



KIMBERLY-CLARK*
72-Hour Closed-Suction Systems

BALLARD TRACH CARE* System*

A unique design. A new standard in clean.



 **Kimberly-Clark**

*Trusted Clinical Solutions**

KIMBERLY-CLARK* 72-Hour Closed-Suction Systems

BALLARD TRACH CARE* System*

The Only System Of Its Kind With Turbulent Cleaning Action

Only the **KIMBERLY-CLARK* 72-Hour Closed-Suction Systems** with proprietary and patented “PEEP seal” technology features turbulent cleaning action that decreases bacterial colonization of the catheter tip by up to 89%, compared to standard 24-hour closed-suction systems.

KIMBERLY-CLARK* 72-Hour Closed-Suction Systems, features and benefits:

- A unique cleaning chamber isolates the catheter tip, resulting in more effective cleaning, reduced peep loss, and reduced inadvertent lavage¹²
- Turbulent cleaning action decreases bacterial colonization of the catheter tip by up to 89% over the use of a standard 24-hour closed-suction system⁷
- One-way lavage port is designed to prevent sprayback of irrigation fluids into the environment
- Double-Swivel Elbow provides endotracheal tube connection flexibility and less torque without extra connectors
- Polyurethane sleeve features improved tactile feel, allowing for easier advancement of the catheter ▼
- Closed cleaning chamber allows for automatic fluid instillation
- Available in Double-Swivel Elbow, T-piece, and Saline Pack configurations

▼ Available with Double-Swivel Elbow only

One-way Lavage Port
designed to prevent “sprayback”

Hinged Valve and “PEEP Seal”
isolates catheter tip

Closed Cleaning Chamber
creates turbulent cleaning action, resulting in a cleaner catheter

PEEP Seal
helps reduce peep loss and inadvertent lavage

Integrated MDI Port
(where available)



KIMBERLY-CLARK* Closed-Suction Systems... A world leader in closed endotracheal suction systems.

KIMBERLY-CLARK* Closed-Suction Systems are designed to safely suction patients on mechanical ventilation by removing secretions from the airway, while maintaining ventilation and oxygenation throughout the suctioning procedure.

“Avoiding disconnection from the ventilator allows the prevention of approximately 50% of the lung volume fall observed during suctioning after disconnection.”⁹

Closed Tracheal Suction Systems Recommended

Patients who breathe solely through an artificial airway require the removal of airway secretions, and clearance is essential.⁴

As a best practice in the prevention of VAP, the American Association for Respiratory Care (AARC) recommends maintaining a closed ventilator circuit.⁶

VAP is associated with high incidence rates, mortality and costs.¹

- **Approximately 86% of hospital-associated pneumonia is linked with mechanical ventilation²**
- **VAP may account for up to 60% of all deaths due to Healthcare-Associated Infections (HAI)³**
- **Approximately 8% to 28% of critical care patients develop VAP⁴**
- **Each incidence of VAP is estimated to generate an increased cost of \$20,000 to \$40,000³**

“The pathogenesis of VAP...is linked to two separate but related processes: colonization of the aerodigestive tract with pathogenic bacteria, and aspiration of contaminated secretion.”¹ — Kollef, et al. Respiratory Care, 2005



Benefits of Closed-Suction Systems:

- ✓ Removes secretions from the airway while maintaining ventilation and oxygen therapy throughout the suctioning procedure¹⁰
- ✓ Protects the caregiver from exposure to patients' body fluids¹⁰
- ✓ Reducing the opportunity for contamination to occur from outside pathogens will reduce the colonization within the circuit; therefore, maintaining a closed circuit is emphasized by the AARC and others.¹⁰

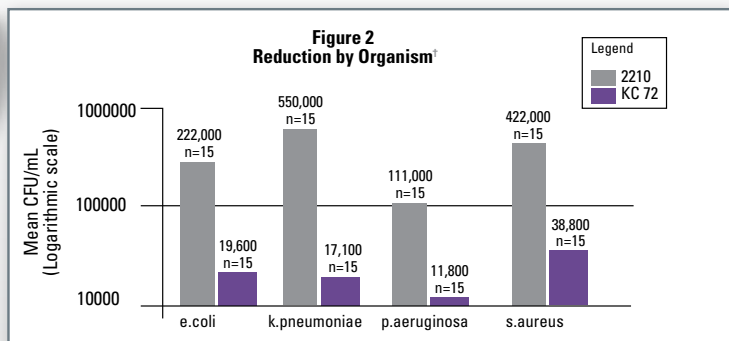
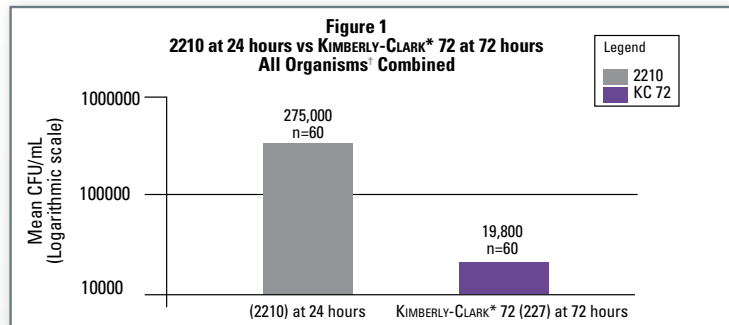


Proprietary Technology. Cleaner Catheter Tip Cleaning.

As the market leader in closed-suction systems, Kimberly-Clark offers you the only closed-suction catheter on the market with proprietary features uniquely designed to reduce bacterial colonization.

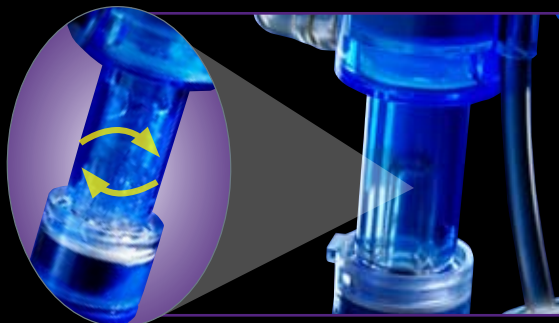
Cleaner is Better¹⁰

KIMBERLY-CLARK 72-Hour Catheters, at 72 hours, show over an (89%) reduction in mean catheter tip colonization compared to the control 2210 catheters at 24 hours (p<0.001)⁷*



*240 catheters were equally divided then challenged with four common bacterial pathogens, which cause ventilator-associated pneumonia.

Turbulent Cleaning. How It Works:

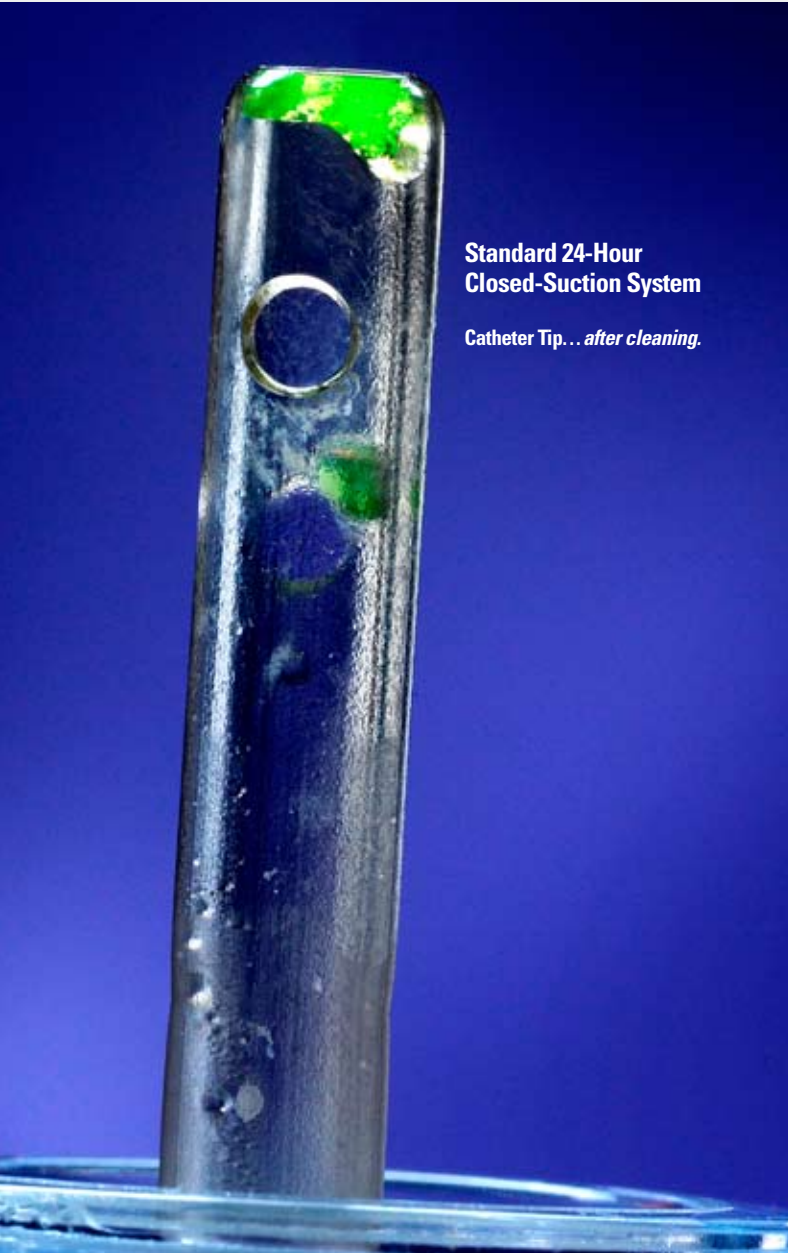


Where The Cleaning Takes Place:

The catheter tip is retracted entirely into the unique isolated cleansing chamber, sealed by our patented "PEEP seal" technology. Once activated, both the suction and the saline produce the turbulent cleaning action, providing a cleaner catheter tip.

KIMBERLY-CLARK*
72-Hour Closed-Suction Systems

BALLARD TRACH CARE* System*



**Standard 24-Hour
Closed-Suction System**

Catheter Tip... after cleaning.



KIMBERLY-CLARK*
72-Hour Closed-Suction System

Catheter Tip... after cleaning.

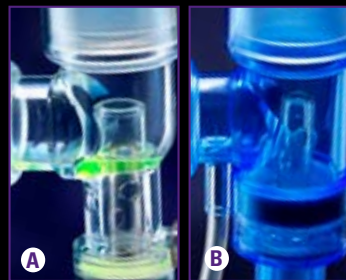
**Turbulent cleaning
action decreases
bacterial colonization**

89%



Isolating The Catheter Tip:

The KIMBERLY-CLARK* 72-Hour Closed-Suction System includes a hinged valve flap or "PEEP seal" which closes under vacuum to allow the saline vial to empty into the catheter-cleaning chamber without squeezing.



The Results:

In laboratory tests, standard 24-Hour catheters were cleaned by the usual method of squeezing the saline vial to dispense. **A**

KIMBERLY-CLARK* 72-Hour Closed-Suction System catheter tip was cleaned in the isolated cleaning chamber, which prevents bacteria from re-entering the patient's airway. **B**

The KIMBERLY-CLARK ADVANTAGE*

KNOWLEDGE NETWORK* Accredited Education

Online at HALwatch.com
On-site rep-facilitated programs
HAI Education Bus

Ongoing Customer Support

In-service training
Product technical support
Unsurpassed customer service

Expert Sales Force

Healthcare Industry Representative Credentialed
On-site trained in hospitals

Infection prevention website:

www.HALwatch.com



Tools & Best Practices

Infection Prevention Education Toolkits
Product Use and Selection Tools
Best Practices/ Industry Guidelines

Clinical Research

Staff medical professionals to advise and direct clinical research
Clinical Scientific research to measure clinical outcomes in patients
Peer-to-peer consultation

Commitment to Excellence

At Kimberly-Clark, our mission is to deliver innovative healthcare solutions supported by in-service training, clinical research and accredited education that you can depend on to meet the demands of your fast-paced world. Whether your needs involve preventing healthcare-associated infections or surgical and digestive solutions, or pain management, with Kimberly-Clark you'll always have one less worry.



Healthcare-Associated Infection Solutions



Surgical Solutions



Digestive Health



Pain Management

For more information, please call 1-800-KCHELPS in the United States or visit our web site at www.kchealthcare.com.

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