

Dri-Therm™ dual heated wire breathing system

Reduced condensate technology



Critical Care ▪ Dri-Therm™ dual heated wire breathing system

Dri-Therm™ reduced condensate technology

Condensation is a common issue when humidifying mechanically ventilated patients in the ICU. Excess condensation in the ventilator and breathing system can quickly accumulate, leading to higher airway resistances, compromised ventilator performance and additional work for the patient and the clinician.

The Dri-Therm heated wire breathing system is designed to reduce the humidity of gas in the expiratory limb, keeping tubing clear of fluid, helping maintain a closed system and protecting the ventilator from high levels of humidity.

The Dri-Therm system combines permeable tube technology with Intersurgical's twin coil wire and high quality product design. The temperature and humidity of the gas is conditioned to deliver the optimal level of humidification to the patient whilst minimising excess condensate in the gas pathway. Intersurgical's transparent, lightweight tubing and connectors ensure complete visibility of the breathing system patency and performance throughout patient treatment.

Features and benefits



The design of Dri-Therm allows for a closed breathing system which:

- Maintains PEEP
- Maintains O₂ saturation
- Extends system use for up to 14 days
- Reduces the risk of cross infection



Improved ventilator performance

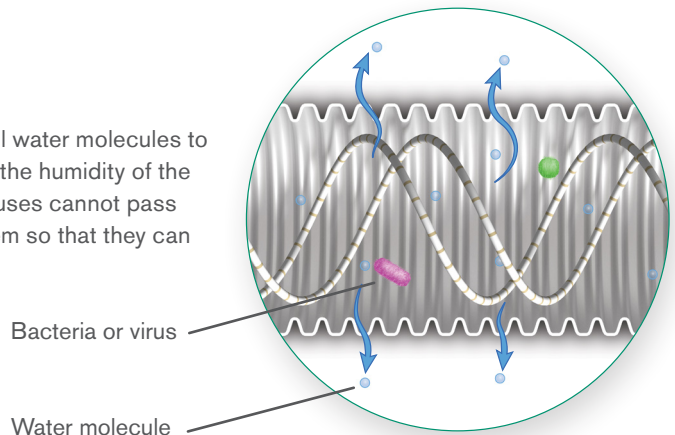
- Protect ventilator valves and sensors from condensation
- Maintain ventilator performance

Filter remains dryer for longer

- Resistance remains low
- Reduce filter changes

Permeable tube

Dri-Therm expiratory tubing is made of material that allows small water molecules to pass through the limb wall. The permeability of the tube lowers the humidity of the gas and removes excess condensate. Larger bacteria and viruses cannot pass through the tubing and are contained within the breathing system so that they can be safely filtered at the end of the breathing system limb.





Dri-Therm heated wire breathing system include the patented Intersurgical dual float auto fill humidification chamber. The auto fill chamber design includes a number of features to improve safety and ease of use.

Inline filter

Prevents any debris entering the chamber

Dual valve

For added security

Clearly visible water level indicator

Easy to see for instant accurate fluid level assessment

Advanced dual float design

The closed cell material of the primary float ensures a totally reliable unsinkable rigid mechanism. Whilst the secondary float provides added security

Protective cassette

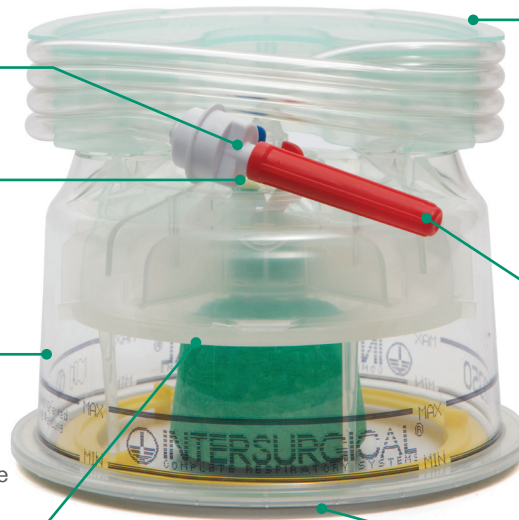
Protects the chamber from contamination and conveniently stores the fill set before use

Strong polycarbonate clear material

Improved compliance characteristics. Allows for easy visual assessment of the fluid level at all times

Shrouded heated plate cover

Prevents accidental burns when removing the chamber from the heater base



▶ Video available at www.intersurgical.com/info/video

Improved filtration

Filtering and protecting the ventilator and ICU environment from expired pathogens has never been more important. Unfortunately, saturated filters can be a real problem with heated wire breathing systems. High humidity gas can cause water to condense in the filter media and over time, this can lead to an increase in resistance and increase in patient Work of Breathing^[1]. Dri-Therm heated wire systems dry the exhaled gas before it reaches the filter; this ensures that the humidity is reduced to a level that prevents condensation developing^[2].

Modular design

Allows easy transition between invasive ventilation, non-invasive ventilation and high flow oxygen therapy.

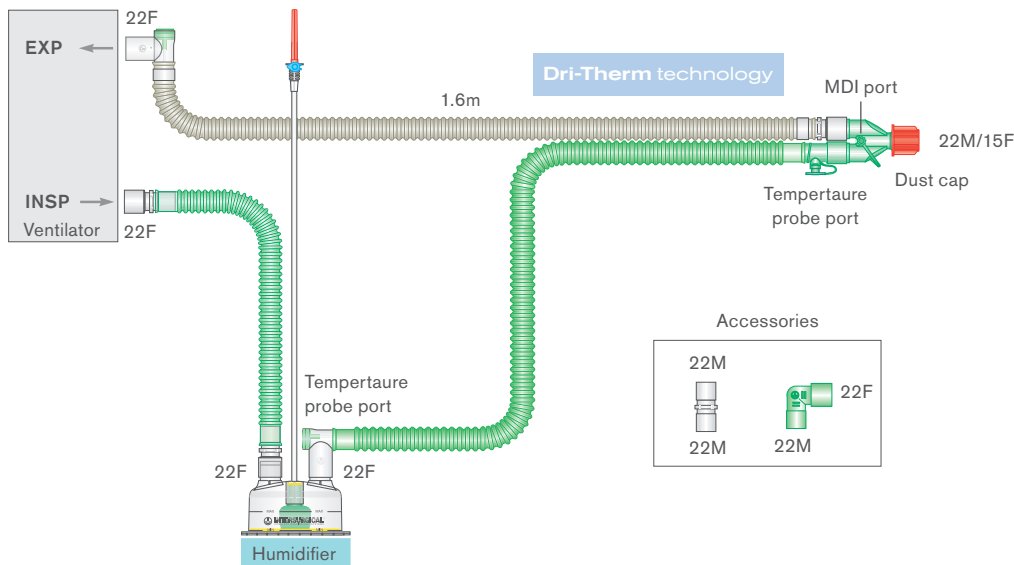


[1] Buckley PM. Increase in resistance of in-line breathing filters in humidified air. British Journal of Anaesthesia 1984; 56: 637– 43

[2] Internal laboratory testing

Dri-Therm™ dual heated wire breathing systems

Suitable for use with the majority of humidifiers and ventilators found in intensive care areas.



Code	Description	Box Qty.
2066310	22mm Dri-Therm dual heated wire breathing system with autofill chamber and extra limb. ≥ 1.6m	7

Accessories

Humidifier electrical adaptor leads

Code	Description	Humidifier	Box Qty.
5601000	Electrical adaptor lead for dual heated wire breathing systems with black plug	MR850™, 7000 Series	1
51006182	Electrical adaptor lead for dual heated wire breathing systems with grey-red plug	VHB20 series	1

Breathing Filters

Code	1944000	1790000 (S*)
Box Qty.	70	50 (40*)
Filtration efficiency	>99.999%	>99.9999%
Resistance to flow at 30L/min	1.0cm H ₂ O	0.9cm H ₂ O
Resistance to flow at 60L/min	2.3cm H ₂ O	1.9cm H ₂ O
Compressible volume	67ml	120ml
Weight	40g	56g
Connectors	22F-22M/15F	22F-22M/15F
Minimum tital volume	>200ml	>360ml

(S*) Add an S to the seven digit code number for the sterile version of this product eg. 1790000S (sterile box quantity is shown in brackets).



Intersurgical Ltd, Crane House, Molly Millars Lane, Wokingham, Berkshire, RG41 2RZ, UK
 T: +44 (0)118 965 6300 F: +44 (0)118 965 6356 info@intersurgical.com www.intersurgical.com



The manufacturer Intersurgical Ltd is certified to ISO 9001:2015, ISO 13485:2016 and ISO 14001:2015



IS1.58 • Issue 1 05.21