Thank you for your support in our progress. Your continuous encouragement has driven us to pioneer green and clean technologies to provide you with the best in Energy Recovery and Indoor Air Quality (IAQ).

Year 2009 has been a very happening year for DRI. We opened offices in the USA and Philippines and have also set up a new manufacturing facility at Manesar. With these new openings, DRI now has its presence in all the continents across the world to address the needs of our customers for the certified products, high quality, fast delivery requirements and technical hand holding.

At DRI, innovation is believed to be the key to growth. DRI has established a worldwide reputation for clean technology innovations. Keeping with this philosophy, DRI has launched an array of new products in Fresh Air HVAC Systems. One of such evolutionary new technologies is India’s first DOAS (Dedicated Outdoor Air System). This system can assist in scoring substantial LEED points for green buildings.
Towards Fresher & Healthier ‘In’vironment in Hospitals with **Treated Fresh Air (TFA) Unit**

Hospitals are no longer only the institutions for the care of the sick. Instead they prefer to provide all comfort in terms of health, comfort, care and clean air that smells good and healthy to ensure faster healing, healthier inmates and happy clients. Substantial amount of heat is normally generated internally by the occupants and operating equipments. An effective cooling (and heating depending upon the external weather conditions) and ventilation systems combined with the good insulation of hospital building are required to reduce hospital’s sensitivity to the outside weather.

According to the studies, the hospitals, as large consumers of energy, have high bills for electricity and fuels. They have to maintain high air-conditioning to maintain health care facilities, standards, faster healing, healthier inmates and happy clients. Air-conditioning constitutes a significant component, estimated as 15-20% of the hospital operating and maintenance cost.

**HVAC system as major electricity end-user in Hospitals**

In many large and centrally air-conditioned hospitals, HVAC systems may consume 40% of total electricity consumption. Air-conditioning and Ventilation system in hospitals is required for:

- Maintaining the requisite indoor temperature, air distribution and humidity levels for thermal comfort.
- Maintaining indoor air quality, particularly in areas requiring prevention of infection.

Ventilation and Air-conditioning

Ventilation is required not just to combat heat gains from lighting, staff, patients and specialist equipment but, more importantly, to provide high air change rates in operation theaters and on the wards to help eliminate airborne bacteria. It is also required for infection control.

Meet mandatory healthcare air quality (fresh air) standard without extra energy/project cost

Increasing ventilation rates translate into two ways – An improved indoor environment and significant higher utility bills for the owners. Hence, the effective management of energy systems becomes imperative. The solution is the use of energy recovery devices which meet mandatory healthcare air quality (fresh air) standard without extra energy/project cost.

Good IAQ depends on adequate supply of fresh air, absence of pollutants and good distribution of air to the breathing zone of occupied spaces.

**DRI Treated Fresh Air (TFA) Units with EcoFresh® wheels inside can provide the required fresh air without increasing the load on air-conditioning systems and thus reducing the overall energy bills. It meets all the criteria as it is designed and manufactured using selection of materials to comply to Hygiene needs!**

**DRI Treated Fresh Air (TFA) Unit with EcoFresh Inside**, exhausts stale, contaminated, conditioned room air and exchanges it with fresh outdoor air, recovering up to 75% energy from exhaust air through a next-generation EcoFresh® exchanger.

<table>
<thead>
<tr>
<th>Function Space</th>
<th>Minimum Total Air Changes per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterilization</td>
<td>15-25</td>
</tr>
<tr>
<td>Wards</td>
<td>6-8</td>
</tr>
</tbody>
</table>

**EcoFresh®**

- Exchangers: pentamidine admin 12
- Bronchoscopy, sputum collection, and percutaneous adrenalin 12
- Excrucation room 6
- Medication room 4
- Treatment room 6
- Physical therapy and hydrotherapy 6
- Sedation workroom or needle holding 10
- Clean workroom or clean holding 4
- Sterilizing and Supply
- Sterilized equipment room 10
- Soiled or decontamination room 6
- Clean workroom and sterile storage 4
- Equipment storage 4
- Food preparation center 10
- Laundry general 10

*General Comfort Conditions as per NBC, 2005 and ASHRAE Handbook 2007 HVAC Application

<table>
<thead>
<tr>
<th><strong>Ventilation</strong></th>
<th><strong>Water pumping</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting: 30-40%</td>
<td>HVAC: 30-65%</td>
</tr>
<tr>
<td>Lighting: 30-40%</td>
<td>Water pumping: 10-12%</td>
</tr>
</tbody>
</table>

*Excerpts from energy efficiency in hospitals – Best Practice Guide.
DRI Arctic Coolers produce effective cooling by combining a natural process - water evaporation with a simple, reliable air moving system. Fresh outside air, filtered through the saturated evaporative media, is cooled by evaporation and circulated by a suitable sized blower. Adequately designed, such cooling lowers the fresh air temperature by 7-12°C e.g., the air-off temperature from the evaporative cooler for an outside temperature of 43°C can be as low as 28-30°C.

While using an evaporative cooler to keep the hot air in your facility out, leave a window or door cracked open. This allows new cooled air in and warmer air to escape. This also means that stale air escapes the place. Air-conditioners are closed systems, i.e. they use the air from inside your place over and over again while an evaporative cooler constantly draws in fresh air from outside.

**How heat affects your company’s bottom line . . .**

- Work output drops
- Production drops off
- Product Quality drops
- Company profitability decreases
- Increased downtime
- Reduced profit margins
- Increased accidents
- With accidents - increased insurance rates

**Advantages with DRI Arctic Coolers:**

- Precise temperature control
- Humidity control
- Vibration free
- Low maintenance
- Silent
- CFC free, no "green house" effect
- Operational in high ambient temperatures
- Comfortable habitation and working environment
- Improved Indoor Air Quality
- Higher productivity
- Lower absenteeism
- Lower operating costs (approx. one tenth of the air-conditioning cost)

**A reliable fresh air supply in confined space for**

- Process Cooling
- Equipment Cooling
- Personnel Cooling

to increase safety and improve production

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