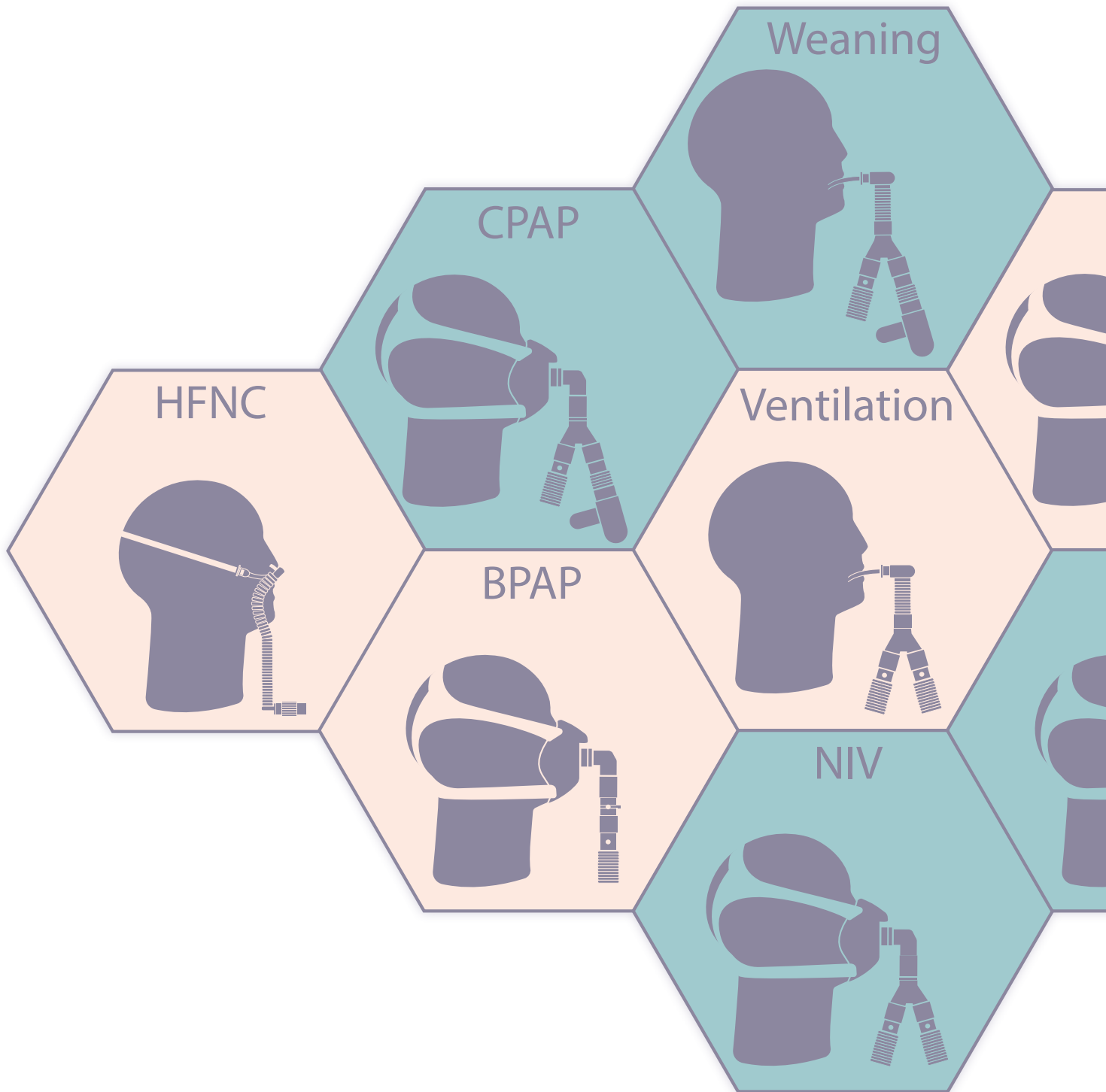


Critical Care

by Armstrong Medical



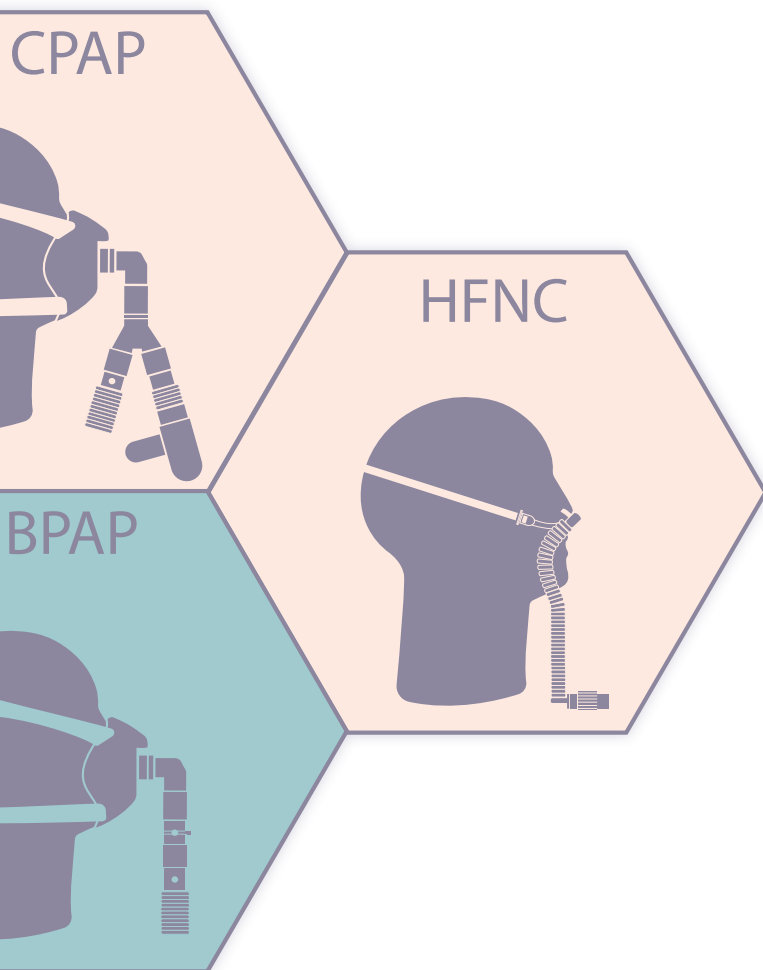
The **Critical Care Pathway** outlines the support therapies to treat or prevent multiple respiratory conditions.



Contents

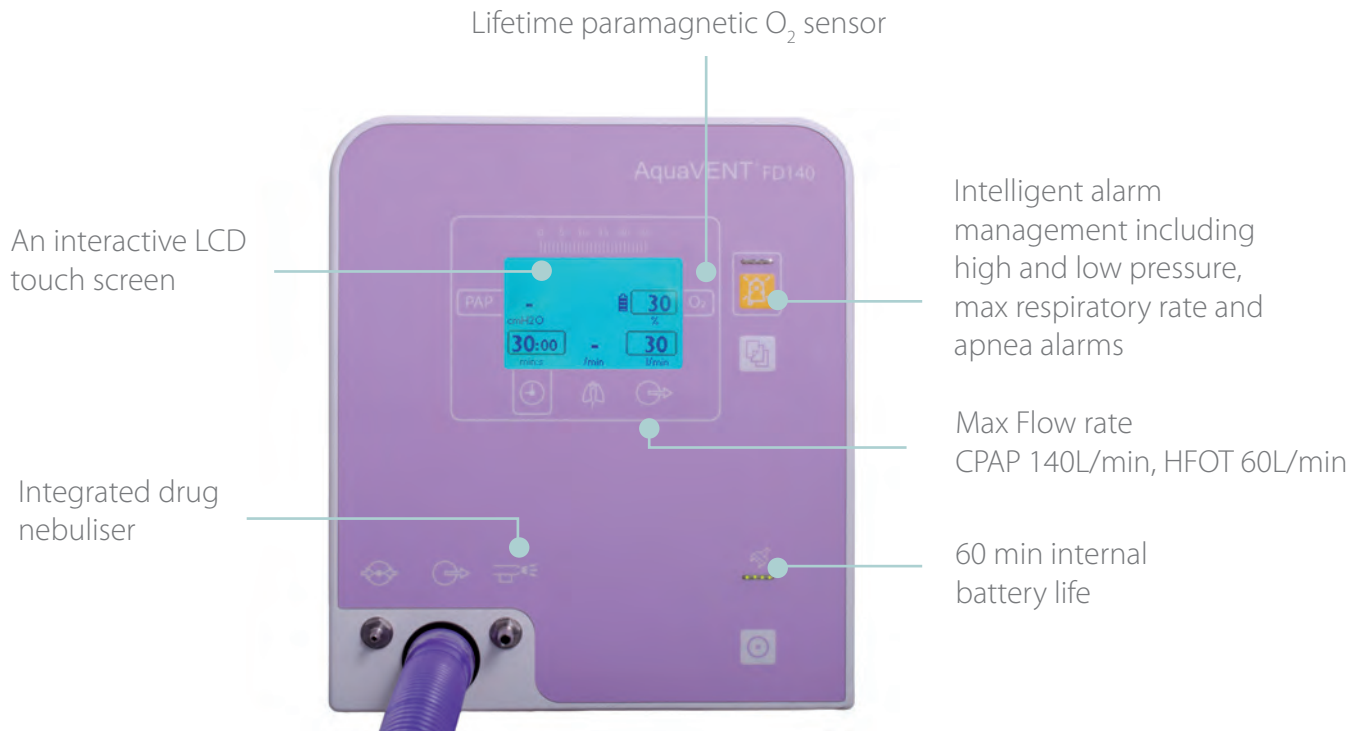
Armstrong Medical's critical care range supports the patient and care giver as they transition between respiratory therapies.

FD140	p4-5
AquaVENT®	p6-7
AquaNASE®/ Ultra-PEP	p8-9
Universal facemask/ Spirale®	p10-11
Flowkit/ BioCote®	p12-13
Product codes/ References	p14-15



FD140

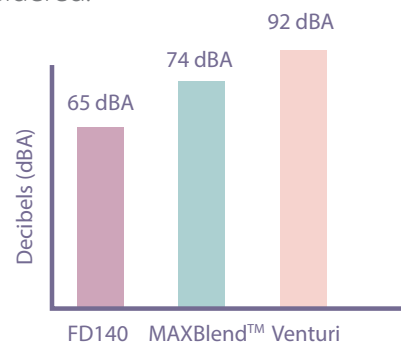
The FD140 is a new generation flow driver for mask or helmet CPAP and high flow humidified oxygen therapy.



The FD140 flow driver is significantly quieter than alternative high flow drivers benefiting patients, visitors and care providers.



Patients in intensive care units suffer from sleep deprivation arising from nursing interventions and ambient noise which may exacerbate confusion and ICU-related delirium. Unit-wide noise reduction programmes should be considered.

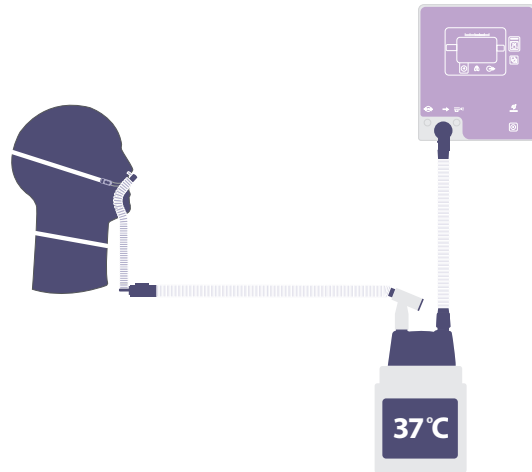


Applications

| High flow

Oxygen therapy delivered through AquaNASE® nasal cannula heats and humidifies the gases with flows up to 60 L/min, reducing oxygen dilution.

- Improved patient comfort
- Reduced oxygen dilution
- Dead space washout
- Improved secretion clearance
- Alveoli recruitment



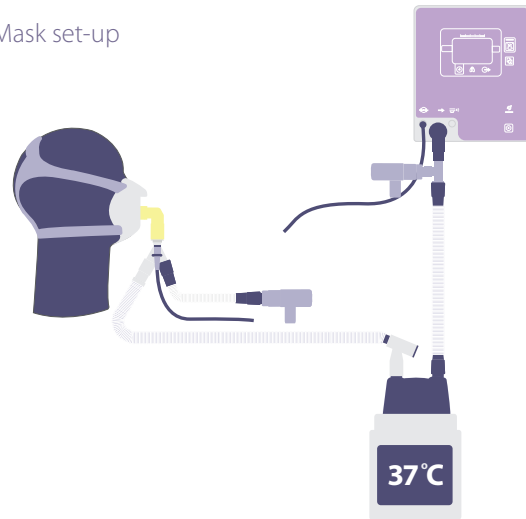
| Mask/ Hood CPAP

Continuous Positive Airway Pressure (CPAP) is delivered to correct hypoxia. Indications include cardiogenic pulmonary oedema and atelectasis.

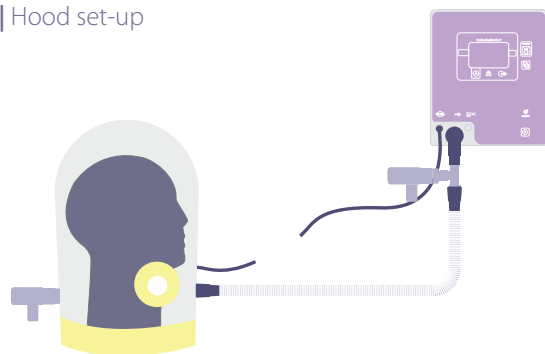
CPAP recruits collapsed alveoli and improves gas exchange by:

1. Application of a PEEP (Positive End Expiratory Pressure) valve to maintain expiratory pressure.
2. Delivering flow to meet the patients peak inspiratory requirements and maintain PAP.
3. Delivery of CPAP is confirmed via pressure manometer.

| Mask set-up



| Hood set-up

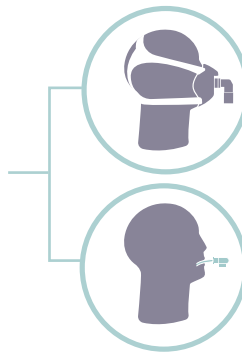


AquaVENT®

Heated breathing systems

AquaVENT® heated breathing systems combine technological advances in thermal conductivity and breathing circuit construction to deliver optimal and controlled humidification.

AquaVENT® heated breathing systems are available for invasive and non-invasive ventilation and may be customised in line with local clinical practice.



*AquaVENT®
Heated wire

Circuit available in single and double limb

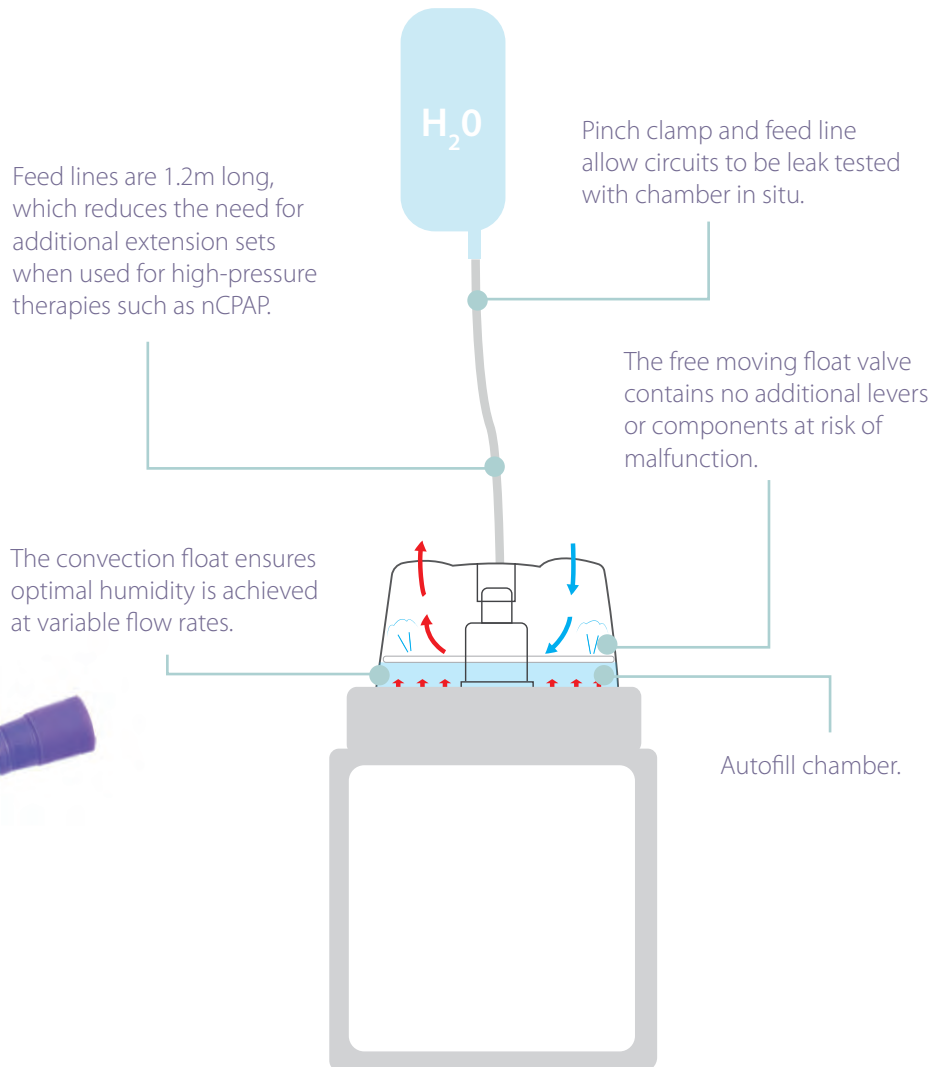


Circuit validated for 14 days

AquaVENT® heated breathing circuits contain BioCote® antimicrobial silver additive to limit the number of microbes on the surface of the breathing circuit, protecting it from microbial colonisation.



AquaVENT® Humidification Chamber | Key Features



AquaVENT® Heater | Key Features

- Invasive or non-invasive mode selection
- Automatic temperature selection
- Low and high temperature alarm
- Over-temperature protection
- Real-time temperature tracking display allows heater plate, chamber and airway temperature to be viewed
- Digital display
- Servo controlled



AquaNASE®

AquaNASE® cannula for HFHOT can be supplied with AquaVENT® breathing systems in a complete Flowkit.

Patients can eat, drink, communicate and mobilise pulmonary secretions without disrupting therapy support.

Heated humidification helps prevent drying of upper airway mucosa increasing patient comfort during oxygen therapy.

Flows closer to a patient's inspiratory demand reduces ambient air entrainment and oxygen dilution.

Use AquaNASE® during patients non-invasive ventilation rest periods for:

- oral hygiene
- hydration
- feeding
- physiotherapy
- managed weaning

| Clinical applications ⁽³⁾

- Acute hypoxemic respiratory failure
- Post-extubation period
- Pre-intubation
- Emergency department
- Bronchoscopy and other invasive procedures
- Palliative care
- Acute heart failure
- Chronic airway disease



High flow humidified PEP

High flow humidified PEP combines two respiratory therapies for the prevention and treatment of post-op pulmonary complications.

Anaesthesia may adversely affect the lung's defence mechanisms impairing the ability to cough and suppressing mucociliary clearance.

Post-operative pulmonary complications (PPC) are linked to increased length of stay and mortality.

Cardiac, thoracic and abdominal surgery present the highest risk of PPC. ⁽¹⁾



90% Anaesthetised patients with Atelectasis

36% Patients with radiographically diagnosed atelectasis that develop pneumonia. ⁽²⁾

Key Features | AquaNASE®/ Ultra-PEP

Humidified high flow with **AquaNASE®** maintains mucociliary function and improves oxygenation by delivering flows close to the patients' peak inspiratory requirement.

Ultra-PEP is used to mobilise secretions, assist with airway clearance and prevent or reverse post-operative atelectasis.



Ultra-soft nasal prongs.

Button clip for extra security.

Easy glide neck strap.



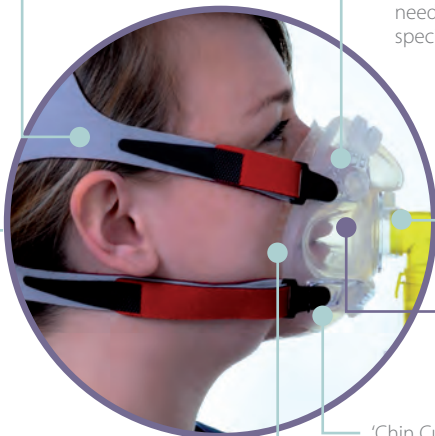
“ Since introducing Armstrong Medical’s mask, we have seen a significant increase in patient compliance and success of respiratory therapies. ”

Key Features | Universal face mask

5 adjustment points ensure optimal anatomical positioning and enhanced patient comfort .

Deep sealing flange on the nose bridge helps create a low pressure seal.

Swivel elbow connector; non-vented or vented with anti-asphyxia valve can be adapted for CPAP and BPAP reducing the need to stock 2 mask specifications.



Low deadspace mask aids CO₂ clearance.

Metro Seal™ holds an accessory tube in place on a patient’s face, creating a seal between the mask, tube and patient’s skin.

‘Chin Cup’ provides stability and comfort preventing movement of the mask into the patient’s line of sight.

Customer testimonials

“Some patients avoid being intubated and ventilated, thus avoiding the associated risks and costs. Patients have tolerated the Armstrong mask for days, whereas other masks were only tolerated for a matter of hours”

“The Armstrong Medical facemask has reduced the need for multiple interface brands, resulting in approximate savings of over £12,000 per year.”

Deadspace comparison

Universal face mask	Size	P	Xs	S	M	L
	Deadspace	78	88	99	125	143
Comparable Masks	Deadspace	-	260	280	300	320
Full face mask	Deadspace	-	375	-	-	550



Spirale®

Patients with acute respiratory failure are often removed from non-invasive ventilation to receive inhaled bronchodilators. ⁽⁴⁾

Many patients may not tolerate removal of their respiratory support and subsequently their bronchodilator therapy may not be completed.

55% interrupt respiratory therapy for delivery of bronchodilators.

59% have experienced patient desaturation during this period.

92% of clinicians agreed it beneficial to deliver MDI bronchodilator without interrupting respiratory support.

*Results from 67 clinicians surveyed at European Society of Emergency Medicine 2014



Cost benefits of Spirale®

Bronchodilators are given a minimum of 4 times per day and a nebuliser should be disposed of after each treatment.

Using Spirale® instead of a nebuliser could lead to savings of cost and nursing time. ⁽⁵⁾

Reduced nursing time		
	Nebuliser	*Spirale®
Total treatment time	19 min 54 s	2 min 3s
Set-up time	1 min 38s	23s

*Deadspace with Spirale®

Volume, collapsed and locked - **16ml**

Volume, fully open and expanded - **133ml**

*Product code- AMDN 1311/005

Flowkit

Design your own Flowkit by selecting the products best suited to your local practice.



Patient Interface



Breathing Systems



Humidifier/
Flow drivers



Airway Clearance



Accessories

Better for patient comfort

Flowkit incorporates enhanced interface design and optimal humidification for improved patient comfort.

Easier for healthcare professionals

A "ready-to-go" solution to minimise set up time, aid transition between respiratory therapies and reduce waste.

Efficient procurement

Flowkit reduces inventory costs and storage requirements.

Customise
and simplify to
reduce waste...

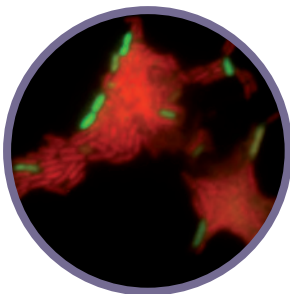
Protected by BioCote®

AquaVENT® Heated Breathing Systems contain **BioCote®** antimicrobial silver additive to limit the numbers of microbes on the surface of the breathing circuit, protecting it from microbial colonisation.

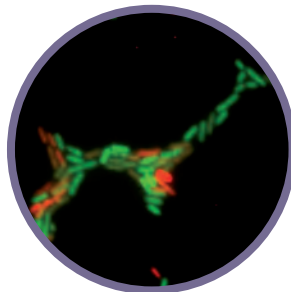


Microscopy showing viable *P. aeruginosa* cells as green-coloured and dead *P. aeruginosa* cells as red-coloured.

Treated polymer
(Containing BioCote®)

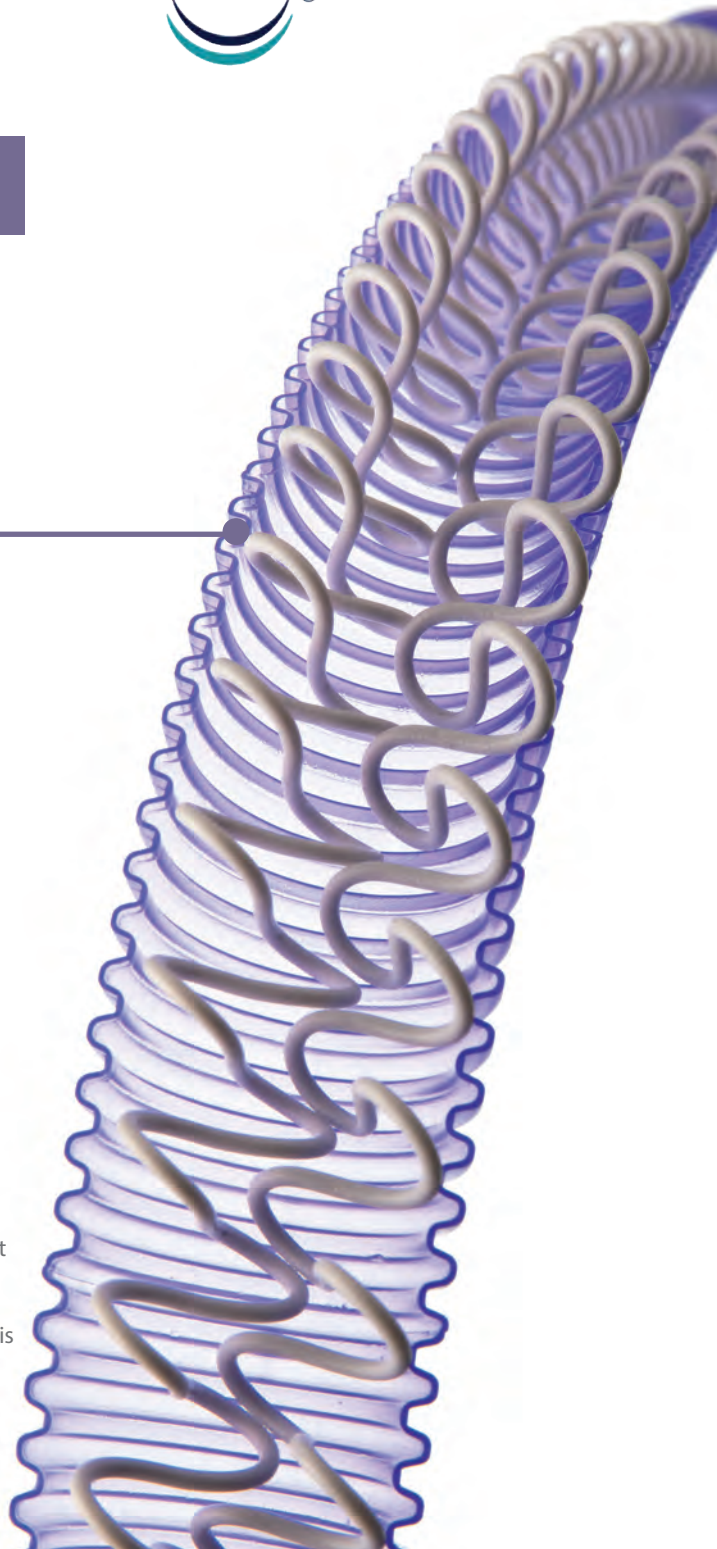


Untreated polymer
(Not containing BioCote®)



BioCote® antimicrobial protection is effective against a broad spectrum of micro-organisms:

- Clostridium difficile
- Legionella pneumophila
- MRSA
- Pseudomonas aeruginosa
- Salmonella enteritidis
- Salmonella typhimurium
- Staph aureus
- Vancomycin Resistant Enterococcus
- Aspergillus niger
- Aspergillus brasiliensis
- Candida albicans
- Penicillium sp.
- Influenza A H1N1



Product codes

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