

Engineer evaluates Tornado's CV30 vacuum cleaner

by Dawn Shoemaker for Tornado Industries

Michael Simkhin is probably not who you would expect to be vice president and general manager of a large building maintenance company. Simkhin, who has a master's degree in engineering, originally planned to be an engineer. However, a second job working for Chicago-area contract cleaning company Executive Building Maintenance — which cleans schools and other facilities around the city — soon became a full-time job. And the rest, as they say, is history.

"My engineering degree actually helps me quite a bit in the cleaning business," said Simkhin. "Running a large contract cleaning company takes planning, testing and applied technology. In many ways, that's what engineering is all about."

Simkhin used his engineering background to evaluate Tornado Industries' new CV30 true-HEPA upright vacuum cleaner. "This is an engineering marvel," said Simkhin. "We use it in the factories, offices, condo complexes, and schools we clean. The CV30 is clean, quiet, efficient, and very easy to use."



HEPA filter

is 70 percent higher than the national average.

Simkhin said that, because the CV30 is a true-HEPA vacuum cleaner, it creates a cleaner and healthier environment for school-age children and adults in educational and other settings; and it can help improve indoor air quality.

HEPA filters can trap 99.97 percent of particles — and many of the allergens that trigger asthma — down to 0.3 microns in size, so that they do not become airborne.

However, if the machine is not properly sealed, contaminants can escape into the air — even when the vacuum uses a HEPA filter. A true-HEPA vacuum cleaner, such as the CV30, is specially engineered so the casing and connections have a proper, airtight seal. That way, all airflow travels through the filter and contaminants are deposited into the machine's specially designed filter bags — not back into the air we breathe.



The CV30 vacuum has edge-cleaning capabilities.

Protecting indoor air quality

One of the major concerns of Chicago schools is the rapidly increasing rate of childhood asthma. In fact, Chicago is now considered the "asthma epicenter" of America, with 650,000 children and adults suffering from the respiratory illness, a death-from-asthma rate among African Americans double the national average, and a hospitalization rate that

Protecting the worker and the machine

Another "engineering marvel" Simkhin appreciates is the automatic clutch system on the CV30. The system disengages the motor whenever a coin,



It's so quiet, this icon's on the machine.

staple or other large foreign object gets in the machine. "This helps protect the vacuum cleaner, especially in the schools we clean. The youngsters drop all kinds of things on the carpet but, because the clutch disengages the roller brush immediately, there is no harm to the motor or other engine parts," he said.

The CV30 is also ergonomic, making it easier to maneuver, and minimizing the worker fatigue often experienced when using other brands of vacuum cleaners, according to Simkhin. The CV30 has an ergonomically designed handle that conforms to the user's hands. The machine is light, with large, vibration-absorbing wheels; and it is also self-propelled.

"As an engineer, I know noise can be bothersome — and a factor affecting worker productivity," said Simkhin. "The CV30 is quiet — about 66 decibels. In fact, it is so quiet it even has its own icon right on the machine." He also mentioned that having the wand and brush attachments built right into the machine means workers do not need two vacuum cleaners to do their job.

Executive Building Maintenance has purchased several CV30s based on Simkhin's recommendations. "As an engineer and a cleaning contractor, I think the CV30 is a well-made machine, and the perfect union of engineering, science, and cleaning technology." □