

# DEFENDO™

Sterile Single-use Valves

Procedure



# A HISTORY OF INNOVATION

In 2010, Cantel became the first company to offer single-use endoscope valves and we now manufacture over 9 million DEFENDO™ Valves every year.

We continue to test and refine our valves to produce products that give physicians more control during the procedure and make procedures more efficient.

- Our research and development team is constantly working to better understand all the available valve options on the market and to create valves that offer solutions to unmet clinical needs.
- Our verification testing includes multiple tests for force and suction to help create valves that don't exhibit some of the common issues with reusable and other single-use valves: clogging, sticking and loss of insufflation.
- The consistency and accuracy we achieve in our manufacturing processes means that less than a tenth of one percent of our valves exhibit a reportable issue.<sup>1</sup>

## SOCIETY GUIDELINES SUPPORT THE USE OF SINGLE-USE ENDOSCOPE VALVES

### CSA

" The reprocessing of reusable endoscopic accessories shall be performed in the same manner and care as the reprocessing of the endoscopes ... For devices that are difficult to reprocess or cannot be reprocessed effectively or safely (devices with sharp components, small lumens, etc.), single-use devices or components shall be used."<sup>2</sup>

### AORN

" Parente conducted a nonexperimental study to evaluate the difficulty with manual cleaning and disinfection of endoscopic biopsy port valves ... The researchers found eight of the 15 valves (53.3%) exhibited some form of debris or potential contamination ... The researchers concluded that single-use biopsy port valves provided a higher degree of patient safety."<sup>3</sup>

### AAMI

" Processing of certain reusable endoscope components such as air/water and suction valves ... require the same level of inspection, cleaning and high-level disinfection or sterilization as the endoscopes themselves." Providers should therefore "... consider the use of single-use, disposable valves."<sup>4</sup>

### SGNA

" ... literature suggests that reusable buttons & valves be reprocessed and stored together with the endoscope as a unique set for tracking purposes."<sup>5</sup>

# YOUR PARTNER IN THE FIGHT AGAINST HEALTHCARE-ASSOCIATED INFECTIONS (HAIs)

**Reducing the risk of infections for endoscopy patients is critically important. More HAIs and outbreaks have been linked to contaminated endoscopes than to any other medical device.<sup>6</sup>**

For patients who contract an HAI the consequences can be significant. In Canada, over 220,000 people contract HAIs each year and more than 8,000 people die.<sup>7</sup>

For more than 40 years Cantel has been delivering innovation and excellence in endoscope reprocessing. We offer a comprehensive line of endoscope reprocessing products including market-leading detergents and disinfectants, technologically advanced automated reprocessors, transportation systems, drying and storage cabinets, and equipment tracking systems.

**Our ecosystem of product and service offerings comes together in our Complete Circle of Protection,** an infection prevention program designed to help you streamline reprocessing workflow, improve department efficiency, and reduce the risk of infection.



## THE COMPLETE CIRCLE OF PROTECTION

As the global vanguard in infection prevention, **only Cantel delivers the Complete Circle of Protection**, a full-value, proactive partnership dedicated to helping you remove risk, streamline operational efficiencies and optimize your success.

**PROCEDURE** Reducing the risk of patient cross contamination is at the forefront of infection prevention. Cantel innovates infection control products designed to improve patient outcomes, while increasing procedural efficiency.

# THE BEST DEFENSE

## IS DEFENDO™ STERILE SINGLE-USE VALVES

### INFECTION PREVENTION

**The risk of infection from improperly cleaned and disinfected reusable endoscope valves is extremely high due to their complex design.**

Meticulous brushing is required during reprocessing and that still may not be sufficient to ensure a safe, patient-ready endoscope. DEFENDO Sterile Single-use Valves solve the issue of reusable valve reprocessing by offering a single-use option that ensures sterile valves for every procedure.

### PERFORMANCE

**DEFENDO Valves are high-performance, high-quality products that support procedural control and efficiency.**

Our verification testing includes multiple tests for force and suction to help create valves that don't exhibit some of the common issues with reusable and other single-use valves: clogging, sticking and loss of insufflation. When you experience these issues during a procedure, the result can be a longer, more difficult procedure.

**DEFENDO SINGLE-USE VALVES ARE COMPATIBLE WITH LEADING GI ENDOSCOPES, INCLUDING OLYMPUS, PENTAX 90 AND i10 SERIES, AND FUJIFILM 500 AND 600 SERIES.**

DEFENDO Single-use Valves for Olympus Endoscopes



DEFENDO Single-use Valves for Pentax 90 and i10 series Endoscopes



DEFENDO Single-use Valves for Fujifilm 500 and 600 series Endoscopes



## IMPROPER VALVE REPROCESSING

The complex design of reusable endoscope valves makes them exceptionally difficult to clean and disinfect. A laboratory study of "patient-ready" valves found widespread, inadequate reprocessing of air/water and suction valves.<sup>8</sup>



**Bacteria, yeast, moulds and bacterial spores** were detected on 56% of the valves tested.

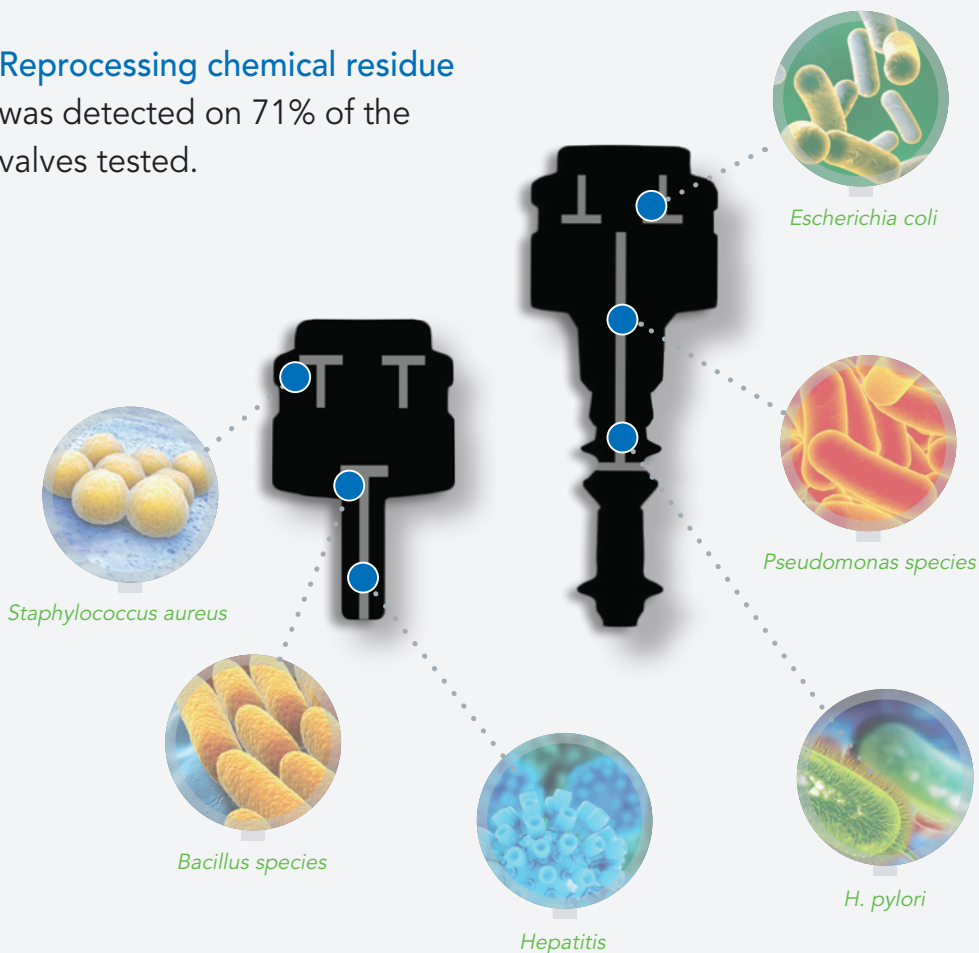
The pathogenic microorganisms detected on the reprocessed valves included *Staphylococcus aureus*, *Escherichia coli*, *Bacillus species*, *Pseudomonas species*, *Hepatitis* and *H-Pylori*.<sup>8,9</sup>



**Endotoxin/pyrogen** was detected on 20% of the valves tested.



**Reprocessing chemical residue** was detected on 71% of the valves tested.



## DEFENDO™ Sterile Single-use Valves Ordering Information

### OLYMPUS GI ENDOSCOPES

PART NUMBER	DESCRIPTION
100301	Single Use Biopsy Valve
100303	Single Use Y-OPSY™ Valve
4000096	Single Use Cleaning Adapter
100322	5-piece Kit (Single Use Air/Water, Suction and Biopsy Valves, ENDOGATOR™ Connector and Cleaning Adapter)
100323	4-piece Kit (Single Use Air/Water, Suction and Biopsy Valves and Cleaning Adapter)
100310	4-piece Kit (Single Use Air/Water, Suction and Biopsy Valves and ENDOGATOR™ Connector)
100311	3-piece Kit (Single Use Air/Water and Suction Valves and ENDOGATOR™ Connector)
100305	3-piece Kit (Single Use Air/Water Suction and Biopsy Valves)
100306	2-piece Kit (Single Use Air/Water and Suction Valves)



### PENTAX GI ENDOSCOPES

100302	Single Use Biopsy Valve
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### PENTAX 90 AND i10 SERIES GI ENDOSCOPES

100315	4-piece Kit (Single Use Air/Water, Suction and Biopsy Valves and ENDOGATOR™ Connector)
100316	3-piece Kit (Single Use Air/Water, Suction and Biopsy Valves)
100317	2-piece Kit (Single Use Air/Water and Suction Valves)



### FUJIFILM GI ENDOSCOPES

100301	Single Use Biopsy Valve
100303	Single Use Y-OPSY™ Valve

### FUJIFILM 500 AND 600 SERIES GI ENDOSCOPES

100312	4-piece Kit (Single Use Air/Water, Suction and Biopsy Valves and ENDOGATOR™ Connector)
100313	3-piece Kit (Single Use Air/Water, Suction and Biopsy Valves)
100314	2-piece Kit (Single Use Air/Water and Suction Valves)



1. Customer service data on file.
2. CSA Standards. "National Standard of Canada: Canadian medical device reprocessing." (2018, March)
3. AORN. "2016 Guidelines for Perioperative Practice: Guideline for Processing Flexible Endoscopes." (2016, February)
4. AAMI. "American National Standards ANSI/AAMI ST91: 2015. Flexible and semi-rigid endoscope processing in health care facilities." (2015)
5. SGNA. "Standards of Infection Prevention in Reprocessing of Flexible Gastrointestinal Endoscopes." (2015)
6. Rutala, W.A., Weber, D. J., and the Healthcare Infection Control Practices Advisory Committee (2008). Guideline for Disinfection and Sterilization in Healthcare Facilities (Last update: February 15, 2017). Retrieved from CDC: <https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines.pdf>
7. Canadian Patient Safety Institute. "Healthcare Associated Infections (HAI)." Retrieved from CPSI: [http://www.patientsafetyinstitute.ca/en/Topic/Pages/Healthcare-Associated-Infections-\(HAI\).aspx](http://www.patientsafetyinstitute.ca/en/Topic/Pages/Healthcare-Associated-Infections-(HAI).aspx)
8. Pearce, P.J. (2011, August). A Report on the Widespread Inadequate Reprocessing of Endoscope Air/Water and Suction Valves by Healthcare Facilities. Retrieved from: [http://www.medivators.com/sites/default/files/minntech/documents/Improper%20Valve%20Reprocessing%20Study\\_Sept%202017\\_50098-1504%20Rev%20A.pdf](http://www.medivators.com/sites/default/files/minntech/documents/Improper%20Valve%20Reprocessing%20Study_Sept%202017_50098-1504%20Rev%20A.pdf)
9. ASGE Quality Assurance Endoscopy Committee. "Guideline: Infection control during GI endoscopy." Gastrointestinal Endoscopy. (2018, March). Print.

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[www.cantelcanada.com](http://www.cantelcanada.com)

#### TO PLACE AN ORDER

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