



HAMILTON-C6

The next generation of intelligent ICU ventilators



Our passion. Intelligent Ventilation solutions

Ever since we were founded in 1983, our focus has been on supporting the frontline heroes of critical care - with ventilation technologies that are safe, effective, and lung-protective. And we want to lessen the load for those who make extraordinary efforts every day, helping seriously ill patients fight their way back to health.

That is why we are committed to helping medical teams deliver the best respiratory care - to anyone, anywhere. That commitment is present in everything we do.

Bob Hamilton
CEO

Meet the HAMILTON-C6

The HAMILTON-C6 represents a new generation of high-end ventilators. The combination of modularity, ease of use, mobility, and advanced features allows you to individualize your patient's ventilation therapy:

- ✓ State-of-the-art ventilation modes for adult, pediatric, and neonatal patients
- ✓ Adaptive, lung-protective ventilation mode ASV[®]
- ✓ IntelliSync[®]+ real-time patient synchronization
- ✓ High-performance noninvasive ventilation
- ✓ High flow oxygen therapy
- ✓ P/V Tool[®] for lung assessment and recruitment
- ✓ Transpulmonary pressure measurement
- ✓ Integrated IntelliCuff[®] pressure controller
- ✓ Remote access to humidifier controls and status



Slender, flexible, convenient

Flexible device configuration

The HAMILTON-C6 adapts to your individual user environment. Mount it on a trolley, with the interaction panel on top or in front, or use the shelf-mounted version with the interaction panel on the side or mounted on the pendant system.

For intrahospital transport

Thanks to the slender frame, an integrated O2 cylinder carrier, and the high-performance turbine, the HAMILTON-C6 can stay at your patient's side for intrahospital transports.

Ergonomic maneuverability

With a compact footprint and high-quality trolley wheels the HAMILTON-C6 is designed for easy handling and maneuverability.





Ease of use

In close cooperation with users and ventilation experts, our engineers have designed a user interface that is particularly intuitive. Switching between the HAMILTON-C6 and all other Hamilton Medical ventilators is easy because they are all operated according to the same principles.

The Ventilation Cockpit on the HAMILTON-C6 consolidates the monitoring data and displays it as intuitive graphics. These provide a quick overview of the patient's current ventilation status and provide a reliable basis for therapy decisions.

“

The Hamilton operating platform actually made my job as an educator and a clinical specialist a lot easier. Because once we learn one platform it transfers over to all of the other platforms. To the MRI ventilators, to the transport ventilators, to the neonatal side, in the EC and ICU, it all transfers over.

Craig Jolly, Adult Clinical Education Coordinator
University Medical Center, Lubbock (TX), USA



The Ventilation Cockpit

1 Main monitoring parameters

All of the main monitoring parameters at a glance. The large characters allow you to see them even from a distance.

2 Dynamic Lung

One quick look shows you tidal volume, lung compliance, patient triggering, resistance in real-time, cuff pressure, and pulse. The lungs expand and contract in synchrony with the actual breaths.

3 Vent Status

The Vent Status panel displays six parameters related to the patient's ventilator dependence. When all values are in the weaning zone, the panel is framed in green, indicating that spontaneous breathing trials or extubation can be considered.

4 Direct access to main controls

Access and adjust the most important controls for the current mode directly on the main display.



Individualized, lung-protective ventilation

The features available on the HAMILTON-C6 help you individualize your patient's ventilation and to implement a lung-protective ventilation strategy.

Adaptive, lung-protective ventilation with ASV

- ✓ Supports the earliest possible spontaneous breathing by the patient^{1, 2}
- ✓ Shortens the ventilation time in various patient groups^{1, 2}

Lung assessment and recruitment with the P/V Tool

- ✓ Hysteresis of the pressure/volume curve can be used for assessing the recruitability of the lung at the bedside³

Synchronization based on waveform analysis with IntelliSync+

- ✓ Waveform analysis is a reliable, accurate, and reproducible method for assessing patient-ventilator interaction⁴
- ✓ In terms of cycling, IntelliSync+ performs at least as well as ETS optimized by clinicians⁵

Automatic cuff pressure control with IntelliCuff

- ✓ Continuous cuff pressure control can decrease microaspiration and VAP^{6, 7}

Transpulmonary pressure measurement

- ✓ PEEP set based on transpulmonary pressure can improve compliance and oxygenation in ARDS patients⁸
- ✓ Transpulmonary pressure measurement can avoid the use of ECMO in the most severe patients⁹

¹ Kirakli C. *Eur Respir J*. 2011 Oct;38(4):774-80

² Chen CW. *Respir Care*. 2011 Jul;56(7):976-83

³ Demory D. *Intensive Care Med*. 2008 Nov;34(11):2019-25

⁴ Mojoli F. *Intensive Care Med Exp* 2016, 4(Suppl 1):A1168

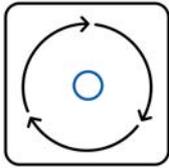
⁵ Mojoli F. *Intensive Care Med Exp* 2016, 4(Suppl 1):A1164

⁶ Lorente L. *Critical Care*. 2014;18(2):R77

⁷ Neelr S. *American Journal of Respiratory and Critical Care Medicine*. 2011;184(9):1041-1047

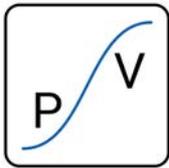
⁸ Talmor D. *N Engl J Med*. 2008 Nov 13;359(20):2095-104

⁹ Grasso S. *Intensive Care Med*. 2012 Mar;38(3):395-403



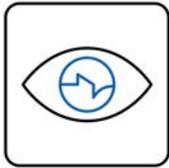
Adaptive Support Ventilation (ASV)

adjusts respiratory rate, tidal volume, and inspiratory pressure continuously, depending on the patient's lung mechanics and effort. ASV adapts ventilation breath-by-breath, 24 hours a day, and from intubation to extubation.



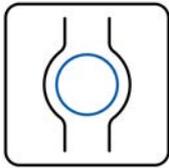
P/V Tool for lung assessment and recruitment

helps you assess recruitability and set PEEP based on respiratory mechanics. It also provides a repeatable method for quickly performing recruitment maneuvers.



IntelliSync+ keeps an eye on patient-ventilator synchrony

by continuously analyzing waveform shapes hundreds of times per second. This allows IntelliSync+ to detect patient efforts and cycling immediately, and initiate inspiration and expiration in real time. IntelliSync+ applies to invasive and noninvasive ventilation, regardless of the ventilation mode.



IntelliCuff pressure controller

continuously measures and automatically maintains the user-set cuff pressure of an endotracheal or tracheostomy tube in real time.



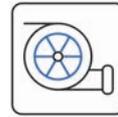
Transpulmonary pressure measurement

allows optimization of PEEP, tidal volume, and inspiratory pressure. Use it in combination with the P/V Tool to assess lung recruitability more precisely and perform recruitment maneuvers.

Features and options



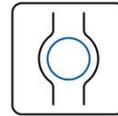
State-of-the-art ventilation modes



High-performance turbine with lifelong warranty



Integrated high flow oxygen therapy



Integrated control for IntelliCuff pressure controller



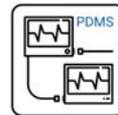
Integrated pneumatic and optional Aerogen nebulizer



Remote access to HAMILTON-H900 controls and status



Pulse oximetry (SpO₂ and pulse measurement)



Serial interface for connection to PDMS or patient monitors



Mainstream (volumetric) and sidestream capnography



On-screen help for alarm troubleshooting



Continuous monitoring of driving pressure

From the ventilation specialist

Academy

Our Academy provides free, open-access educational content about mechanical ventilation and ventilators. Join here:

www.hamilton-medical.com/Academy.

Universal ventilator consumables

Our accessories and consumables are specially developed for the highest possible patient safety and ease of use. Choose between reusable and disposable parts according to your institutional policies.

Peripheral devices

Our ventilation portfolio includes an active humidifier, the HAMILTON-H900, as well as our automatic cuff pressure controller, IntelliCuff. Both devices may be used with all kinds of mechanical ventilators.





More information and free simulation software:
www.hamilton-C6.com



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