why we designed the Clean-Trace Monitoring System to be accurate and reliable.

Step 1: Sample

Use the Surface test UXC to sample a small area. Flexible and pre-moistened, the test reaches even difficult-to-reach areas.

Step 2: Click/Shake

Activate the test and shake.

Step 3: Measure

Place test in Luminometer and measure.
Pass: The surface area is clean.
Fail: Re-clean and re-test.

Step 4: Monitor and Report

Test data is wirelessly uploaded to the Neogen® QCDM to compile test data for reporting and analysis.

Generates Data, Dashboards and Reports

Neogen® Quality Control Data Manager turns data into valuable information to help improve cleaning practices.

Meet the database portion of the Clean-Trace ATP Monitoring System: the Neogen Quality Control Data Manager, or Neogen QCDM. It's an online, hosted service that allows you to review and manage your cleaning test data. Instead of relying on guesswork, you can easily (and quickly) identify weak spots, problem areas and trends, thus, improving and streamlining your entire cleaning monitoring practice.

Neogen QCDM can help you:

- Communicate results to various stakeholders.
- Monitor number of re-tests and re-cleanings required to achieve pass results based on facility-determined pass/fail RLU threshold values.
- Identify problem areas like damaged instruments that consistently fail, and may need repair or replacement.
- Pinpoint performance differences between facilities, staff, or time of day.
- Evaluate cleaning procedures and focus training accordingly.
- Manage ongoing records of your cleaning quality control program to be audit ready.

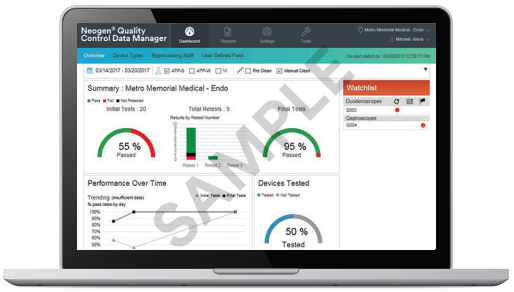
Ace the Audits

Because the Clean-Trace ATP Monitoring System makes cleaning, monitoring and data analysis so seamless, you're better prepared going into an audit. Implementing the Clean-Trace ATP

Monitoring System can help keep you compliant with guidelines and standards from organizations like AAMI, AORN, and SGNA.

Data visualized the way you need it.

The Neogen Quality Control Data Manager securely captures and stores data from all test points, then analyzes and translates it into dashboards and reports for easy analysis. You'll see visual data summaries the moment you log in with the new summary dashboard. Click through to review or schedule reports, or download your raw data for analysis.



Device Report — NEOGEN — **Metro Memorial Medical - Endo**

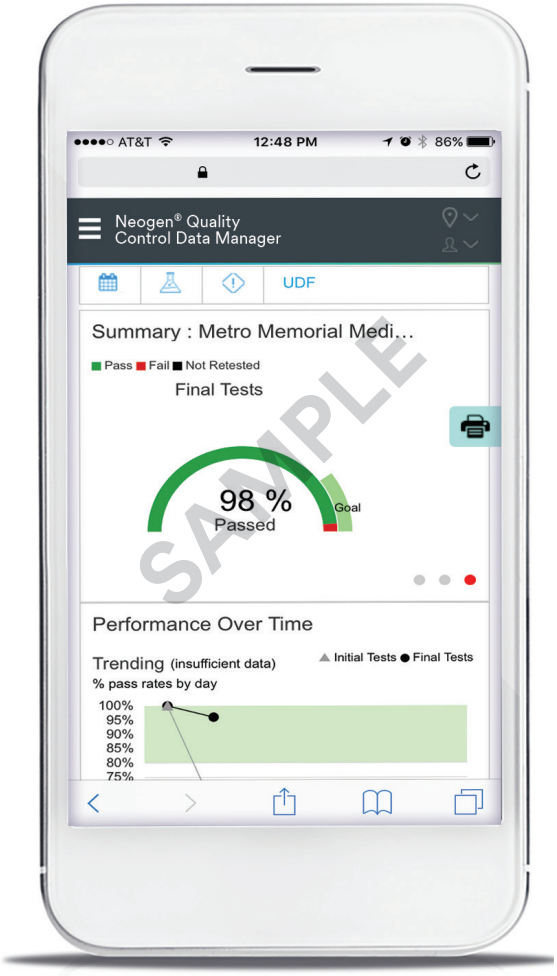
Report Parameters
Date: 03/14/2017 - 03/20/2017 Test Methods: ATP Surface, ATP Water Test Plan Type: Sample Test Plan Reprocessing Steps: ManualClean

Performance Comparison
Metro Memorial Medical Center Pass Rate: 57% Metro Memorial Medical - Endo Pass Rate: 57% National Average (ATP) Pass Rate: N/A

Key
⚠ - Caution: Small Sample size

	Initial Test Performance					
Device Type / Device	■ % Pass ■ % Fail	% Pass	Total Tests	Average RLUs	Total Retests	Final %Pass
EUS		**100%**	**4 ⚠**	**49**	**0**	**100%**
EUS002		100%	4 ⚠	49	0	100%
EUS001	-	-	0	-	-	-
EUS003	-	-	0	-	-	-
Colonoscopes		**72%**	**18 ⚠**	**143**	**6**	**100%**
C006		100%	2 ⚠	169	0	100%
C001		100%	2 ⚠	86	0	100%
C008		100%	2 ⚠	81	0	100%
C002		75%	4 ⚠	127	1	100%
C004		50%	4 ⚠	281	2	100%
C007		50%	2 ⚠	87	1	100%
C005		50%	2 ⚠	189	2	100%
C003	-	-	0	-	-	-
C009	-	-	0	-	-	-
C010	-	-	0	-	-	-
Pediatric Colonoscope		**60%**	**10 ⚠**	**112**	**4**	**100%**
PedC001		100%	4 ⚠	19	0	100%
PedC003		50%	4 ⚠	146	2	100%
PedC002		0%	2 ⚠	2355	2	100%
Gastroscopes		**50%**	**8 ⚠**	**180**	**5**	**88%**
G001		100%	2 ⚠	11	0	100%
G005		50%	2 ⚠	242	2	100%
G004		50%	2 ⚠	190	0	50%
G003		0%	2 ⚠	2119	3	100%
G002	-	-	0	-	-	-
G006	-	-	0	-	-	-
G007	-	-	0	-	-	-
Bronchoscopes		**33%**	**6 ⚠**	**176**	**6**	**100%**

SAMPLE



Log in and view dashboards on your mobile device.

You can also easily create, pull and schedule custom reports within or across your facility or system by:

- Organization
- RLU Distribution
- Staff
- Test Points
- Rooms/Areas
- Devices

Not Just User Friendly, the Clean-Trace Luminometer LX25 is User Indispensable

The Clean-Trace Luminometer LX25 is accurate, consistent and designed to be user friendly.

The Luminometer LX25 was designed based on user feedback to enhance functionality, a color touchscreen and a modern ergonomic design.

Whenever a reading is generated on the Luminometer LX25 in your facility, the data is captured, transmitted wirelessly and uploaded directly for analysis. No transcription is required.

- Ergonomic design[11]
- Utilizes a simple touchscreen with prompts
- Easy to open test chamber for easy sample insert
- Provides accurate Pass/Fail results and RLU measurement in ≤ 10 seconds*
- Battery recharge in 3 hours, when connected to a power supply

*Pass/Fail RLU threshold values are determined by each health care facility.

It's Time to Put New Safeguards in Place

Clean-Trace ATP Monitoring System Components and Services

Neogen offers a range of service options to help keep your Luminometer LX25 functioning reliably and accurately.

Catalog Number	Description	Packaging	Shipping
LX25	Clean-Trace Luminometer LX25	1 each/box	1 box/case
CM-SW200	Quality Control Data Manager	N/A	N/A
UXC	Clean-Trace Surface Test	10/pouch	10 pouches/case
H2O	Clean-Trace Water Test	10/pouch	10 pouches/case
WTK	Clean-Trace WTK Water Test Accessory Kit	Each/bag of 100	1 bag/case

Services available: Annual Preventive Maintenance and Calibration, Flat Fee Repair

Learn more at info.neogen.com/Clean-Trace-healthcare

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3 Rutala WA, Weber DJ. In: Healthcare Infection Control Practices Advisory Committee (HICPAC). Guideline for disinfection
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4 Ofstead, Cori L. et al. Longitudinal assessment of reprocessing effectiveness for colonoscopes and gastroscopes: results
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11 Neogen data on file: EM-05-311617

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