



I, that am curtail'd of this fair proportion,
Cheated of feature by dissembling nature,
Deform'd, unfinished, sent before my time
In to this breathing world, scarce half made up,
And that so lamely & unfashionable
That dogs bark at me as I halt by them

William Shakespeare

This passage from the opening soliloquy of Shakespeare's famous play depicts the type of patients that Neonatologist deal every day.



DRAGONFLY

the only **Servo Oscillator** in the world



“DRAGONFLY” The Only Servo Oscillator in the World innovated by Shreeyash

The striking features of Shreeyash make Dragonfly are:

- Active Inspiratory and Active Expiratory phase.
- Inspiration Time can be set to 33% & 50% providing an I:E Ratio 1:2 & 1:1.
- Servo Controlled Bias Flow ensures accurate maintenance of set MAP as set by the clinician.
- MAP can be set from 4 to 40 cm H₂O.
- Amplitude can be adjusted from 0 to 100 by rotary knob.
- Frequency can be set from 5 to 15 Hz.
- Digital display of Dco2 helps in non invasively monitoring the pulmonary mechanics. Helps in reducing frequent ABG & CXR.
- Digital display provided for delivered Tidal volume, DCO₂, P Max, P Min, Delta P, Bias flow, delivered FIO₂, I:E ratio, inspiration time in %, amplitude & set frequency.
- Large 15 inches touch screen indicates the above settings with various messages & alarms.
- Graph provided for Pressure v/s Time.
- Indication provided for differential pressure (D.P. which is actual Delta P)
- Inbuilt Air & Oxygen Blender.
- Special help key that indicates various Oscillatory settings required in specific diseases.
- Facility provided to freeze the pressure wave form.
- Tube holding arm assembly is a standard accessory.
- Unit mounted on castor wheels for easy mobility.

Gas Transport Coefficient (DCO₂) :

(CO₂ Diffusion coefficient)

DCO₂ is a measured value which helps the clinician to non invasively monitor the ventilation.

The Amplitude can be adjusted looking at the chest wiggle & the DCO₂.

In all the commercially available HFOV, non invasive monitoring of pulmonary mechanics is not possible. This leads to frequent monitoring of blood gases & chest X ray's. To circumvent this problem, concept of DCO₂ is introduced by Shreeyash in the Dragonfly. This is supposed to reflect the alveolar ventilation & hence the PaCO₂ values. However it is reasonable to confirm the relation between DCO₂ & PaCO₂ by doing serial blood gases.

An increase in Tidal volume will increase the DCO₂ & vice versa. In other words higher the DCO₂ values lower are the PCO₂ values.

Mean Airway Pressure :

This is a Servo Controlled Valve. The user can set the MAP by using the Rotary Knob. Once the MAP is set, the Bias Flow & the MAP Servo valves will "Shake Hands" & will maintain the exact MAP set by the user.

As this is Servo Controlled, even changes in the Amplitude, % Ti or frequency will not alter the MAP because the Servo Mechanism re-adjusts the valve and maintain the set values. The range for MAP setting is from 4 cm to 40 cm H₂O.

Bias Flow :

The Bias Flow provided in the patient circuit is warmed, humidified & is Servo Controlled. A flow transducer that is incorporated in the circuit accurately calculate the Bias Flow & indicates the same on the 15 inches touch screen. As per the MAP settings the micro controller adjusts the Bias Flow automatically to ensure that the selected MAP is achieved.



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QUESTIONS

What are the exclusive features of Dragonfly as compared to contemporary once ?

Is this "Dragonfly" reliable?

If I wish to know more on HFOV?

Can my staff use it in my absence?

ANSWERS

"Dragonfly" is packed with unique features like Servo controlled MAP & Bias flow Tidal volume display, DCO₂ display, Pressure v/s Time graph, Noiseless operation, Help key facility, Clinical data key.

World has started to realize now that huge talent still remains untapped in India. **Over 45 months of studies, research of more than 30 months, followed by more than One year of animal & clinical trials has made this machine absolutely reliable.**

Dragonfly is used and persevered in India as well as abroad with great trust since last 18 years.

You can attend the workshops arranged by us on regular basis & get trained through expert faculties from all over India & abroad.

Yes, definitely. The staff can use the Help key to know about the settings for a disease or can learn about the unit.



Humidifier shown in the picture is an optional accessory available at an extra cost.

The high powered software in the "Dragonfly" enables the user to access various information in regards to

- Setting guidelines in various diseases.
- Clinical strategies .
- HFOV at a glance.
- Weaning, Trouble Shooting etc.