

Date: 23.05.2020

To, The Director, Central Mechanical Engineering Research Institute, Durgapur. West Bengal.

Sub: Appraisal of the Ventilator Develop by you.

Dear Sir,

We are grateful to you for providing us the opportunity to be associated with your Visionary effort at this time of the Country where ventilator needs are ever increasing.

We have been involved right from inception and gradual development of the Ventilator.

In our opinion:

Given by our team comprising of below Doctors, Critical Care Specialists of Healthworld Hospitals, Durgapur.

Dr. Arindam Kumar Hazra (MBBS.MD(ANAESTHESIOLOGY). IDCCM)

Dr. Brojen Choudhury (MBBS.MD(ANAESTHESIOLOGY), FNB)

Dr. RamprasadGorai (MBBS.MD(ANAESTHESIOLOGY).FNB)

The system is suitable for the following settings:

- 1. Emergency department: where there is large number of patients who may need intubation and ventilator support
- 2. During Transport and field management where patient needed to be intubated outside the hospital settings
- 3. In critical care units, where further care of intubated patients will go on.

As per our experience with the ventilator design, this can provide assist control volume control mode with high or low FIO2 settings (determined by flow of oxygen). This machine also can detect patient's breathing effort.



**Disadvantage**: The major drawback with this machine is as it is volume based, this does not support Pressure controlled or pressure support modes. Precise control of FIO2 is not possible. Weaning is very difficult. Lung mechanics can't be fully understood through these ventilators.

**Conclusion:** This is an ideal ventilator for emergency department and out of hospital use and for all those patients who need controlled mechanical ventilation. These should be called as "Respirators" to be distinguished as a separate class of mechanical ventilators.

Thanking you once again for making us a part of this Historic Venture.

Yours Sincerely,

fund

Dr ArunangshuGanguly
MD DNB(Card) MNAMS FESC FAC FSCAI
Senior Interventional Cardiologist
Chairman and MD
HEALTHWORLD HOSPITALS
Visiting Consultant Cardiology
Ramkrishna Mission SevaPratishthan
Ph: +919002125039