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Air Liquide Healthcare is a world leader in medical gases, home healthcare, hygiene products and healthcare specialty ingredients. It aims to provide customers in the continuum of care from hospital to home with medical products, specialty ingredients and services that contribute to protecting vulnerable lives.
Monnal T75 is the result of over 30 years experience in artificial patient ventilation. Its wide range of modes and its characteristics make it an ideal unit for the treatment of adult, child or infant patients. This ventilator combines both ease of use and patient comfort. It makes the work of the medical staff easier and can be used even in the most complex situations. The integrated turbine technology provides air autonomy adding enhanced mobility to the ventilator, while ensuring high-quality non-invasive ventilation.

Meeting your requirements

**High flow oxygen therapy**

- Hypoxaemic patients (non-hypercapnic)
- Patients with Acute Respiratory Failure

High-Flow Oxygen Therapy delivers an accurate $\text{FiO}_2$ range, while preserving moisture and temperature conditions of the lung similar to spontaneous breathing.

**Why use High-flow oxygen therapy?**

- Versatility
- Ease
- Comfort
- Autonomy

- Better comfort thanks to the nasal canula
- PEEP effect
- Reduced risk of infection and facilitation of mucociliary clearance, thanks to humidification
- Better control of $\text{FiO}_2$
- Better oxygenation
- Elimination of most of the anatomic dead space

- **OPTIMISATION**
  - Integrated solution for space optimisation

- **RAPID AND SECURE**
  - Safe and quick shift between NIV and HFOT session

- **SIMPLICITY**
  - Simplifies staff training and focus on patient

- **ECONOMY**
  - Unique device for reduced care cost

**INFANT**

**CHILD**

**ADULT**
Implementing non-invasive ventilation is a decisive step in patient’s acceptance of the treatment. Fitting the mask and finding the most comfortable settings for the patient are amongst the challenges faced by physicians. Patient comfort is optimised with Monnal T75, the ventilator responds immediately to the efforts of patients in severe decompensation, through fine detection of patient triggers.

**Non invasive ventilation**

- **PATIENT COMFORT**
- **FINE DETECTION OF PATIENT TRIGGERS**
- **LEAK COMPENSATION**

**HEPA* filter**
Patient protection
The Monnal Clean’n filter is located at the turbine inlet; it protects the ventilator against infections from germs present in the air. The filter also purifies the insufflated air to the patient, as 99.97% of particles are blocked.

**Turbine Technology**
Mobility and air autonomy
The combination of the turbine and the integrated proportional valves generates high flow rates, provides effective leaks management and meet patient needs while operating in a silent environment.

**Nebulization**
Synchronisation with ventilation
Bronchospasms can be managed more effectively using the nebuliser function, which keeps the same ventilation settings and ensures synchronisation of drug distribution during each patient inspiratory cycle.

**Invasive ventilation**

Protective ventilation is required for critical patients. Monnal T75 provides support for physicians in their treatment approach, from intubation to weaning and extubation.

**Acute patients**
- ARDS*
- Trauma patients

**Volumetric Capnography**
Monitoring of Alveolar ventilation
In order to ensure the correct intubation of a patient and also to follow his metabolic progress, Monnal T75 CO₂ sensor uses mainstream technology, providing immediate responses to physicians. This function is used to monitor CO₂ production, lung perfusion and alveolar ventilation with the following parameters: etCO₂, VmCO₂, Vmalv, Vdaw, Vdaw/Vt and CO₂ slope.

**Respiration and diagnosis monitoring**
Caring for critical patients
In a single step, physicians can monitor the changes in their patients’ lung mechanics using key functionalities such as Pplat, R&C/Stat and Auto-peep. Measures such as P0.1, NF, WOB and f/Vt provide real-time information and, combined with loop curves and volumetric capnography, allow physicians to adjust their ventilation strategy.

**Invasive ventilation (continued)**

**PS-PRO : A self-adapting mode for patient recovery**

- **SAFE**
  - 3 parameters to secure ventilation: Respiratory Rate, Target Vt, Pmax max
- **SELF-ADAPTING**
  - From mandatory pressure ventilation to pressure support ventilation
- **EASE**
  - Smooth recovery and maximum tolerance of the treatment
- **COMFORT**
  - Patient is free to breathe spontaneously above RRmini

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**Monnal T75**

**Technical specifications**

<table>
<thead>
<tr>
<th>Patient category</th>
<th>Adult, child, infant</th>
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</thead>
<tbody>
<tr>
<td>Standards</td>
<td>ISO 14971, EN-CEI 61601-1, EN-CEI 66601-2-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Settings</th>
<th>Main parameters</th>
<th>VT (20 to 2,000 ml), RR (4 to 120 Bpm), Pmax (2 to 99 cmH2O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasive ventilation modes</td>
<td>VCV, PCV, PRVC, SIMV, PSIMV, PSV, CPAP, PS-Pro, Duo-Levels</td>
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<tr>
<td>Non invasive ventilation modes</td>
<td>PSV, CPAP, Duo-Levels, APRV</td>
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<tr>
<td>Safety ventilation</td>
<td>Apnea ventilation, RRmini</td>
<td></td>
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<tr>
<td>Advanced measures</td>
<td>Measures: P0.1, NIF, WOB</td>
<td></td>
</tr>
<tr>
<td>Special functions</td>
<td>O2 high flow, PS-Pro mode, TC tube compensation, O2 intelligent suction, nebulisation</td>
<td></td>
</tr>
</tbody>
</table>

**Monitoring**

| Volumes | MNw, Vte, Vt, Spont. Mw, Vpeak I, Vpeak E, leak flow (in NIV) |
| Pressures | Ppeak, PEEP, Pplat, Psealean |
| Respiratory rates | RR, Spont, RR |
| Ratios | Ti/Tot, RR/Vt, Spont. index, leak index, I/E |
| Loops and waveform presentations | Real-time waveforms: pressure, flow rate, volume, CO2 (option) |
| Respiratory mechanics | Leaks: pressure/volume, volume/flow rate, flow/pressure, CO2/Volume |
| Gas | HO2, CO2 (option) |
| Event history | Chronological list of 200 last triggered alarms and recorded events |
| Trends | Stored trend values for up to 80 hours |

**Physical specifications**

| Autonomy of internal battery | 2.5 to 3h in standard ventilation |
| Ventilator dimensions | (H)35x(W)30x(D)40 cm |
| Ventilator weight | 16 kg |
| Screen | Type: flat color touch-screen, TFT-LCD module, Size: 10.4 inches |
| Pneumatic O2 supply | High pressure: 2.8-4 bar / 280-600 kPa / 40-86 psi |
| Low pressure: 0.5-1.5 bar / 100-150 kPa / 0-21 psi |

**Computerized systems compatibility**

| OTP Protocol | Monnal Link |
| BOW MEDICAL interface | Communication with BOW MEDICAL software |
| DATACAPTOR interface | Numbers of CIS and HIS (www.capsultech.com) |
| PHILIPS interface | Vuelink / Intellibridge connection |

**Directives**

Class IIb device. Manufactured by Air Liquide Medical Systems S.A. CE 0459. Read carefully the user manual.

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**Monnal T75 accessories**

Combines with other added value accessories, which can be purchased separately. Monnal T75 offers a comprehensive solution that can be integrated in the patient’s health care pathway.