

# Broncoflex™

Single-use Bronchoscope



The only  
« Made in France »  
single-use bronchoscope

# Benefits of single-use bronchoscope



## No cross-contamination

Sterile from the pouch, enhance patient safety

Reusable bronchoscopes are difficult to clean and disinfect due to their long and narrow working channel.

The transmission of pathogenic organism via contaminated reusable bronchoscopes remains an evident risk, even if appropriate decontamination procedures are adhered to.

3%

Risk of residual cross-contamination after decontamination of a bronchoscope following the guidelines

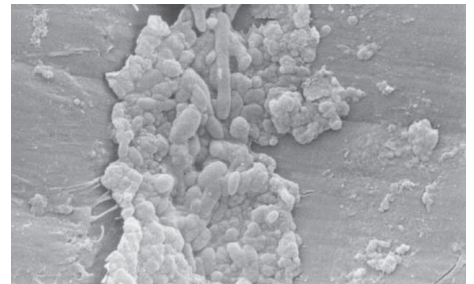
21%

Risk of a patient developing an infection following the use of a contaminated reusable bronchoscope

24,421€

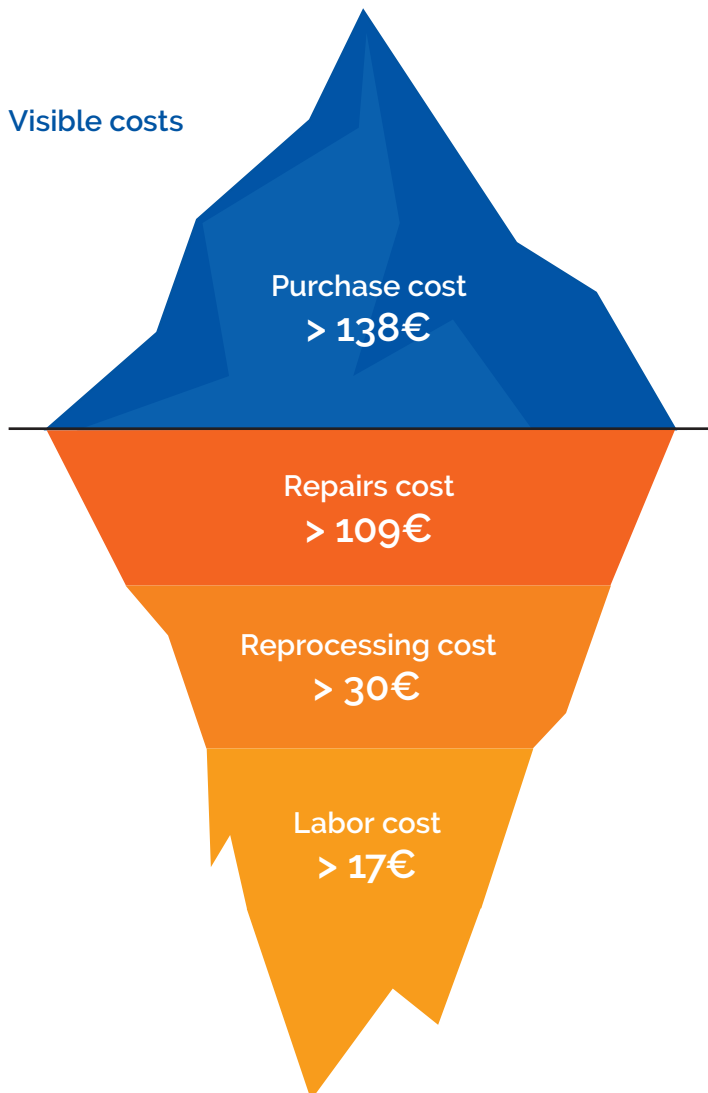
Additional cost of treatment per patient having contracted VAP

= 1 patient infected each 158 procedures<sup>(2)</sup>  
(154€ per procedure)



Dirt and micro-organisms in a working channel<sup>(4)</sup>

## Visible costs



## Cost-effective

No reprocessing or repair

Decontamination cycles and recurrent repairs of reusable bronchoscopes represent very significant and often underestimated costs.

Procedures are complex, costly in terms of material and human resources and require several steps, immobilizing equipment for long periods of time.

Cost per use of reusable bronchoscope  
= 294€<sup>(3)</sup>



## Always available

Ready to use solution, frees up resources and streamlines workflow

With reusable devices often in the process of being decontaminated or repaired, some procedures need to be cancelled or delayed, resulting in financial losses for hospitals and critical patient care.

# Benefits of single-use bronchoscope



## Low environmental footprint

Decrease waste, energy and resource consumption

Materials used to reprocess one endoscope <sup>(4)</sup>

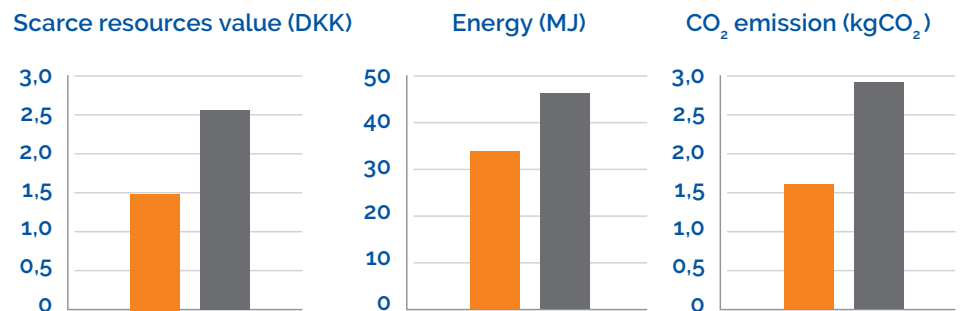


Due to the use of detergents and personal protective equipment, reusable bronchoscopes are associated with a higher level of material and energy consumption as well as emissions of CO<sub>2</sub> compared to single-use scopes.



PPE used to reprocess one endoscope <sup>(4)</sup>

### Environmental impacts of reusable vs single-use bronchoscopes\* <sup>(4)</sup>



\*Please note that the graphs compare one single-use scope with one reprocessing operation for reusable bronchoscope.

■ Single-use ■ Reusable

## International guidelines



"Disposable bronchoscopes should be used first line when available" <sup>(6)</sup>

European Society of Anaesthesiology



SIARTI  
PRO VITA CONTRA DOLOREM SEMPER

"Flexible endoscope with separate screen (prefer disposable)" <sup>(7)</sup>



"Single-use flexible fiberoptic bronchoscopes (FOBs) could potentially eliminate the risk of cross infection" <sup>(9)</sup>



"Use of disposable scopes is recommended" <sup>(11)</sup>



"Recommending single-use bronchoscopes due to the risk of contamination of the personnel reprocessing the bronchoscopes" <sup>(10)</sup>

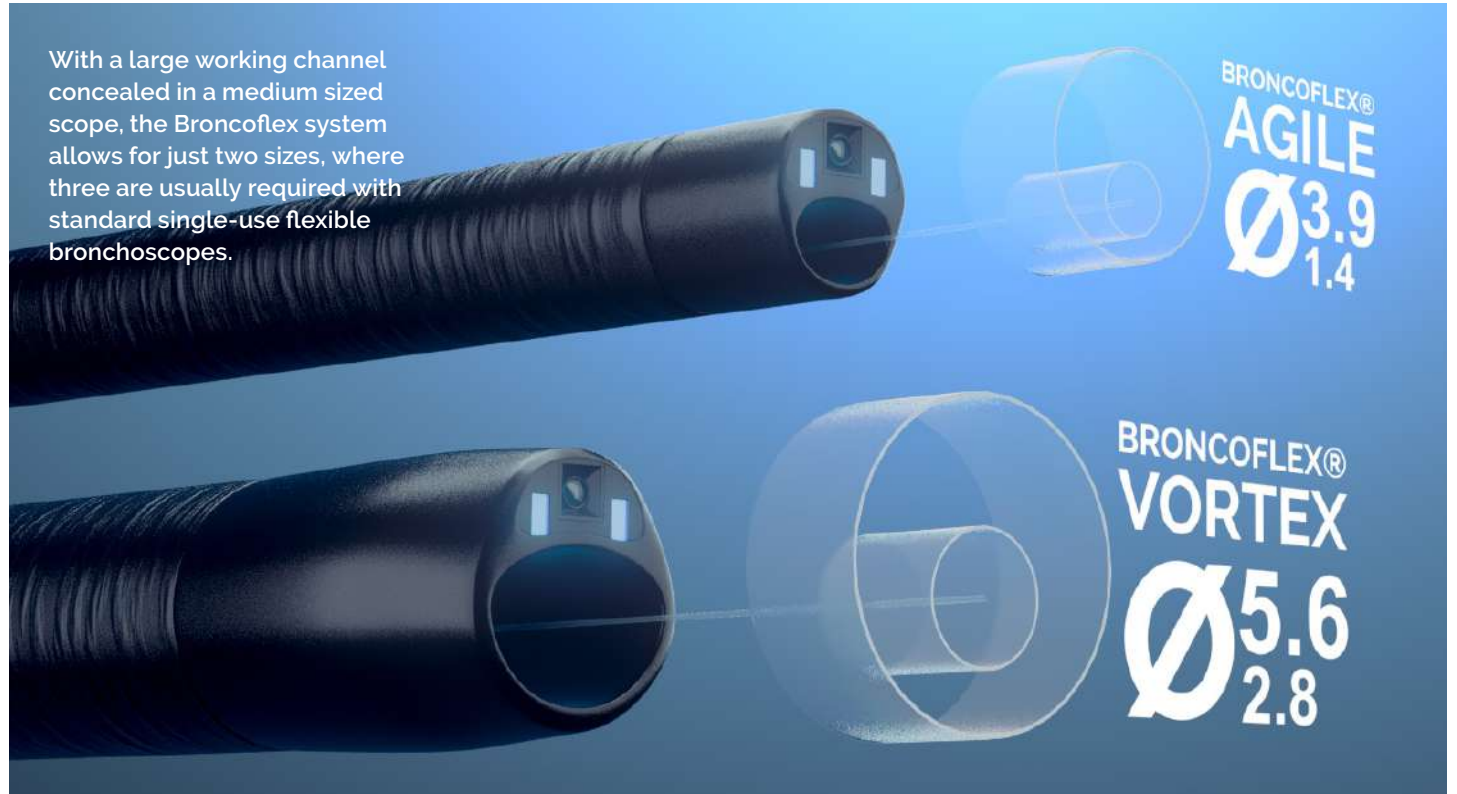


"The use of a disposable endoscope must be considered and proposed in order to reduce the risk of aerosol and manual exposure when cleaning the soiled endoscope" <sup>(8)</sup>

# Broncoflex™ Agile and Vortex

## Two sizes, more options

Broncoflex Agile and Vortex bring innovation with only two sizes that cover the full range of flexible bronchoscopy indications.



### Ergonomics

Easy-grip handle, very similar to using a reusable endoscope, with identical working channel access and a leak-tight biopsy valve.



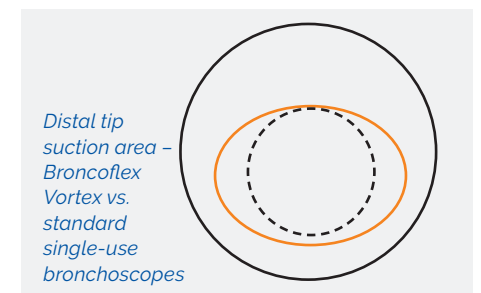
### Maneuverability

The precise, flexible deflection mechanism enables up and down distal angulation of more than 200°. The high resistance of the system maintains superior angulation, even when an instrument is inserted into the working channel.



### Secretion management

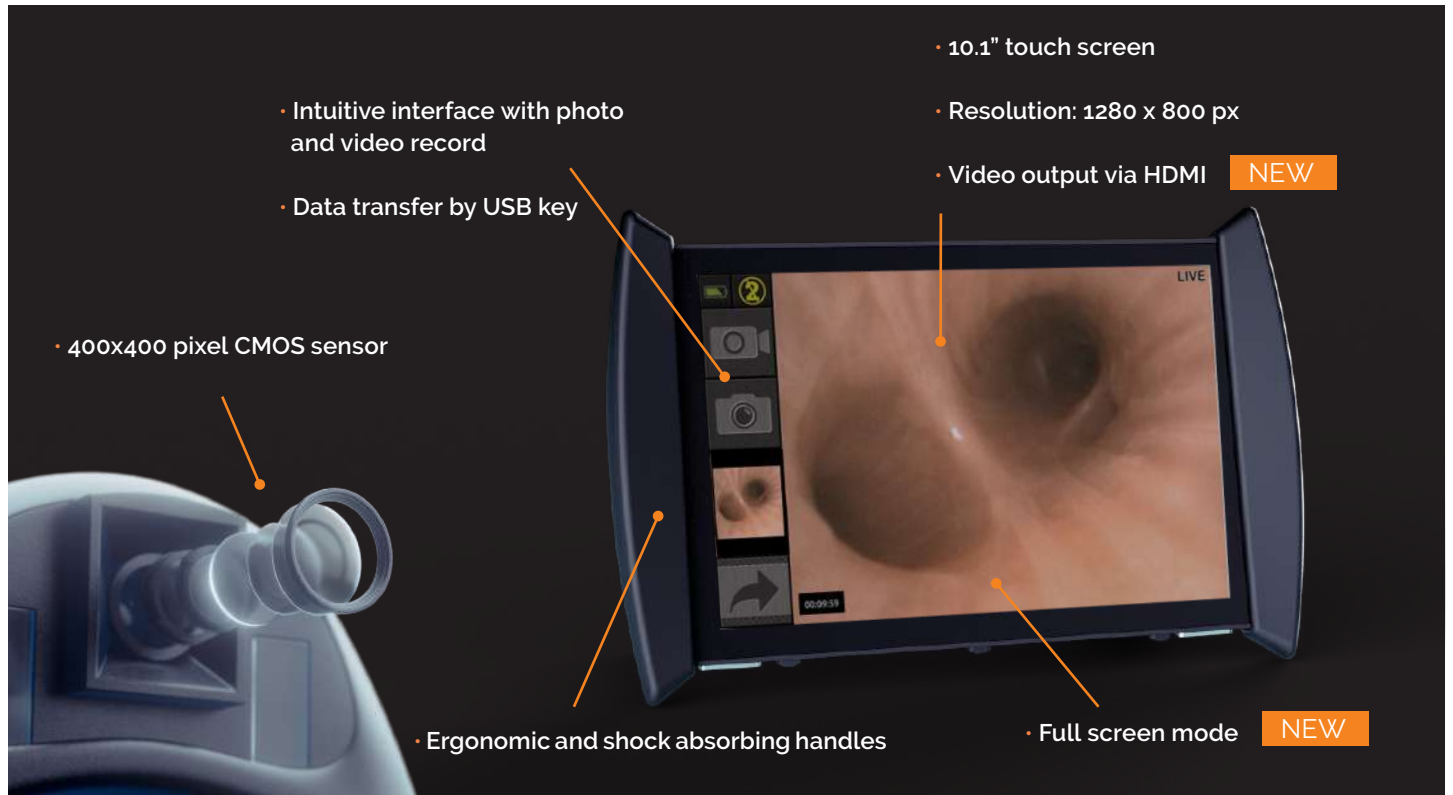
The wide distal opening forms a suction cone that helps facilitate the suction of secretions and fluids in distal proximity to the endoscope.



# Screeni™ HD

## High Definition Display Screen

Screeni™ HD is much more than a simple touch screen, the viewing system incorporates an algorithm that ensures the display of a high-definition image.



### High-definition system

Enhanced image treatment algorithm and light management system:

- Decreased overexposure when close to the tissue
- Enables superior near and distal vision



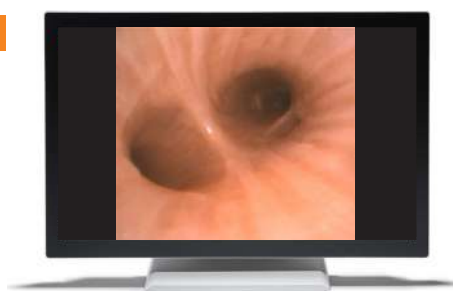
### Quick connection and transportable system

The Screeni™ is equipped with a quick-connect bracket enabling the system to be attached to an IV pole. Mobile and lightweight so that it can be easily used in often small spaces. Broncoflex™ Agile and Vortex endoscopes can be suspended on the Screeni™ support feet.



### Screeni Video Station NEW

The Screeni™ can be connected to a full HD 21.5" medical touchscreen and mounted on a IV pole. This external screen is easy to operate and the perfect size and format for a variety of applications.



# Clinical indications: operating room

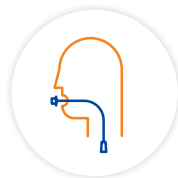
The Broncoflex™ can be used for all flexible bronchoscopy therapeutic indications. The diagnostic indications accessible are those involving tissue (biopsy) or cellular (BAL) samples.



## Single-lung ventilation

In cardiothoracic surgery, it may be necessary to exclude ventilation of the lung that is being operated on or located close to the site of surgery using a double-lumen tube.

**Broncoflex Agile characteristics:**  
small external diameter of 3.9mm  
> Benefits: compatible with all 35Fr double lumen tube



## Difficult intubation

An endotracheal tube is guided into the trachea using the bronchoscope in the event of difficult intubation, either expected or unexpected, following several failed attempts with a laryngoscope.

**Broncoflex Agile characteristics:**  
small external diameter of 3.9mm  
> Benefits: compatible with all 5mm ET tubes



## Training

Flexible bronchoscopy is a clinical procedure that requires technical skills to perform. These skills can only be acquired by hands-on training on demo equipment, virtual-reality simulators, or patients (supervised).



# Clinical indications: intensive care unit



## Bronchial wash & Bronchoalveolar lavage

This is performed in patients on mechanical ventilation. Secretions can build up in the lungs and must be removed by suction.

Cell samples are collected from the distal bronchi and then analyzed in the laboratory to make a diagnosis.



**Broncoflex Vortex characteristics: wider working channel of 2.8mm in the same ET tube**  
> **Benefits: maximizes suction and limits negative overpressure**

## Easy BAL Clip™

NEW

Easy BAL Clip™ is a sampling solution for bronchoalveolar lavage procedure.

### Characteristics and benefits:

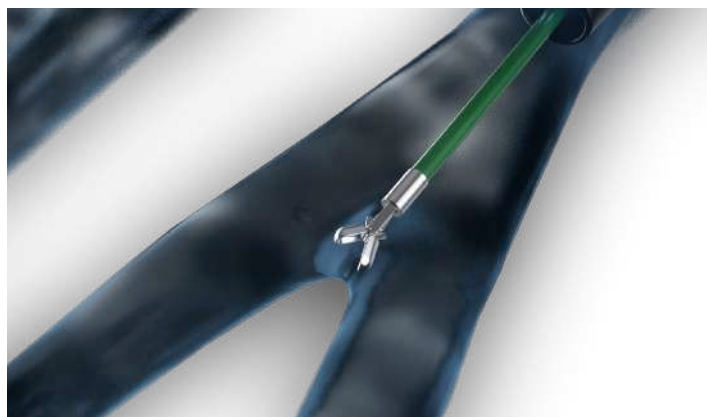
- compatibility with multiple sizes of specimen containers
- improved suction line management
- single operator sampling solution



## Biopsy

Accessories can be used along with the bronchoscopes to perform biopsies or remove foreign bodies.

**Broncoflex Vortex characteristics: efficient, sturdier and more flexible angulation**  
> **Benefits: during instrument use, limits the reduction in deflection angle**



## Percutaneous dilatational tracheostomy

Insertion of a cannula into the trachea following prolonged intubation or after a failed attempt to withdraw mechanical ventilation.

**Broncoflex characteristics: image quality significantly improved**  
> **Benefits: clearer and more detailed distal vision**



# Why Broncoflex™ is the single-use bronchoscope preferred choice?



Entreprise lauréate  
RÉPUBLIQUE FRANÇAISE

Two sizes that cover the full range of flexible bronchoscopy indication



## High suction performance

- True 2.8mm working channel and large 9.95mm<sup>2</sup> suction area



## Most precise bending angle on the market

- More than 200° for both sizes



## << Made in France >>

- Production in Tours

## Ordering information

Designation	Item number	Quantity
Broncoflex Agile	20030001	5
Broncoflex Vortex	10030001	5
Easy BAL Clip	41010000	10
Screeni HD	30030000	1
Full HD 21.5" medical touchscreen - Barco	AMM215WTPP	1
IV Stand - Provita Medical	171858	1
Screeni Video Station Full HD	01000001	1
Video Station Full HD	01000002	1

## Bibliographic references

- (1) Pajkos et al. Is biofilm accumulation on endoscope tubing a contributor to the failure of cleaning and decontamination? *Journal of Hospital Infection* (2004), 58, 224-229
- (2) Terjesen, Christoffer Lilja et al. "Early Assessment of the Likely Cost Effectiveness of Single-Use Flexible Video Bronchoscopes" *PharmacoEconomics - open vol. 1,2* (2017): 133-141.»
- (3) Mouritsen et al. A systematic review and cost effectiveness analysis of reusable vs. single-use bronchoscopes. *Anaesthesia*, 75: 529-540. <https://doi.org/10.1111/anae.14891>
- (4) Ofstead et al. A glimpse at the true cost of reprocessing endoscopes: Results of a pilot project. *Communiqué*, Jan/ Feb, 63-78.
- (5) Sorensen et al. Comparative Study on Environmental Impacts of Reusable and Single-Use Bronchoscopes
- (6) <https://aabronchology.org/wp-content/uploads/2020/03/2020-AABIP-Statement-on-Bronchoscopy-COVID.GAE-updated-Version.pdf>
- (7) <https://www.esahq.org/uploads/2020/03/poster-esa-rev-1-2.pdf>
- (8) <http://splf.fr/wp-content/uploads/2020/03/Precautions-particulieres-endoscopie-bronchique.pdf>
- (9) <https://anaesthetists.org/Home/Resources-publications/COVID-19-guidance/Statements-COVID-19>
- (10) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7193137/pdf/main.pdf>
- (11) <https://www.leidraad.nl/infected-prevention-measures-kno-care-during-covid-19-pandemic.pdf>

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