

Healthcare: Devices

## Development Of Advance Ventilator

### APPLICATION

Mediklik is developing advance medical devices like – ventilators which can be used for respiratory and life support for patients in ICU & ITU

COMPANY NAME	TECHNOLOGY READINESS LEVEL (TRL)	INTELLECTUAL PROPERTY
<b>Mediklik Webhealth Pvt Ltd</b>	<b>TRL: 6</b> (The Industrial prototype has been fabricated and currently the regulatory compliances are going on)	<b>Granted Indian Patent No:</b> 508250
<b>FOUNDER'S NAME</b>		<b>Granted Design:</b> 347994-001, 347995-001, 347993-001
Vikramaditya Tirthani		

### PROBLEM ADDRESSED

Over 3.6 million people die each year from respiratory illness in India alone. Over 46 percent of these patients die due to lack of Mechanical Ventilator. Per WHO standards, India itself currently needs an additional 1 Million Ventilators. Currently 95% Advance ventilators used in India are imported and they are not only unreasonably expensive, but they have high running cost due to monopoly on consumables. Most of the ventilators are application and environment specific and apart from this ventilation modes, safety certificates and advance tools are other clinical needs contributing to high price factors.

### ABOUT THE TECHNOLOGY

Ventilators use different technologies to cater various needs and all technologies have their advantages and disadvantages. Like Pneumatic Ventilators are compact but have limited functionality. Compressor based ventilator are sturdy but are bulky in size. Plastic turbine blowers are smaller but have Low life span. Ceramic turbines have fantastic performance, but they can only be used with an Expensive flow sensor, which needs to be changed after every patient. Our Breathing Cassette system, enables us to use ceramic turbine technology without dependency on expensive flow sensors and other disposables. It also integrates UVC filter, so no exhalation filters are required, and above all this complete breathing cassette is autoclavable, with integrated sterilization monitoring system, with this way we are ensuring Safe, Precise and Universal Ventilation at affordable cost.

### FUNDS RAISED/ACHIEVEMENTS

- Received INR 21 lakhs from 36 INC against CCPS
- Received BIRAC BIG Grant worth INR 50 lakhs
- Received BIRAC SEED investment fund worth 20 Lakhs

### PRODUCT IMAGE



### USP

- Adult Paediatric and Neonatal Ventilation (Ventilation from 2ml tidal volume)
- No flow sensor needed (Integrated reusable flow sensor)
- No bacteria filter needed (Integrated UV filter)
- Smart Sterilization monitoring
- 20000 hours guaranteed lifetime
- Precise Flow from 2ml to 2000ml
- 100% Leakage compensation
- Smart Ventilation - Intelligent ventilation mode
- Smart Pulmo-sight - Lung Graphics for better assessment
- Smart Weaning Tools for faster and easier weaning

### END USERS/CUSTOMERS

- Government Hospitals
- Private Hospitals
- Doctors / Nurses / Other Medical Staff