Setting new trends in ventilation.

DRÄGER EVITA INFINITY® V500
Under pressure

Hospitals around the world are under increased financial pressure. Competition for patients is increasing and clinics are often required to benchmark quality and outcome.

Many hospitals share a number of challenges which can have a negative effect on workflow efficiency and, ultimately, the quality of care.

COMMON HOSPITAL CHALLENGES

Challenging workplace ergonomics
Device placement issues, cable clutter, limited patient access and unintuitive user interfaces; it’s an environment that can divert your attention away from your primary concern – the patient.

Limited flexibility
Compatibility of components and interfaces is severely limited. There are just too many proprietary solutions. In addition, equipment is often not designed to adapt to changing needs.

Need for standardization
Inconsistent user interfaces, operating concepts, nomenclature and accessories for different modalities is a reality in many hospitals. There’s no easy way to share and download information. This means increased training and a higher risk of significant medical error.

Data overload
Medical personnel have to analyze and interpret a constant stream of raw data from various sources. Long working hours and the fast pace of ICU environments can compromise clinical decision-making.

Inner-hospital transport
Transporting a ventilated patient can be risky; one is often forced to compromise between performance and portability when changing between a bedside and a transport ventilator. In addition, setting up dedicated transport equipment can be time consuming.

The solution to these and other problems can only come from an increase in efficiency. Technology can help you streamline workflow, access and interpret data, automate processes and much more. Dräger has been making technology for life for over a century, and we firmly believe that an essential element of any successful health care strategy lies in choosing the right technology to accomplish your goals.
The Dräger Evita Infinity® V500, a component of the Infinity® Acute Care System™

Equipped with features that go beyond standard ventilation - the V500 is a highly advanced ventilator for use in modern, acute care respiratory support.

More than just advanced respiratory therapy, the synergy provided by the Infinity® Acute Care System™ can help you meet the challenges of today’s health care environment:

- **SMART**
  - use technology to turn data into information

- **MOBILE**
  - make technology available wherever you need it

- **SCALABLE**
  - expand the system to suit your needs

- **STANDARDIZED**
  - connect components quickly and easily

- **INTEGRATED**
  - combine several useful functions in a single device
SmartCare®/PS is the automatic, knowledge-based weaning system. The new version of SmartCare®/PS lets you configure weaning parameters for enhanced flexibility and control:

- SmartCare®/PS has been shown to reduce weaning times by up to 40% and ventilation times by up to 33%\(^1\). This can help improve outcome and reduce risks while simultaneously lowering costs.

The Smart Pulmonary View performs real-time visualization of pulmonary function data. By turning data into useful visual information, the Smart Pulmonary View helps reduce the cognitive workload of ICU staff.

- Visual representation of data in real time
- Intuitive anatomical analogy
- Reduction of cognitive load

Infinity® ID accessories were developed to simplify handling and optimize workflow:

- **Mismatch control** detects false connections of the circuit to the ports and triggers an alarm, virtually eliminating the possibility of mismatched breathing circuits.
- **Configuration control** detects the connected breathing circuit type and adjusts device settings accordingly.
- **Exchange control** reminds personnel of preselected replacement intervals for breathing circuits, disposable expiration valve and water trap.
- **Transfer of ventilation settings** copies ventilation settings just by connecting the circuit to another V500.

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\(^1\) F. Lellouche et al.; Am J Respir Care Med Vol 174, pp 894-900, 2006. Results are based on a European Multicenter Randomized Trial with 144 patients demonstrating improved respiratory condition, with stable hemodynamic and neurologic status, and no ARDS prior to initiating weaning.
The mobile power supply PS500 greatly expands your transport range:
- This compact yet powerful battery pack will give you at least 100 minutes of independent power.

The GS500 mobile air supply provides air wherever needed:
- The GS500 is an electrically driven, turbine powered air supply unit that can keep you independent of a compressed air source indefinitely.

The Transport Supply Unit TSU lets you transport oxygen cylinders easily:
- The optional TSU can be quickly attached to the V500 transport trolley for ergonomic handling of large cylinders.

Mobile

High level ventilation therapy during transport – that’s mobility with the V500.

Scalable

Uncompromising scalability now and in the future - the V500 is a safe investment.

The V500 is equipped with standardized interfaces for optional hardware components or software upgrades.
- The device-set-up can be adjusted to changing patient needs over the course of treatment.
- For the treatment of all patient ranges, the V500 provides optional neonatal ventilation capabilities.
- Additional Infinity® Acute Care System™ components linked to the system will reveal potential synergies departmental or crossdepartmental level.
With its configuration export function, you can easily copy user interface, therapy and alarm configurations to a standard USB storage device.
- V500s can be easily standardized with the configuration of your choice within minutes.
- This same function also allows a quick export of screen dumps and data, such as logbooks and trends, further supporting information exchange and documentation.
- A common medical cockpit supports cross-departmental standardization with aligned nomenclature. And the user-friendly operating concept helps to reduce training efforts and makes the V500 easy to learn and to operate.

- Workplace integration: V500 can be mounted to a 38mm pole or on vertical front rails.
- Power and air integration: Secure independence from air and power supplies with the GS500 and PS500.
- Service integration: The Infinity® Service program ensures that your V500 can always be updated with the latest software and helps to maximize device uptime.

Standardized
Setting your individual standard – quick and easy configuration with the V500.

Integrated
An integral system component with exciting standalone features – the V500.
Invasive and non-invasive ventilation

The Dräger Infinity® V500 gives you world-class ventilation designed for patients of all ages and acuity levels.

**Invasive ventilation**
Aside from a complete range of standard invasive ventilation patterns, the V500 incorporates advanced invasive ventilation features not found in any other ventilator.

**SmartCare®/PS**
- The automated, knowledge based weaning system, now complete with configurable weaning protocol parameters for added flexibility.

**Variable PS**
- Subtle, random variations in inspiratory pressure have been shown to have a positive effect on pulmonary function. This “noisy” PS ventilation mimics the natural variation of biological systems.

**APRV AutoRelease**
- Dräger’s APRV AutoRelease automatically optimizes $T_{low}$ to terminate expiration at an adjustable percentage of peak expiratory flow, keeping end-expiratory lung volume and CO$_2$ removal optimally balanced, even in the face of changing respiratory mechanics and expiratory flow patterns.

**Full-featured, non-invasive ventilation.**
- With its automatic, dynamic compensation features, the V500 successfully manages one of the most common issues in NIV: leaks. In order to rapidly restore optimal synchrony, the V500 recognizes and compensates for leaks quickly by adjusting both inspiratory trigger and termination points.

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2) Abreu MG; Noisy pressure support ventilation: A pilot study on a new assisted ventilation mode in experimental lung injury; Crit Care Med 2008 Vol. 36, No. 3