I was looking at your specs online for the HJ3100. I wanted to know more about the CFM measurements. One port is at 100CFM and two ports are at 180CFM (90CFM per port). Is this

The specification for CFM as shown in the HJ3100 Instruction Manual and on the product web page are the ratings of the vacuum system. These ratings are measured by evaluating the flow of air as it leaves the fume extraction system. By using this method, the rating accounts for any flow resistance due to the filters that are installed in the unit as well as the shape and area of the port openings.

It is true that as you add duct to the unit, the flow is affected. This is due to the resistance created by the duct that is added, so the diameter and length of the duct as well as the degree and number of bends in the duct will greatly affect the flow rate.

For example:

As per the specification for the HJ3100, the vacuum system has a rating of 100CFM when using only 1 port and the standard filters are installed. Testing showed that airflow was measured at 110.29CFM \pm 1.5%. After installing the standard Loc-Line® duct kit (PN: 999-205-01), the measured airflow was reduced to 77.99CFM \pm 1.5%. This is a reduction of approximatley 29%.

So as demonstrated in the example above, duct work added to the HJ3100, or to any fume extraction system for that matter, will reduce airflow.

Please note, in the example above, environmental conditions such as temperature and humidity as well as the configuration of the duct can affect measurements. As a result, individual measurements may vary.

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