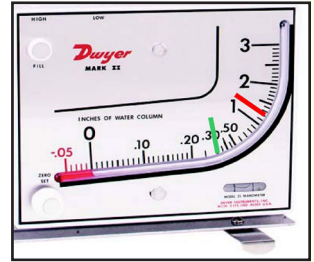


When to Change Exhaust Filters

Method 1

- 1) Replace all filters in the spray booth so that they are all new. Ensure that there are no gaps between the filters and the metal frames.
- 2) Read the manometer while the blower is turned off. If it does not read zero, then zero it by turning the “zero” knob in the appropriate direction.
- 3) Close the doors of the spray booth (if there are doors) and start the blower.
- 4) Wait until the level in the manometer stabilizes and place a green mark at that level. This is your “initial” level.
- 5) Ask your filter manufacturer what the pressure differential should be when the filters are loaded. Many vendors will tell you that you should replace the filters when the level is one inch above the initial level. If that is the case, place a red mark exactly one inch higher than the green mark. Therefore, if the green mark is at 0.35 inch water column (in wc), place the red mark at 1.35 in wc.



The recommended maximum pressure drop

for an Andrae Filter is 0.51 in wc (128 Pa). However, an Andrae Filter can withstand a maximum pressure drop up to 1.03 in wc if the fan is capable. Andrae Team encourages (and cautions) finishers to try to achieve the highest pressure possible to get the maximum life out of the filters.

Method 2

If you own a velocity meter, you can use a more cost efficient method to determine the high (red) mark.

- 6) Measure the velocity inside the booth when the blower is turned on and the filters are new (i.e. at the green mark). According to OSHA regulations the velocity should be at least 100 ft/min for most cross draft spray booths. You should refer to the regulations to determine what the velocity would be for your booth design.
- 7) If the velocity is less than that required by OSHA, you should ask a qualified, certified electrician to increase the fan rotation until you attain at least 100 ft/min. If you don't have an electrician who can do this, call your spray booth vendor.
- 8) After you ensure that the initial velocity is more than 100 ft/min, slowly plug up the filters by placing small pieces of masking paper over the filters. Read the velocity inside the booth.
- 9) If the velocity was more than 100 ft/min at the green mark, you can keep building up resistance on the filters until the velocity drops to 100 ft/min. That would be the high level mark (red) at which you would need to change filters.¹