Our Products

Automatic Transport Resuscitators and Ventilators

The O-Two ‘e” Ventilator Range ushers in a new era in controlled ventilation for resuscitation and patient transport! These electronically controlled, pneumatically powered ventilators provide a range of ventilation solutions for all types of patient requirements and all levels of pre-hospital and in-hospital healthcare professionals.

The simplicity of operation masks the level of sophistication these products offer. The standardized controls on all three models provide an ease of use concept that is second to none.

Continuous parameter monitoring and self adjustment in all three models ensures that the device is always fully functional and ready for immediate use. The wide range of both visual and audible alarms provides the healthcare professional with warnings of any changes in patient or device parameters.

The CAREvent® range of handheld and control module style automatic transport resuscitators and ventilators are time/volume cycled, intermittent positive pressure ventilators with the added benefits of manual triggering and demand breathing. They provide a wide range of ventilation frequency and volume settings.

Our CAREvent® MRI model is specifically designed for use within the MRI environment with a 3 Tesla rating.

Manual Resuscitators

The SMART BAG® and SMART BAG® MO provide controlled ventilation during manual resuscitation. The unique SMART valve in the device responds to the rescuers squeeze, limiting the excessive flow of gas into the patient’s airway. It also responds to changes in the patient’s compliance or resistance, alerting the rescuer of any airway problem that may occur.

By removing the risks associated with inadvertent hyperventilation, the SMART BAG® MO reduces gastric insufflation (in the mask-ventilated patient), the reduction in cardiac pre-load as well increased cerebral ischemia due to excessive CO₂ removal.

CPAP Devices

The O-Two single-use open CPAP delivery system provides accurate CPAP delivery with more comfort for the patient.

The unique feature of the device is in its ability to titrate CPAP levels from 0 - 25 cm H₂O over a flowrate range of only 8 - 25 L/min. This is significantly lower gas consumption than other disposable device.
Demand Valves

Our demand valve range is designed to provide spontaneously breathing patients with flow rates up to 140 L/min. These devices accommodate respiratory distress situations with minimal effort. The Oxygen Demand Valve provides 100% oxygen to the spontaneously breathing patient. The Demand Valve Resuscitator has the added benefits of manual ventilation button set at 40 L/min and a pressure relief system set at 60 cmH₂O.

Analgesic Gas Delivery Systems

The Equinox® II Demand Valve is designed for use with pre-mixed N₂O/O₂ gases providing demand flow rates up to 140 L/min. The Equinox® Relieve and Advantage Analgesic Gas Delivery Systems provide O₂ and N₂O gas mixing and demand breathing capabilities in two configurations. The Equinox® Relieve provides a preset, 50/50 mix of O₂ and N₂O while the Equinox® Advantage allows the adjustment of N₂O and O₂ concentrations over a range of 25% to 75% N₂O or 100% O₂. Multiple alarms and failsafes on these devices provide for patient safety.

Pressure Regulators

Our range of high-quality pressure regulators provide both therapy and low-pressure outlets in a variety of styles and for a wide range of gases. The all-brass construction of these products provides for improved user safety. The Multi Patient Unit offers six therapy outlets for oxygen therapy during a mass casualty incident.

Ventilation Timing Lights

The use of our adult and pediatric Ventilation Timing Lights assists in complying with resuscitation guidelines by providing clear visual indications of when to squeeze and release the bag ensuring the correct ventilation rate, I Time and E Time.

Ventilation Training Aids

The Mini Ventilation Training Analyzer highlights the complications of inadvertent hyperventilation (such as gastric insufflation) associated with poor manual ventilation technique. Calibrated to simulate a normal adult lung capacity, compliance, airway resistance and lower esophageal sphincter pressure, the mini ventilation training analyzer responds to the rescuer’s squeeze of the BVM like a real patient.
Our Mission

Our corporate mission is to apply our expertise in the design, engineering and manufacture of emergency respiratory care products to assist our dedicated healthcare providers in giving the very best patient care possible. We constantly monitor market trends to anticipate changes in the way patients are treated. This proactive approach enables us to develop the products today that will become the healthcare provider’s tools of tomorrow.

By applying our imaginative design processes and technologically advanced solutions to new products, O-Two Medical Technologies will continue to meet the challenges of the emergency respiratory care device market.

Our Capabilities

O-Two Medical Technologies provides advanced engineering, state-of-the-art design, prototyping and manufacturing capabilities. These are all encapsulated within a painstaking quality system to meet the required international manufacturing standards.

Our manufacturing and research-and-development facilities are registered to the ISO 13485 Quality system as well as Health Canada (HC), European (CE) and US (FDA) medical device requirements.