



The CFT™ Difference

Central vacuum systems need a balance between maximum air movement and effective filtration to guarantee high-performance cleaning. Bags and filters can clog quickly and reduce airflow and vacuum power.

The filtration method of Cyclonic Separation delivers the highest sustained cleaning performance because the dirt is removed from the airflow without restriction. Cyclonic Separation, as defined by the Dictionary of Physics, requires three criteria to be met: high-speed rotating airflow, a conical container, and downward motion. **Only Cyclonic Filtration Technology® (CFT) from VACUFLO® meets all three criteria.**

CFT is an exclusive dual filtration process designed to deliver maximum cleaning power every time you vacuum. CFT begins with Cyclonic Separation to remove dirt, dust and allergens from the incoming air stream without bags or filters.

Cyclonic Separation starts the moment vacuumed dirt enters the power unit from the intake. As the dirt-laden air begins a downward descent, it spirals along the inside of the unit, picking up speed and forcing 96-98% of the vacuumed dirt into the dirt canister. The remaining fine dust particles are pulled upward with the airflow and are either exhausted outside (True Cyclonic® units) or trapped in a high-efficiency pleated filter cartridge (Filtered Cyclonic™ units). Less than 5% of the vacuumed dirt is exposed to the filter or exhausted outside.

Versus Permanent Cloth Filter System

- Cleaning performance diminishes rapidly as the permanent cloth filter becomes clogged with dirt.
- Airflow forces 100% of all vacuumed dirt directly against the permanent cloth filter – no cyclonic air path or separation is achieved. The result is dirtier filters for greater clogging potential and diminished vacuum power.
- Debris doesn't fall from the permanent cloth filter until system is turned off. This helps to unclog the filter, but a dirt film remains – reducing original performance.
- Permanent cloth filter systems can not be restored to like new condition once dirt and dust are embedded in the filter. Coatings like GORE-TEX® and Teflon® help reduce embedded dirt, but do not eliminate it.



Filtered Cyclonic™

Incoming air and vacuumed debris

Filter shroud enhances cyclonic performance and protects filter from incoming dust and dirt

Filter cartridge is exposed to less than 5% of vacuumed fine dust particles before clean air is exhausted.

CFT™ separates the debris from the airflow and forces 96-98% of all vacuumed dirt into the dirt canister



Terms and Definitions

There are many measurements manufacturers might use to assess their vacuum system's performance. But, what does it really mean?

Amps represents the amount of electrical current consumed by the motor during use. The implication is that the more electricity the motor uses, the more powerful it is. This is not necessarily true. A motor that uses more electrical current does not always mean the current is being used more efficiently.

Horsepower measures the power of a motor. Horsepower can vary according to voltages, motor loads and temperature variances, and is not an accurate measure of how well a vacuum system will pick up dirt.

Sealed Suction measures the maximum suction generated by the motor without airflow. Because vacuum cleaners rely on airflow to clean effectively, high sealed suction without airflow will not clean anything.

CFM is the maximum volume of airflow measured in Cubic Feet Per Minute. Maximum CFM ratings occur when the vacuum system is operating without restrictions to airflow. In normal vacuuming conditions, hoses, cleaning attachments, bags, filters and accumulated dust create restrictions to airflow, reducing CFM. Therefore, CFM alone is not a good indicator of vacuum cleaning performance.

Maximum Air Watts represent the air power delivered by the power unit. CFM and Sealed Suction are combined to represent actual vacuum cleaning power. Maximum Air Watts is recognized by the American Society of Testing and Materials (ASTM) as the best way to measure the actual cleaning power of a vacuum system.

Sustained Cleaning Power is the ability to maintain Maximum Cleaning Power over time. Cyclonic Separation, used in all systems from VACUFLO®, delivers the highest sustained cleaning performance because the dirt is removed from the airflow without restriction.

Cyclonic Filtration Technology® for Cleaner, Healthier Homes

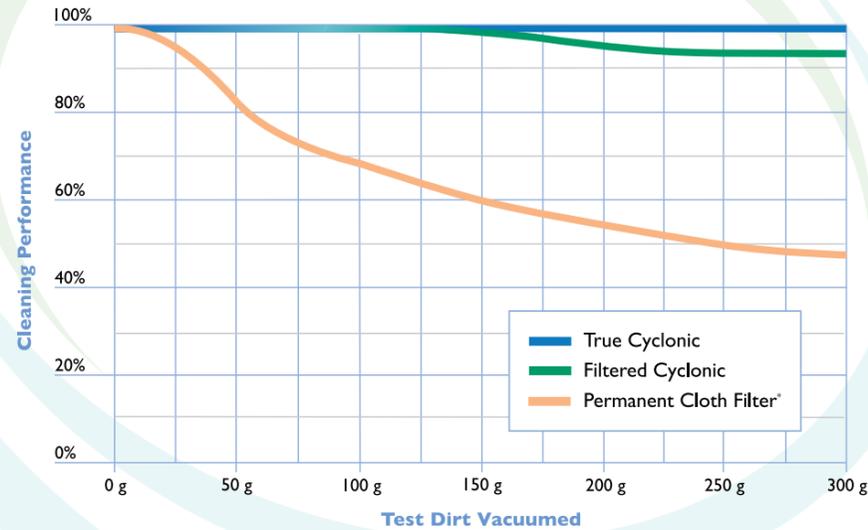


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Cyclonic Separation is a method of removing particles from an air stream without having to use filters. The high speed rotating airflow within a conical container creates high G-forces, forcing particulate matter to the outside wall. As the rotating airflow moves downward, the airflow and G-forces steadily increase enabling the separation of finer particles.

Dictionary of Physics

Sustained Cleaning Power Equals Maximum Vacuum Power Every Time



Results from independent testing conducted by Intertek Testing Service, NA, Inc. in Cortland, NY. *Includes GORE-TEX®, Teflon® or other treated fabrics

Independent Testing Results

VACUFLO® commissioned an independent test of central vacuum systems at Intertek Testing Services in Cortland, New York. True Cyclonic® and Filtered Cyclonic™ models from VACUFLO, along with three competitive models with permanent cloth filters (inverted or bouncing bag models), were tested.

Three units of each model were tested to ensure consistency and accuracy. Performance results of the permanent cloth filter units were averaged together to report a sustained cleaning measurement. VACUFLO's True Cyclonic and Filtered Cyclonic units were reported independently.

As the chart illustrates, after 300 grams of test dirt, True Cyclonic units experienced no loss of power or suction and the Filtered Cyclonic units showed a minimal performance drop and then stabilized at 94%. The permanent cloth filter models drop off in sustained cleaning power almost immediately after ingesting a small amount of dirt. The decline is steady, stabilizing at 44% after 300 grams (the average household vacuums up 453.6 grams per week).

The performance of Filtered Cyclonic units will return to "like-new" condition once the filter is replaced. Permanent cloth filter systems, even those with coatings like GORE-TEX® and Teflon®, can not be restored to like new condition once dirt and dust are embedded in the filter. Coatings may help reduce embedded dirt, but do not eliminate it.

This testing confirmed that Cyclonic Filtration Technology® delivers unbeatable sustained cleaning performance when compared to competitive products.



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