IntelliCuff

Intelligent Ventilation

To reduce VAP and tracheal injuries

HAMILTON MEDICAL

Reduce VAP and tracheal injuries

Known problems in endotracheal cuff pressure management

For many years, the leakage of oral secretions past the endotracheal tube (ETT) has been a causative risk factor in the development of Ventilator Associated Pneumonia (VAP) and tracheal injuries. Existing solutions for endotracheal tube cuff pressure management require manual monitoring and adjustment of cuff pressure – a critical aspect of the ICU workload. It has been shown that up to 8 manual cuff pressure adjustments are required daily to maintain the recommended cuff pressure ranges,[1] often resulting in higher risk of lung infections and mechanical complications. Recent clinical studies show that continuous cuff pressure control can optimize endotracheal tube cuff filling and reduces VAP[2].

Optimal cuff pressure with IntelliCuff®

Following AARC Guidelines, HAMILTON MEDICAL has developed IntelliCuff®, a new noninvasive automatic cuff pressure controller for use with HAMILTON MEDICAL ventilators. IntelliCuff® helps to reduce VAP and tracheal injuries by continuously monitoring and automatically adjusting cuffed tracheal and tracheostomy tubes, providing real-time cuff pressure optimization.

Reduce complexity with an integrated solution for cuff pressure management

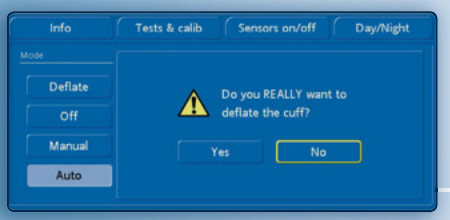
The IntelliCuff® control module and software are integrated parts of HAMILTON MEDICAL ventilators, and controlled via the Ventilation Cockpit – the same unique user interface used to adjust and adapt ventilation therapy. The Ventilation Cockpit reduces complexity by graphically displaying the patient's status, current treatment, and required support, including current cuff pressure control and monitoring parameters. It provides transparency by supporting protocolized care – so you can rest assured that IntelliCuff® continues to optimize cuff pressure at all times.

By integrating IntelliCuff® into HAMILTON MEDICAL's unique intuitive user interface, you can focus your attention on your patients. There is no longer the need to manage two different systems or master additional user interfaces.

[1] Sole ML et al. AJCC, 2011 March, Volume 20
[2] Nseir S et al. AJRCCM, 12-10-11 23:38:49

Pcuff and Dynamic Lung
The Ventilation Cockpit provides a unique, intuitive and efficient way to monitor the patient's lung condition and cuff pressure in real time.

One user interface
IntelliCuff® is an integrated part of the configurable Ventilation Cockpit, giving you full access to cuff pressure controls.



Perfectly integrated solution
The automatic cuff pressure module is integrated into the ventilator and is externally visible. Just connect the cuff tubing to the ventilator and focus on your patients, not extra devices.

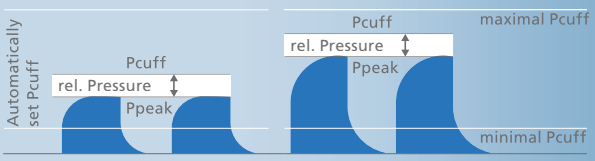
IntelliCuff® is a fully integrated solution designed to reduce the clinical staff's workload and minimize complexity in the ICU.

IntelliCuff

The Ventilation Cockpit

How IntelliCuff® works

IntelliCuff® is designed for immediate use, no calibration is required. It operates in different modes, allowing the operator to find suitable solutions for most clinical situations. Clinicians can choose between a manual setting for constant cuff pressure – which is then maintained automatically – or automatic cuff pressure adjustments that vary depending on actual ventilating pressures. Simply set the cuff pressure relative to the average airway pressure (Ppeak). The difference between Ppeak and Pcuff will be kept constant to provide a tight sealing cuff.



The applied cuff pressure will vary safely between the adjustable minimum and maximum pressure limits set by the operator or will be maintained at a constant pressure so that excessive or low pressure will be avoided. This prevents aspiration and reduces the risk of tracheal ischemic complications. The integrated ventilator cuff pressure controller issues an alarm when a leaking cuff or disconnected tubing is detected.
Disposable tubing is designed to fit the cuff pressure measurement connector and the ET tube or the tracheostomy tube. The shut-off valve prevents loss of cuff pressure. The cuff can be fully deflated for intubation and extubation.

Improve patient outcome with IntelliCuff®

Continuous optimized and controlled cuff pressure supports ventilation therapy and protects your patients against Ventilator Associated Pneumonia (VAP) and tracheal injuries. Thanks to its intuitive user interface, the IntelliCuff® fully integrated continuous cuff pressure control solution helps to reduce your clinical staff's workload. IntelliCuff® is an integrated solution and provides major improvements in all conventional ventilation modes.

Available disposables:
Cuff pressure tubes (prevent loss of cuff pressure control) REF 282016/00

IntelliCuff® ensures optimal cuff pressure – helping to avoid VAP and tracheal injuries.

Optimal cuff pressure with IntelliCuff®

Over-inflated cuff

Under-inflated cuff

HAMILTON MEDICAL

For further information about IntelliCuff®
please contact:

HAMILTON MEDICAL AG
Via Crusch 8
CH-7402 Bonaduz
Switzerland
(+41) 81 660 60 10
(+41) 81 660 60 20

www.hamilton-medical.com

Swiss
Quality

IntelliCuff

Prevents and controls VAP and tracheal injuries

Integrated cuff pressure module, no need for external device handling

Provides continuous real-time monitoring of optimal cuff pressure during the entire ventilation period

Supports and optimizes mechanical ventilation therapy

HAMILTON MEDICAL