MAKE SURE YOUR MECHANICAL ROOM EQUIPMENT IS READY FOR HVE USE.

Simultaneous HVE use can be considered as the equivalent of approximately one (1) user performing typical dentistry at one time.

To determine if your particular vacuum can accommodate simultaneous HVE, we recommend taking the following steps.

1. Prior to seeing patients, have a technician come to your office and, along with your office staff, simulate your patient numbers and procedure mix to test this new demand on your vacuum.
   • Turn on tips in each “in-use” operatory
   • Test the suction using your line cleaning bucket filled with water
     – Does the water evacuate in a timely manner?
     – If your office uses overhead plumbing, is there any evidence of stagnant flow or backflow?
   • Turn off tips until you reach desired suction

2. Was your vacuum able to provide the desired suction for your operation? If not, consider these options.
   • Adapt to how you operate
     – Turn off tips that aren’t in practice
     – Only use when procedures producing aerosols are performed
   • If you have a backup pump for redundancy, consider turning it on
   • Increase your vacuum pump size or upgrade your equipment to increase your user size
   • Ensure your office has a good standard vacuum line cleaning procedure that is practiced regularly by all staff

3. Ensure proper ventilation of your mechanical room equipment by having vacuum exhaust and compressor intake plumbed to the exterior.

Why are high-volume evacuators needed in the dental practice?

As part of the ADA Interim Guidance for Minimizing Risk of COVID-19 Transmission, dental health care professionals are advised to opt for “the use of high-volume evacuators.”*

HVE equipment helps to reduce the aerosols and splatter produced by ultrasonic and air polishing treatments containing saliva, blood, bacteria and pathogens.

*Dental Key Considerations for Use of Continuous HVE in a Dental Practice

Before implementing continuous use of high-volume evacuation (HVE), consider its effects on your air and vacuum system.

HOW BIG IS A MICRON?
When imagining the size of a micron, think of it like this: The large circle represents the size (O.D.) of a single human hair. The smallest dot represents one micron, or 1/1,000 of a millimeter. Midmark PowerAir oil-less compressors utilize a 0.01 micron coalescent filter. That’s 500 times greater filtration than the industry standard.

Midmark solutions
Compressors and vacuum systems operate at peak efficiency when installed, operated and maintained per specifications provided online or from your dealer. They are designed to provide your office with clean, dry air and suction that exceeds the requirements for dental operation.

Midmark PowerVac® and PowerVac® G Dry Vacuums
• These vacuums can be expanded easily to grow with your practice and meet your needs today and into the future. Upgradable flexibility can accommodate 1–20 users.
• PowerVac and PowerVac G have the best flow at pressure rate. Positive displacement pulls through the system more effectively vs. other systems.
  - For practices with overhead plumbing, the PowerVac and PowerVac G have the most suction pressure at 18” Hg to keep up with your demands.

Midmark Oil-Less PowerAir Compressor
• This compressor does not use oil, which eliminates the need to change oil that could carry contaminants.

To ensure you have the safest, most reliable air and vacuum, check with your preferred service technician to ensure any change in your operational environment can be reliably provided with your current equipment.

Types of Contaminants*

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>Visible with the Naked Eye</th>
<th>Visible with a Microscope</th>
<th>Visible with an Electron Microscope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td>5</td>
<td>1.0</td>
<td>0.5</td>
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<tr>
<td>Cooking Smoke/Grease</td>
<td></td>
<td>0.1</td>
<td>0.01</td>
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<td>Human Hair</td>
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<tr>
<td>Pet Dander</td>
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<td>Household Dust</td>
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<tr>
<td>Tobacco Smoke</td>
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<tr>
<td>Viruses</td>
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<tr>
<td>Fertilizer</td>
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<tr>
<td>Insecticide Dust</td>
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<tr>
<td>Plant Spores</td>
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<tr>
<td>Coal Dust</td>
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</tbody>
</table>

Contaminants that pass through a 5-micron filter

Clean air is vital both now and always. Midmark PowerAir Compressors have a 0.01-micron coalescent filter designed to provide the ultimate in clean air, generating the capacity to capture 99.9997% of compressed air contaminants.

Competitive compressor brands filter air to 5 micron. Midmark PowerAir oil-less compressors filter air to 0.01 micron.

*Adapted from: https://cleanaire.co.nz/design-your-hrv/air-filters-explained

Now is a great time to check in and update or reset your maintenance requirements and the expectations of your dental office.

For additional information, please visit our start-up guide available at midmark.com/airvacstartup

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