



Reduce ventilation time
by up to 33%*

SMARTCARE® /PS

MT-09/03-2008

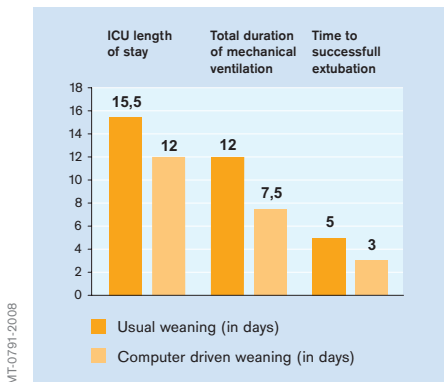
SmartCare®/PS automates weaning

„The problem however is that no matter how good the written protocol is, physicians and caregivers still have to devote enough time to ensure that no opportunities to progress in weaning are lost, which is often difficult in a busy ICU where more urgent matters might take precedence“.

PD. Dr. Philippe Jolliet Senior Member of the Medical ICU Staff
University Hospital Geneva

Proven automated clinical protocol

- Decreases ICU length of stay by up to 20% *
- Reduces overall ventilation time by up to 33% *
- Reduces weaning duration by up to 40% *
- Supports weaning protocol compliance: 100% [1,3]



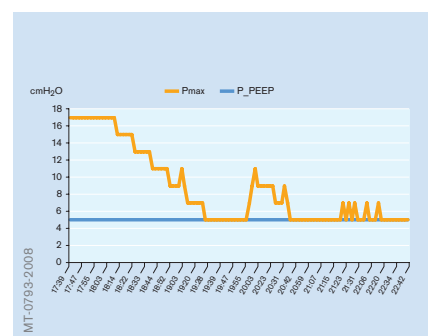
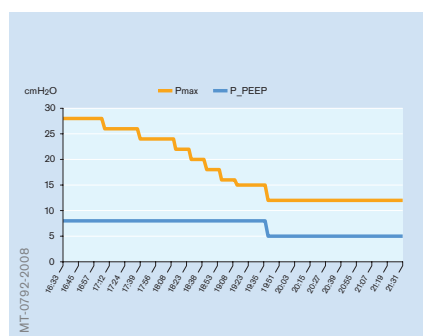
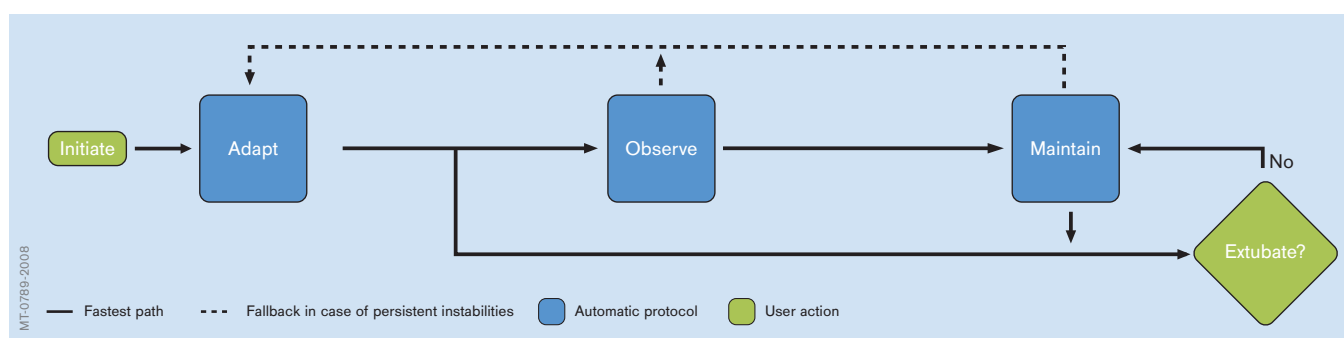
Address Ventilator Associated Pneumonia

„Preventing Ventilator Associated Pneumonia (VAP) has been identified as one of 12 interventions that can save lives and reduce patient injuries, as part of Institute of Healthcare Improvement's "5 Million Lives" campaign [5].

One of the key measures in the ventilatory bundle to reduce the occurrence of VAP is a daily sedation vacation with a spontaneous breathing trial (SBT). SmartCare®/PS's protocol performs a SBT automatically, as soon as the patient is ready for it [3].

* F. Lellouche et al.; Am J respir Care Med Vol 174, pp 894-900, 2006. Results are based on a European Multicenter Randomized Trial [2] with 144 patients demonstrating improved respiratory condition, with stable hemodynamic and neurologic status, and no ARDS prior to initiating weaning

A safe and effective clinical protocol



Decrease ventilatory support gradually

- The safe and effective clinical protocol is patient controlled and includes a metabolic component.
- Configure the limits for the parameters f , VT , $etCO_2$ to adapt its automatic protocol to specific patients' needs.
- While weaning the patient, SmartCare/PS aims to keep the patient in a comfortable zone of normal ventilation.
- Automatic reduction in ventilatory support frees up time for the caregiver.

Automated Spontaneous Breathing Trial (SBT)

- A spontaneous breathing trial is initiated automatically when the ventilatory support is weaned down to minimum support.
- Upon successful completion, the clinician is notified to consider extubation.
- Until extubation SmartCare/PS continues to monitor the patient and provides ventilatory support as needed.

Increase ventilatory support when needed

- The ventilatory situation is continuously monitored, assessed and classified.
- The weaning plan's knowledge base also contains measures to increase ventilatory support when required.
- The caregiver can override automatic settings at any time and will be alerted in case of critical events.

"The most significant realization comes from the fact that the weaning process is continuous and does not necessarily rely on the availability or constant presence of the practitioner to be at the bedside throughout the weaning session."

Phillip Thaut, RRT-NPS, RPFT, Provo, Utah, September 2007

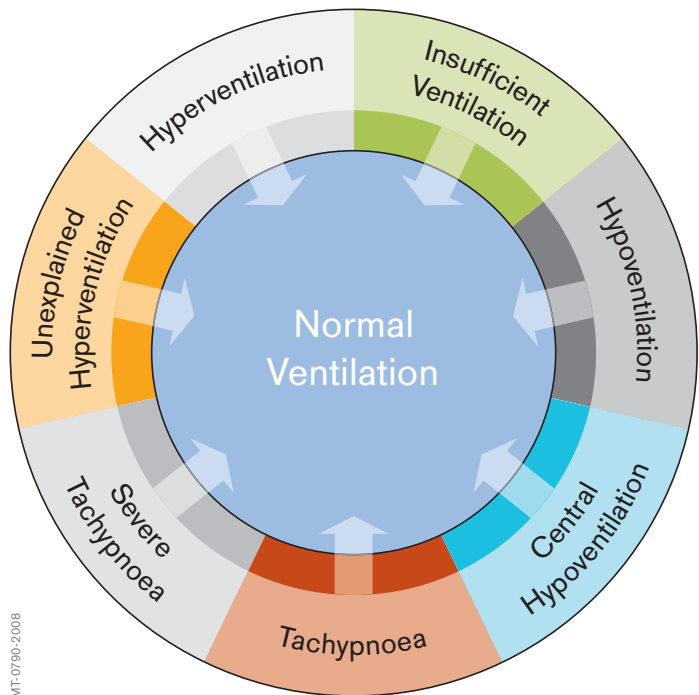


Configuration export function



Support reliable recovery with the V500 and V300

- Seamless transition from invasive to non-invasive ventilation (NIV) in one device.
- NIV in general has been shown to reduce the risk of reintubation[4].



MT-0790-2008

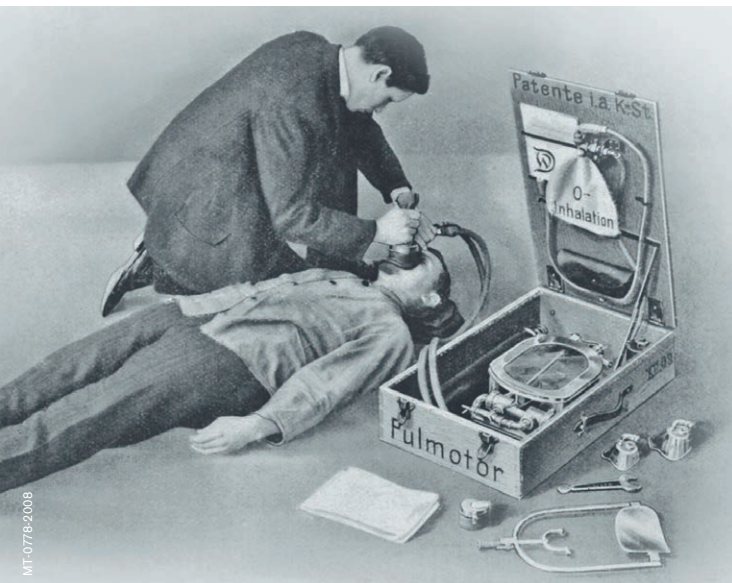
SmartCare/PS ventilates the patient with conventional pressure support. Breathing frequency, tidal volume and endtidal CO₂ are used to evaluate the proper pressure support to meet the patient's demand.

Based on these parameters SmartCare/PS classifies the patient a minimum of every five minutes into one of 8 diagnostic categories.

Depending on this evaluation SmartCare/PS will decrease or increase the pressure support according to the patient's needs.

After successful automatic spontaneous breathing trial the readiness for extubation is indicated.

Over 100 years of innovation in ventilation



“Cutting-edge technology convinced us to purchase the Dräger product; but then the excellent customer service and support strengthened the relationship.”
Angela D. Hedgman, BS, RRT-NPS, Philadelphia, PA, December 1, 2006

Dräger is committed to providing Technology for Life®. We were there at the very beginning of modern ventilation, and we’ve been innovating ever since:

- 1907 – Pulmotor emergency resuscitator
- 1952 – E 52 “Iron Lung” long term breathing system
- 1978 – Oxylog transportable emergency ventilator
- 1989 – BIPAP*/PCV+ and APRV free breathing in PCV

- 1995 – AutoFlow® free breathing in VCV
- 1997 – ATC™ automatic tube compensation
- 2000– Non-Invasive Ventilation (NIV) for ICU ventilators
- 2003– SmartCare/PS automated weaning protocol
- 2004– Lung protection package (LPP)
- 2005– SmartCare/PS automated weaning protocol for pediatric patients
- 2007– Infinity® Acute Care System™

Our reputation for quality and reliability is built on legendary German engineering – but that is only part of Dräger’s commitment to ongoing support:

- Comprehensive on-line training for effective system utilization
- DrägerService® to help maximize uptime and minimize lifetime operating costs
- Continuous development programme to ensure the safety of your investment

* Trademark used under license

Reference: [1] MacIntyre, N.; and the writing committee and Task force of the American College of Chest Physicians. Evidence-Based Guidelines for weaning and discontinuing Ventilatory support. Chest 2001;120:375S-395S. | [2] Lellouche, F. et al.; A Multicenter Randomized Trial of Computer-driven Protocolized Weaning from Mechanical Ventilation. Am J Respir Crit Care Med Vol 174. pp 894 -900, 2006 | [3] Wesley, E.; Effect on the duration of mechanical ventilation of identifying patients capable of breathing spontaneously. N Engl J Med 335:1864, December 19, 1996 | [4] Haddad, B.; An ounce of prevention: Noninvasive ventilation to prevent postextubation respiratory failure. Critical Care 2006, 10: 314 | [5] www.ihl.org

CORPORATE HEADQUARTERS

Drägerwerk AG & Co. KGaA
Moislinger Allee 53–55
23558 Lübeck, Germany

www.draeger.com

Manufacturer:

Drägerwerk AG & Co. KGaA
Moislinger Allee 53–55
23558 Lübeck, Germany

Locate your Regional Sales
Representative at:
www.draeger.com/contact



**REGION EUROPE CENTRAL
AND EUROPE NORTH**

Drägerwerk AG & Co. KGaA
Moislinger Allee 53–55
23558 Lübeck, Germany
Tel +49 451 882 0
Fax +49 451 882 2080
info@draeger.com

REGION EUROPE SOUTH

Dräger Médical S.A.S.
Parc de Haute Technologie
d'Antony 2
25, rue Georges Besse
92182 Antony Cedex, France
Tel +33 1 46 11 56 00
Fax +33 1 40 96 97 20
dlmfr-contact@draeger.com

REGION MIDDLE EAST, AFRICA

Drägerwerk AG & Co. KGaA
Branch Office
P.O. Box 505108
Dubai, United Arab Emirates
Tel +971 4 4294 600
Fax +971 4 4294 699
contactuae@draeger.com

REGION ASIA / PACIFIC

Draeger Medical
South East Asia Pte Ltd.
25 International Business Park
#04-27/29 German Centre
Singapore 609916, Singapore
Tel +65 6572 4388
Fax +65 6572 4399
asia.pacific@draeger.com

REGION NORTH AMERICA

Draeger Medical, Inc.
3135 Quarry Road
Telford, PA 18969-1042, USA
Tel +1 215 721 5400
Toll-free+1 800 437 2437
Fax +1 215 723 5935
info.usa@draeger.com

**REGION CENTRAL
AND SOUTH AMERICA**

Dräger Panama Comercial
S. de R.L.
Complejo Business Park,
V tower, 10th floor
Panama City
Tel +507 377 9100
Fax +507 377 9130
contactcsa@draeger.com