



**RIGEL MEDICAL**

GMC-INSTRUMENTS GROUP

## How to test ventilators?

Medical ventilator types differ by application with diverse ranges. For instance, an infant ventilator typically applies a volume of around 2mL with 100mbar pressure and a breath rate of 120bpm; whereas an adult ventilator typically applies 2000mL of volume with 20mbar of pressure and a breath rate of 12bpm. Therefore, a ventilator tester must be capable of measuring flow, volume, pressure and oxygen over a wide range of values.

It is important that a gas flow analyser is triggered correctly to measure the breath based parameters. Detection of inspiration duration occurs during a ventilators breath cycle. Exhalation time occurs via the test lung to the expiratory valve on a ventilator.

A ventilator tester also needs to compensate for other variables, such as temperature and humidity, as these factors have an effect on overall gas volume measurements. In a gas flow measurement channel there will be a wide range of sensors to accurately measure ventilation.

If you require more help, please contact us at <https://www.seaward.com/gb/enquiry/>.