



## SUSTAINED INFLATION – CONTINUOUS DISTENDING PRESSURE

### Description

One of the most widely recruitment maneuver described is sustained inflation.

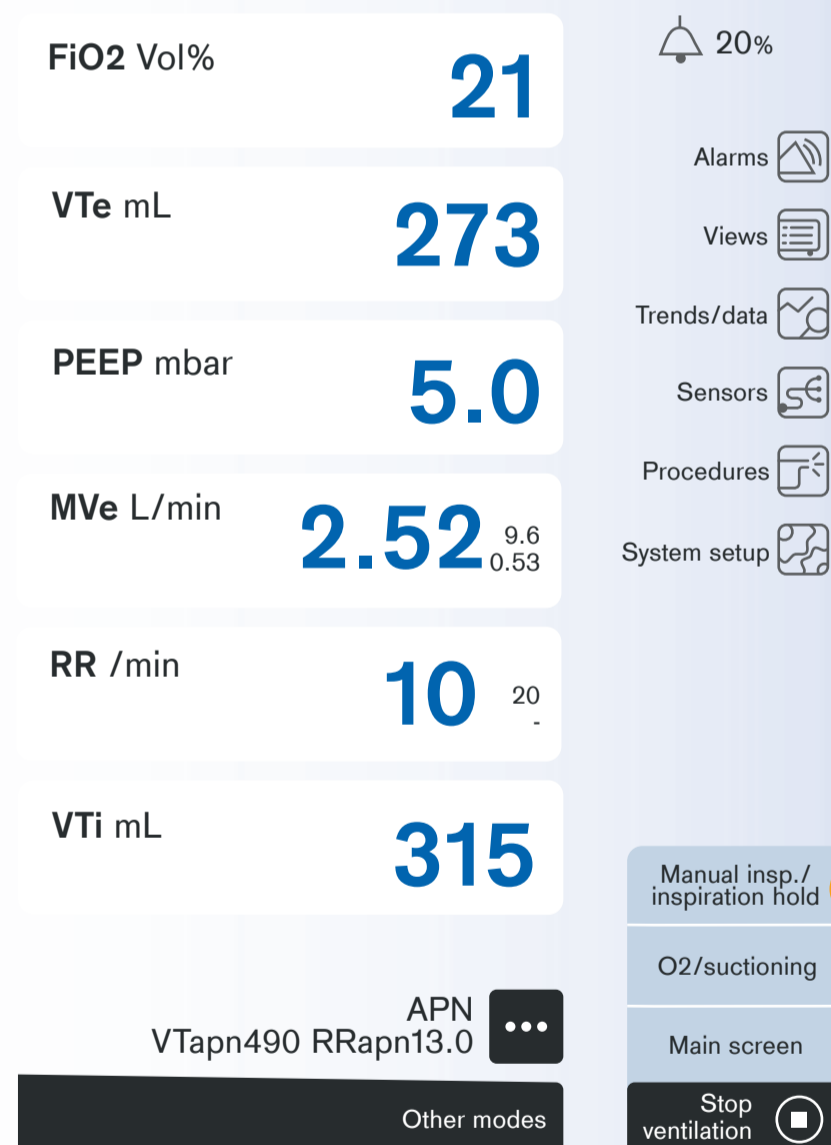
Sustained inflation can be performed keeping a given airway pressure for a longer time during inspiration.

### How to perform it with a Dräger ventilator?

From any pressure or volume controlled mode:

- 1 Push and hold the Manual insp./Inspiration hold button on the right bar. The airway pressure will be kept constant till the button is pushed.
- 2 Evaluate the time elapsing in the pop up.
- 3 Release the button to release the pressure and go back to the previous ventilation settings.

This technique is similar to the 40x40 maneuver, but it can be performed to the reached plateau pressure without increasing the pressure to 40 cmH<sub>2</sub>O.



#### References:

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- (2) Oczenski W, Hörmann C, Keller C, Lorenzl N, Kepka A, Schwarz S, Fitzgerald RD. Recruitment maneuvers after a positive endexpiratory pressure trial do not induce sustained effects in early adult respiratory distress syndrome. *Anesthesiology* 2004; 101: 620-625 [PMID: 15329586]
- (3) Oczenski W, Hörmann C, Keller C, Lorenzl N, Kepka A, Schwarz S, Fitzgerald RD. Recruitment maneuvers during prone positioning in patients with acute respiratory distress syndrome. *Crit Care Med* 2005; 33: 54-61; quiz 62 [PMID: 15644648]
- (4) Grasso S, Terragni P, Mascia L, Fanelli V, Quintel M, Herrmann P, Hedenstierna G, Slutsky AS, Ranieri VM. Airway pressure-time curve profile (stress index) detects tidal recruitment/hyperinflation in experimental acute lung injury. *Crit Care Med* 2004; 32: 1018-1027 [PMID: 15071395]
- (5) Salvatore Grasso, Luciana Mascia, Monica Del Turco, Paolo Malacarne, Francesco Giunta, Laurent Brochard, Arthur S. Slutsky, V. Marco Ranieri; Effects of Recruiting Maneuvers in Patients with Acute Respiratory Distress Syndrome Ventilated with Protective Ventilatory Strategy. *Anesthesiology* 2002; 96:795–802 doi: <https://doi.org/10.1097/0000542-200204000-00005>