



HAMILTON-C1

Minimum size for maximum performance

HAMILTON
MEDICAL



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.

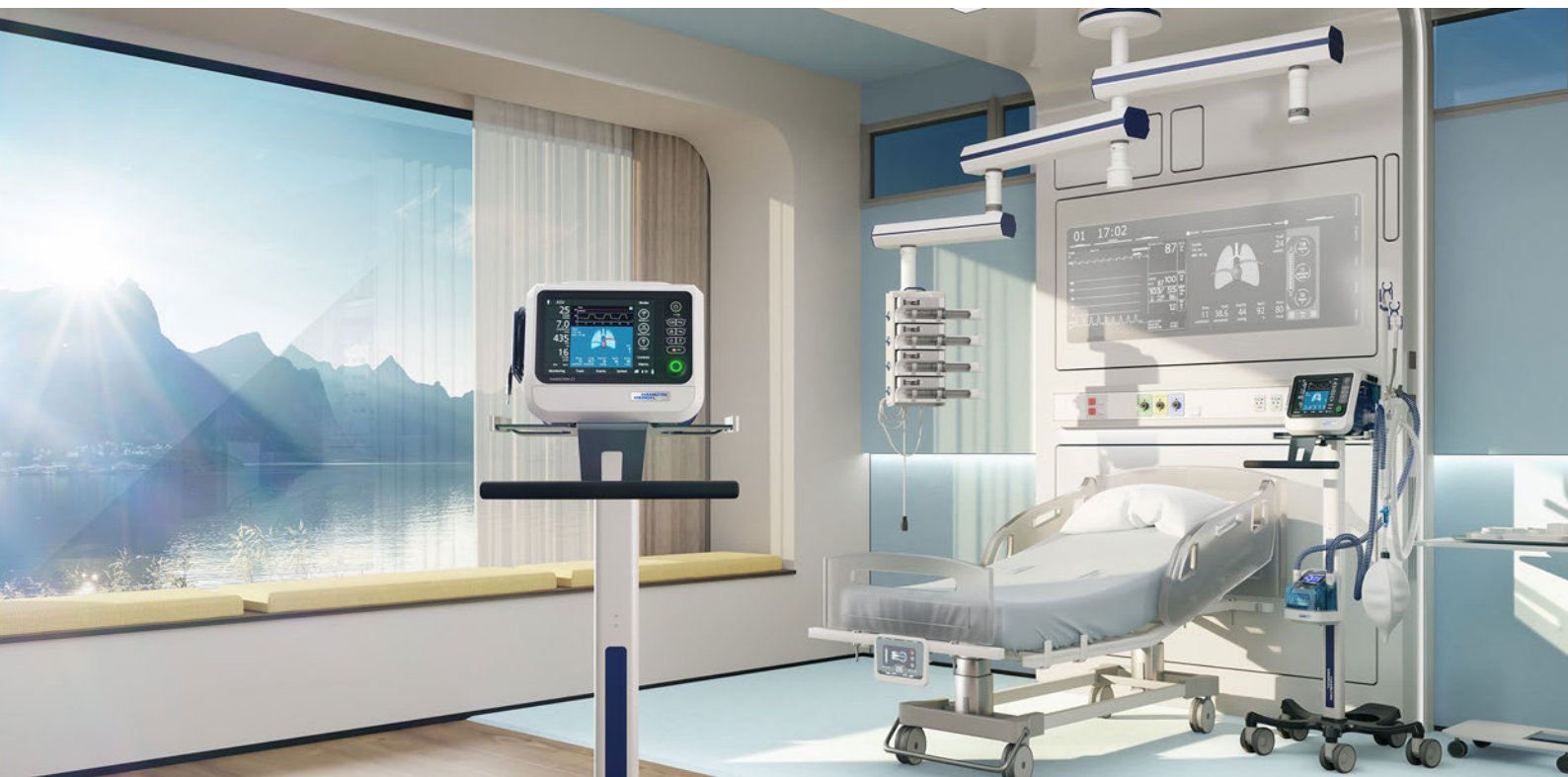
A handwritten signature in blue ink, appearing to read 'B. Hamilton'.

Bob Hamilton
CEO

Meet the HAMILTON-C1

The HAMILTON-C1 is a versatile and feature-rich ventilator packaged in a compact size. It is the ideal companion for all patient groups, including neonates. The HAMILTON-C1 adapts effortlessly to a variety of different settings, such as the intensive care unit, emergency ward, recovery room or intermediate care, as well as long-term acute care facilities and during intrahospital transport.

- ✓ Adult, pediatric, and neonatal ventilation
- ✓ Noninvasive ventilation and integrated high flow oxygen therapy
- ✓ Complete solution for noninvasive ventilation with the NIV-only option
- ✓ High-performance turbine and battery
- ✓ Individualized, lung-protective ventilation modes ASV® and INTELLiVENT®-ASV
- ✓ O2 assist for continuous and responsive oxygen management
- ✓ IntelliSync®+ real-time patient synchronization
- ✓ CPR ventilation



Compact and convenient for transport

The high-performance turbine enables the HAMILTON-C1 mechanical ventilator to be completely independent from compressed air. Its integrated high-capacity battery allows you to ventilate your patients during intrahospital transport and mobilization, without needing an external power source. The compact and lightweight design makes handling easier.





Ease of use

In close cooperation with users and ventilation experts, our engineers have designed the user interface to be particularly intuitive. Switching between the HAMILTON-C1 and all other Hamilton Medical ventilators is easy, because they are all operated according to the same principles.

The Ventilation Cockpit on the HAMILTON-C1 consolidates the monitoring data and displays it as advanced graphics. These provide a quick overview of the patient's current ventilation status and provide a reliable basis for therapy decisions.

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Small but mighty! Despite its compact size, the HAMILTON-C1 is a fully featured ventilator for use in almost any environment.

Jesko Mertha, Group Leader,
Clinic for Intensive Care Medicine
Cantonal Hospital St. Gallen, St. Gallen,
Switzerland



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, and resistance in real-time. 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 dependence on the ventilator. 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.



For use in any hospital situation, from neonates to adults

In the intensive care unit

The HAMILTON-C1 offers the performance of a high-end ICU ventilator in a compact size:

- ✓ State-of-the-art and advanced ventilation modes, including ASV and INTELLiVENT-ASV
- ✓ Continuous and responsive oxygen management with O2 assist
- ✓ Noninvasive ventilation and integrated high flow oxygen therapy
- ✓ Advanced lung-protective features and options

During intrahospital transport and for mobilization

The HAMILTON-C1 is a reliable companion for intrahospital transport and mobilization:

- ✓ High-performance turbine, battery operation, and compact size
- ✓ State-of-the-art ventilation modes appropriate for early mobilization of all patient populations
- ✓ Wireless connectivity with the Hamilton Connect Module

In the neonatal intensive care unit

The HAMILTON-C1 can provide continuity of care for neonatal patients by means of dedicated modes and features:

- ✓ Noninvasive ventilation modes and therapies developed especially for neonatal patients (synchronized noninvasive ventilation, demand-flow nCPAP modes, Volume Support mode, and high flow oxygen therapy)
- ✓ Invasive ventilation modes developed for neonatal patients
- ✓ Robust proximal sensor to provide accurate flow measurement
- ✓ Single-use consumables that may help in controlling infections

For long-term acute care

The HAMILTON-C1 can eliminate the need to use multiple ventilators for patients requiring long-term respiratory support:

- ✓ Portability, making it suitable for mobilization
- ✓ Different modes and therapies in one device (invasive ventilation modes including ASV and INTELLiVENT-ASV, NIV, and high flow oxygen therapy)
- ✓ Continuous and responsive oxygen management with O2 assist
- ✓ Complete solution for noninvasive ventilation with the NIV-only option
- ✓ IntelliSync+ for real-time patient synchronization
- ✓ The Speak Valve option gives tracheostomized patients a voice, and allows them to swallow even while receiving respiratory support from the ventilator



Adult, pediatric, and neonatal ventilation

is provided. For neonatal patients, a specially designed neonatal proximal flow sensor is used. The tidal volume range goes down to as low as 2 ml.



High-performance turbine

enables the HAMILTON-C1 to be completely independent from compressed air. This reduces weight and saves space.



Integrated high flow oxygen therapy

can be applied using the same device and breathing circuit, simply by changing the patient interface. With the optional integrated high flow oxygen therapy, the ventilator offers you a range of ventilation and therapy options in one device.



O₂ assist

is available at the touch of a button. Take control of oxygen management by setting individualized SpO₂ targets for your patients. The system continuously adjusts the oxygen supply to meet your patient's real-time needs, potentially protecting against both hyperoxemia and hypoxemia. This enables you to dedicate more time to other important tasks at the bedside.



High-performance noninvasive ventilation (NIV)

is enabled by the ventilator's integrated high-performance turbine and peak flow rate of up to 260 l/min. Optimal flow delivery is ensured even in the event of large leaks.

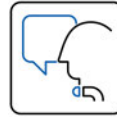
NIV-only option: The complete solution for noninvasive ventilation

offers just the modes you need for high-performance noninvasive ventilation support. It enables you to transition seamlessly between noninvasive modes and high flow oxygen therapy (optional) for pediatrics and adults, without changing the device or even the breathing circuit.

Features and options



Integrated pneumatic and optional
Aerogen nebulizer



Compatible with conventional
speaking valves



Leak compensation for NIV and
invasive ventilation



nCPAP modes



CPR ventilation



Remote access to HAMILTON-H900
controls and status



Serial interface for connection to
PDMS or patient monitors



Real-time patient synchronization
with IntelliSync+



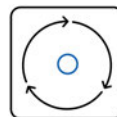
Mainstream (volumetric) and
sidestream capnography



INTELLiVENT-ASV for bedside
assistance



Pulse oximetry
(SpO2 and pulse measurement)



Adaptive Support Ventilation (ASV)

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:
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