

Intensive Care Ventilator

MV2000

SU:M Series



- ✓ Single/Dual High Frequency Ventilator
- ✓ AutoVent®
- ✓ Smart Weaning
- ✓ SpO₂, EtCO₂ Measurements

SU:M Series Aims to Help Successful Weaning

MEKICS understands a modern respiratory care system which demands not only basic ventilation modes but also advanced functions for successful weaning of patient and for supporting clinician as well.

SU:M Series system becomes complete with useful functions for successful and adaptive weaning function and assistant functions in acute respiratory care such as Hemo Dynamics (SpO₂, EtCO₂ Measurement) and Lung mechanics. Additionally, HFV mode of SU:M Series could provide the possibility of a new successful story from premature to adult patient with or without Extracorporeal Membrane Oxygenation (ECMO).

One of major topics of Conventional Ventilator in ICU is successful weaning. MEKICS understands that reducing patient's Work of Breathing (WOB) and mismatching between patient and device are key factors for successful weaning in acute invasive ventilation. SU:M series have these core functions and performance. It has technical solution for reducing asynchrony too.



SU:M Series meets the essential requirements on performance, accuracy and high safety. The SU:M Series ventilator complies with:

- CE0470
- KFDA
- ISO13485
- ISO9001

MV2000 SU:M Series

High Performance Intensive Care Ventilator with MEKICS unique technology

Powerful Modes

The extendable strong configurations make SU:M Series highly competitive.

Standard:

SU:M PACV, VACV, PSIMV, VSIMV, SPONT, O₂Stream®

SU:M2 PACV, VACV, PSIMV, VSIMV, SPONT, O₂Stream®, tBi-level, PRVC, AutoVent®

SU:M3 PACV, VACV, PSIMV, VSIMV, SPONT, O₂Stream®, tBi-level, PRVC, AutoVent®, SHFV®, DHFV®, TCPL-AC, TCPL-SIMV

Additional Options:

PRVC-SIMV, CPR, AwPRV, PV Tool, Micro-pump nebulizer, Hemo Dynamics(SpO₂, EtCO₂)

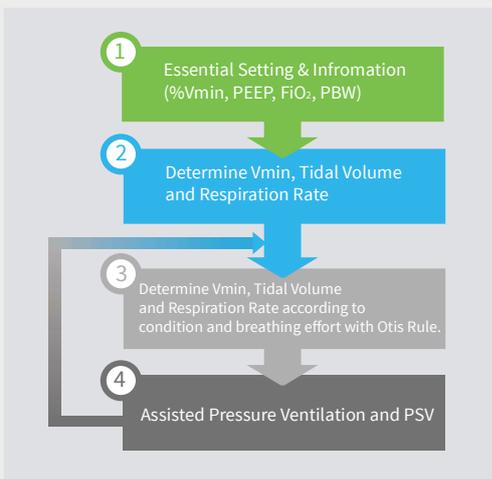
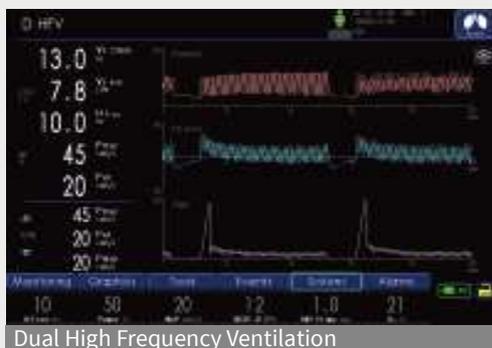
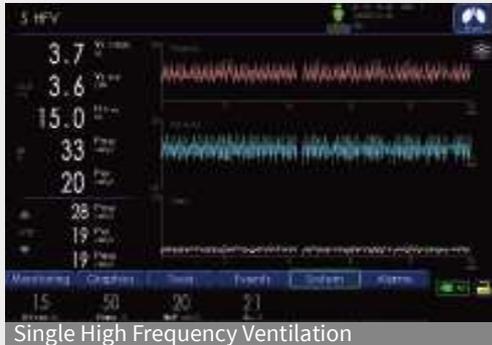
High Frequency Ventilation (HFV)

SU:M Series provides a high level of clinical performance for all the clinical demands from conventional to high frequency ventilation. MEKICS unique pneumatic technology extends the applicability of SU:M Series to HFV without any additional hardware apparatus. It has also possibility to extend the use from neonatal to adult patient.

Reliability and Easy maintenance

The pneumatic system of SU:M Series is MEKICS' unique technology and it makes a basis for all the strong features such as unique High Frequency Ventilation and high reliability. Software based modes makes easier upgrade for customer demands. SU:M series provides easy maintenance process with PC viewer economically including spare parts.

Advanced Features



Single & Dual High Frequency Ventilation

MEKICS' unique principle of HFV has a couple of clinical benefits. The first is that patient can be cared continuously even without replacing the breathing circuit between conventional mode and HFV mode. This strong benefit helps safe and easy care.

The second is Dual Phase High Frequency Ventilation (DHFV). It is a combined mode with CMV and HFV. The CMV phase of DHFV could be used to intend either intermittent lung expansion or intermittent exhalation under high frequency ventilation. The intermittent lung expansion works for insufficient lung recruit process in HFV with low MAP. On the other hand, intermittent lung exhalation could have an effect of improving CO₂ clearance and get measured EtCO₂ in HFV with high MAP.

AutoVent®

AutoVent® mode of SU:M Series is to induct successful weaning depending on patient's lung condition and patient breathing effort by adaptive reaction-controlled algorithm. AutoVent® mode supports the optimal pressure controlled tidal volume with calculated respiration rate. We believe this mode is a possibly optimal solution to care patient's changing lung condition continuously.

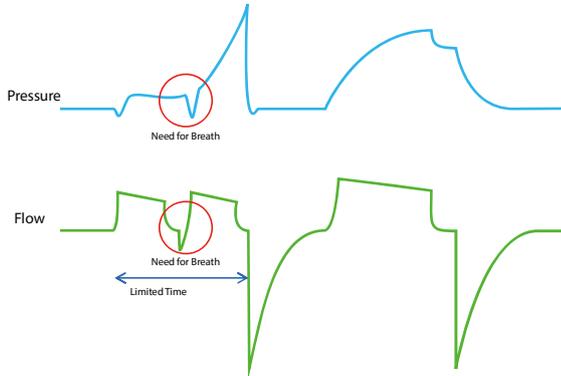
A patient after surgery without any specific lung disease, the demand of patient's breathing may change continuously. AutoVent® mode could help clinician more concentrate on patient-care than setting-device.

SpO₂, EtCO₂ Measurements (Hemo Dynamics)

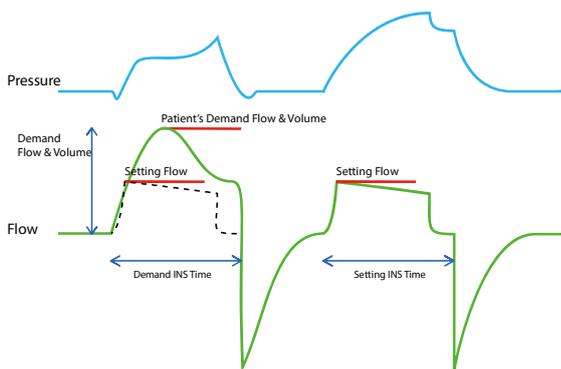
This option could provide information of metabolic-CO₂ and SpO₂ as the result of respiration. This information could be useful to a clinician for patient care without independent gas monitoring system and for reducing complete dependency on Arterial Blood Gas Analysis (ABGA). Especially, it is intended to provide more useful and comprehensive clinical information from this combination of CO₂, SpO₂ and flow information.

Smart Weaning Solution

Asynchrony both in Pressure and Flow



Synchrony both in Pressure and Flow



Smart Weaning

Asynchrony in SIMV is a major challenge for successful weaning process. The first mission is how to meet patient's respiratory demand with a set of volume and respiration rate. The second is how not to interrupt patient's own breathing efforts. In other words, it means how to avoid fighting.

The principle of smart weaning is to support minimum-pressure level and to allow over the set tidal volume continuously as patient's demand increases in inhalation phase. The inspiratory time is extended to detect expiratory start point(Ex-sense) not to interrupt the patient's own exhalation effort.



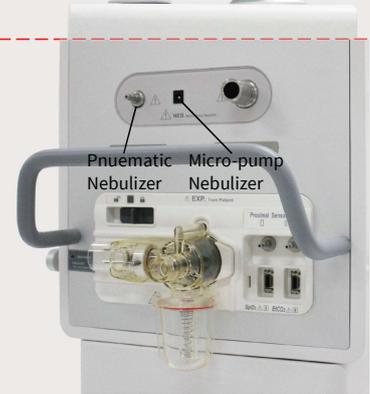
Product Overview



1 Flexible Tilt & Swirl



2 Dual Nebulizer System

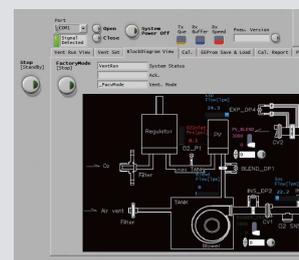


3 Cart with Basket



Smart PC Viewer (Maintenance Tool)

MEKICS offers the advantage of being maintenance easy with Smart PC Viewer. All data can be measured and adjusted by PC viewer directly. This function also allows clinical evaluation with quick access to full patient information and performance data. This includes waveforms, trends, usage patterns and summary statistics, and so on.



MEKICS Ventilator

