HEPA filtration protection of Health Care Workers from aerosols and airborne contaminants as required by CDC and OSHA

Barrier and Negative Pressure Isolation for Emergency Departments and Patient Rooms
OVERVIEW
The Demistifier 2000 HEPA (High Efficiency Particulate Air) filter enclosure is a highly portable system that allows staff to temporarily isolate potentially hazardous patients at point of entry in Emergency Departments or anywhere in the facility. The unit places the patient under a negative pressure isolation canopy while the staff assesses the situation. The patient is easily observed and treated under the clear canopy via access ports. The unit can be set up and operating in a few minutes.

With a variety of canopies available, patients can be isolated on stretchers, beds, chairs or exam tables. With up to 300 air exchanges an hour, the air inside the canopy passes through a three-stage HEPA filter system before retuning to the ambient air.

This cost effective system offers a level of protection and versatility necessary during the rapidly changing situations in Emergency Departments.

DEMISTIFIER 2000 Series
Source Control Systems

Negative pressure and barrier isolation is the best defense hospitals have against the spread of airborne pathogens.

The DEMISTIFIER 2000 has become the industry standard for healthcare worker protection, meeting all CDC and OSHA requirements for high risk procedures.

Each configuration isolates the patient in a vinyl enclosure similar to an oxygen tent. The flexibility of the various canopies allows for optimum patient comfort. Procedures can be performed in a wheelchair, treatment chair, stretcher, bed, exam table and even a crib. Patients can be easily observed through the clear vinyl enclosure, and the system motor is quiet enough to allow normal conversation between caregiver and patient within. The DEMISTIFIER takes up little space and is easily transportable allowing movement to specific treatment areas. Vinyl canopies are inexpensive and disposable.

STANDARD CONFIGURATIONS
These DEMISTIFIER configurations are designed for sputum induction and aerosolized drug treatments (Ribavirin and Pentamidine). The DEMISTIFIER 2000 unit combined with the 2001 Chair Canopy is for use with a treatment chair or wheelchair. The chairs can be in an upright or semi-reclined position. The DEMISTIFIER 2000 unit combined with the 2005 Bed Canopy provides an isolation enclosure for bed procedures. The DEMISTIFIER 2000 with 2006 Canopy and 2007 Crib Mast and Boom Assembly components can be used for crib applications. This configuration also provides respiratory isolation for compromised infants and allows for aerosolized drug treatments.

DEMISTIFIER System uses include:

- Respiratory and barrier isolation
  - Sputum induction • Airborne respiratory isolation
- Aerosolized drug treatments
  - Ribavirin (bone marrow transplant patients) • Pentamidine • Aerosolized antibiotics
- Configurations for use throughout facility
  - Emergency department • Respiratory department • Patient room • ICU
- Transport under negative pressure

All DEMISTIFIERS feature:

- 99.99% HEPA filtration
- Easily portable and adaptable configurations for a variety of procedures
- Sturdy steel construction with easy-change filter system
- No installation requirements and is easy to operate, clean and maintain
DEMISTIFIER 2100
Negative Pressure Bed Enclosure for Infectious Patients

OSHA regulations require that patients even suspected of having infectious disease be isolated under negative pressure. This presents a problem for many facilities that can not provide the necessary amount of negative pressure rooms as the need arises. The DEMISTIFIER Negative Pressure Bed Enclosure is the instant solution to isolating these patients where ever they may be.

The DEMISTIFIER 2100 is also an ideal interim device when major construction projects disrupt hospital routine. It is being used in emergency departments, recovery rooms, ICUs and ordinary patient rooms.

The DEMISTIFIER System
Adapts for Ribavirin Treatments and Respiratory Isolation

The DEMISTIFIER can also be used for crib applications. It is available with a taller mast and shorter boom support to accommodate cribs with croup frames, to treat RSV with ribavirin. This configuration also provides respiratory isolation for infectious infants.

The wheels on the DEMISTIFIER allows it to be moved from treatment room to nursery by one person for greater convenience. No tools are necessary to change the mast and boom.

A special crib canopy that has openings on three sides is used to provide airflow and access to the patient during longer term treatments.

The DEMISTIFIER scavenging system has been tested by NIOSH under clinical conditions with extremely positive results. NIOSH report HETA 91-104-2229 and HETA 91-0187-2544 are available upon request.

The Negative Pressure Bed Enclosure incorporates the standard DEMISTIFIER 2000 unit with a bed frame and four sided vinyl enclosure.

The telescoping steel frame can accommodate anything from a gurney in the emergency room to a full size hospital bed. The frame breaks down to four pieces and is on wheels for easy transport and storage. The frame weighs only 50 pounds allowing manageable movement throughout the hospital.

The enclosure can be assembled around any hospital bed in 5 minutes. When the frame is in place, the durable vinyl enclosure is secured with the use of elastic bands that attach to eye hooks on the frame. Zippers along enclosure corners and service flaps on enclosure sides allow for patient access while maintaining negative air flow.

EFFICACY OF THE DEMISTIFIER FILTER PACK AGAINST COMMON RESPIRATORY PATHOGENS

<table>
<thead>
<tr>
<th>Organism</th>
<th>Total cfu Challenge to Filter</th>
<th>Recovery of Typical Colonies per Agar Strip</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB</td>
<td>$10^5$</td>
<td>None</td>
</tr>
<tr>
<td>Streptococcus</td>
<td>$9 \times 10^8$ (Ca. 109)</td>
<td>None</td>
</tr>
<tr>
<td>A. niger (mold spores)</td>
<td>$8 \times 10^7$ (Ca. 108)</td>
<td>None</td>
</tr>
<tr>
<td>C. albicans (yeast)</td>
<td>$8 \times 10^7$ (Ca. 108)</td>
<td>None</td>
</tr>
</tbody>
</table>

Independent studies have shown the efficacy of Peace Medical’s filter pack in removing airborne drug particles and respiratory pathogens.

Specifications

- **Electrical:** 115v AC, 60 Hz, 1.5 amp circuit breaker, 9 foot power cord.
- **Shipping Weight:** 45 pounds.
Easy Change Filter System

The filter pack consists of three filters. The HEPA (High Efficiency Particulate Air) filter is manufactured from a micro fiber silicate, and individually tested to meet The Institute of Environmental Safety Standard RP-CC-001-86. This filter is 99.99% effective in removing airborne particles 0.3 microns in diameter.

The prefilter is positioned in front of the HEPA filter and is designed to capture larger airborne particles, thereby extending the life of the HEPA filter. The carbon filter is then placed behind the HEPA to help absorb odors and vapors.

Ordering Information

Terms: Net 30. FOB Orange, New Jersey

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>DEMISTIFIER complete with HEPA, carbon, prefilter, motor, mobile stand and 6 standard size canopies.</td>
</tr>
<tr>
<td>2001</td>
<td>2 mil chair canopy. For use with wheelchair or treatment chair in upright or semi-reclined position.</td>
</tr>
<tr>
<td>2003</td>
<td>Replacement Demistifier prefilter.</td>
</tr>
<tr>
<td>2004</td>
<td>Replacement Demistifier carbon filter.</td>
</tr>
<tr>
<td>2005</td>
<td>2 mil bed canopy. Covers upper body, tucks in under mattress with air flow opening directly opposite filter pack.</td>
</tr>
<tr>
<td>2006</td>
<td>2 mil crib canopy for use with Cat. No. 2007.</td>
</tr>
<tr>
<td>2007</td>
<td>Crib mast and boom assembly.</td>
</tr>
<tr>
<td>2100</td>
<td>Negative Pressure Bed Enclosure. Includes DEMISTIFIER Unit, isolation bed frame &amp; four 4 mil vinyl enclosures that have zippers at all 4 corners and 2 service flaps on each long side.</td>
</tr>
<tr>
<td>2101</td>
<td>Isolation bed frame only for use with Cat. No. 2100.</td>
</tr>
<tr>
<td>2102</td>
<td>Replacement 4 mil vinyl bed enclosure for use with Cat. No. 2100.</td>
</tr>
<tr>
<td>2514</td>
<td>Full stretcher enclosure canopy.</td>
</tr>
<tr>
<td>2515</td>
<td>Half stretcher enclosure canopy.</td>
</tr>
</tbody>
</table>

DEMISTIFIER Control Panel

The control panel consists of a 1.5 amp On/Off switch with circuit breaker designed to switch off if there is an internal failure. The control panel also includes LEDs to indicate required filter changes.

DVD available upon request