What type of dust collector is right for me?



UNDERSTANDING DUST COLLECTION

What type of dust collector is right for me?

- Standard dust collection/extraction is usually classified as one of main two types:
 - HVLP (High Volume / Low Pressure)
 - LVHP (Low Volume / High Pressure)
- These two types refer to the air flow volume, but also the pressure or the 'lifting power' it carries through a dust collection system (or hose). This in turn directly affects its purpose.
- Two different systems with two different purposes.
 - One for carrying only fine dust through small diameter hose and connections.
 - One for carrying fine dust <u>and</u> large shavings through large diameter hose.
- Which one is right for you will depend on what you are connecting it to.
- Always check with your machinery supplier for the minimum requirements.





LVHP

- LVHP collectors are designed to run a low volume of air through small diameter hose:
 - Household vacuums, Shop Vac type collectors are a great example of LVHP collectors
 - These systems are perfect at moving finer dust, through smaller hose diameters e.g.: connection to handheld power tools etc
 - LVHP collectors don't lose efficiency when stepped down to these smaller diameter connections.
- These units usually run a universal/brushed motor, which spins a small impeller very fast, and can be quite loud in an close environment e.g. workshop.
- Duty cycle on these type unit may also be a factor to consider, if you are going to be running for extended periods of time.
- LVHP collectors usually have small collection capacity, which is fine when you are connecting to small dust producers (i.e.: handheld power tools). Most are usually 50L or less.
- CFM (cubic feet/min) is important when it comes to woodworking dust extraction & collection. Most LVHP units run around 100CFM, some even less.
 - Most woodworking machines require 300CFM or greater (depending on type) - measured at the machines dust port.



HVLP

- HVLP systems are collectors that are specifically designed to run larger diameter hose, for direct connection to machinery which has larger diameter dust ports.
 - High Volume air is what lifts and moves larger shavings away from machinery cutters etc
 - These collectors start with single port connection (one collector to one machine), and move up to larger units with even higher air volume (CFM), for connection to multiple machines and dust networks.
- HVLP collectors <u>start</u> at around 500CFM, with virtually no upper limit.
- HVLP collectors usually have induction motors, designed to be run for extended periods, reducing the noise in the workshop.
- HVLP collectors have generous collection capacity (e.g. starting at 80L)
- HVLP hose can be stepped down to smaller diameters, but efficiency is lost in the process.



carbatec



1200CFM

2x 100mm inlet

• 79dB @ 1m

>150L bag capacity



- >3000m3/h
- 1800CFM
- 3x 100mm inlet
- 83dB @ 1m
- >340L bag capacity

