

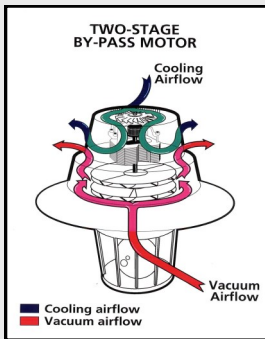
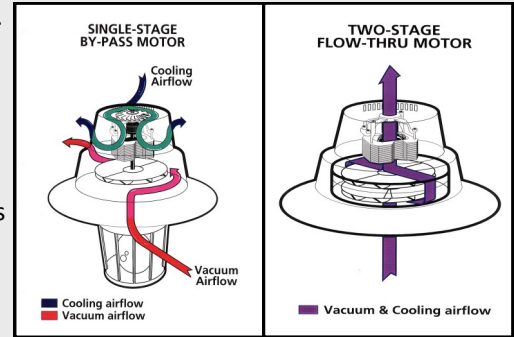
## Wet Dry Vacuums

Wet Dry Vacuums, like words such as Band-Aid™ and Channellock™, have also become known as Shop Vac™ and are a popular item in many homes and businesses. They are used for tough jobs where you wouldn't normally use your standard vacuum, like wood chips, sawdust, heavy dirt, and of course water. So how do you pick the right one for your needs, and what specifications are the most important? Well don't let that "suck" you into making an uninformed decision! This eZtip will help clear up that confusion and lead you through the process to getting the right vacuum for your needs.

**Motor Systems** – Wet Dry vacuums will use one of two motor systems in their construction.

**"By-Pass"** motor systems use a separate cooling fan to draw air in and cool the motor. The air drawn into the tank to create suction by-passes the electrical components of the motor. The separation of the suction and cooling air allows a by-pass system to pick up wet debris and liquid.

**"Flow-thru"** systems use the same air drawn through the tank to cool the vacuum motor. Due to the fact that the suction air flows through the motor, flow-thru units should be used for dry debris ONLY. Exposure to wet debris or liquid would quickly short circuit and ruin the vacuum.



**Motor Types**– Wet Dry vacuum motors can be either single or two stage, which refers to the number of fans used.

**Single-Stage** motors use a single impeller to create suction pressure at a fairly high air flow volume (CFM). Single-stage units are adequate for applications like workshops, home and auto, as well as some light industrial use.

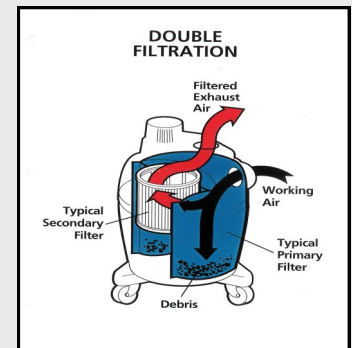
**Two-Stage** motors in turn utilize two impellers, producing a significantly higher suction pressure. This higher suction pressure makes the two-stage vacuums ideal for heavy duty and commercial maintenance applications.

**Peak Horsepower**– Peak horsepower is the maximum horsepower output of a motor as determined in a laboratory test. Because the test is done outside of the motor's normal operating range, this is generally not the best specification to use when comparing vacuums.

**SP (Sealed Pressure)** – Sometimes listed as Static Pressure, Sealed Pressure is a measure of how far a vacuum motor can lift a column of water up a glass tube, as measured in Inches of Water Column. Maximum suction pressure (also known as sealed water lift) is obtained at zero air flow, meaning the water column is lifted by the suction pressure with no external air flow through the hose.

**CFM (Cubic Feet per Minute)** – CFM is a measurement of the amount of air moved by the vacuum at a particular load, like a 2.5" orifice. The actual system load is determined by the type, size, and length of the hose, as well as any accessories and filtration system used.

**Filtration** – Just like your furnace or vehicle require a clean air filter to breathe and perform at their best, the same is true of a wet dry vacuum. For dry filtration, vacuums will use a centrally located filter to capture dust and debris. To improve filtration, most vacuum manufacturers and aftermarket companies offer bags that can be placed inside the vacuum tank. This is called multiple-level filtration where the bag becomes the primary filter, capturing large dust and debris, and the existing filter acts as a secondary filter to capture additional dust particles before the air is exhausted. The majority of commercial wet dry vacuums will have multi-level filtration standard while smaller units often have it as an option (bags). Most filters will need to be removed when using for a wet application. Check your specific unit's manual for confirmation.



**Note: A standard Wet Dry vacuum with a HEPA filter is not sufficient for use in lead, asbestos, or other hazardous material abatement. HEPA rated equipment is required for applications such as this.**



If you are still having difficulty choosing a Wet Dry Vacuum, please contact us at [askzoro@zoro.com](mailto:askzoro@zoro.com) or 855-289-9676

Information sources include Shop Vac, W.W. Grainger

**Product Compliance and Suitability.** THE PRODUCT STATEMENTS CONTAINED IN THIS EZTIP ARE INTENDED FOR GENERAL INFORMATIONAL PURPOSES ONLY. SUCH PRODUCT STATEMENTS DO NOT CONSTITUTE A PRODUCT RECOMMENDATION OR REPRESENTATION AS TO THE APPROPRIATENESS, ACCURACY, COMPLETENESS, CORRECTNESS OR CURRENTNESS OF THE INFORMATION PROVIDED. INFORMATION PROVIDED IN THIS EZ TIP DOES NOT REPLACE THE USE BY YOU OF ANY MANUFACTURER INSTRUCTIONS, TECHNICAL PRODUCT MANUAL OR OTHER PROFESSIONAL RESOURCE OR ADVISER AVAILABLE TO YOU. ALWAYS READ, UNDERSTAND, AND FOLLOW ALL MANUFACTURER INSTRUCTIONS.

Document Create Date: 17 June 2015

Zoro Wet Dry Vacuum eZtip

Last Review: 29 June 2015

© 2011 - 2015 Zoro Tools, Inc. All rights reserved.