

“Unparalleled Delivery Times on Custom and Standard Filtration Products”

Mesh and Micron – What’s the difference?

Wire cloth manufacturers all over the world refer to “mesh” when selling or weaving wire cloth. Filter companies like to talk in terms of “micron.” Over the years both have mixed fairly well. Yea, right! Like water and oil causing confusion. Is there a way out? We can help. In our Learning Center Resources location on our website, there is a chart to help distinguish between the two terms. See our [Mesh-Micron comparison chart](#).

It is extremely important to distinguish between the two terms because it could make all the difference in performance and could even harm the system if the filtration was either too open or too restrictive. Proper filtration is one of the most important aspects in the operation of any system. A good rule of thumb to follow is, if you are not sure, ask questions of the right people. Our knowledgeable staff is always available.

Vacuum and Air Vent Compliance

In the last decade, many states have mandated that screens be installed on all vacuum and air release valve vent openings, as shown here. Cost effective compliance can be achieved through the use of pipe-mounted suction screens which OFCO manufactures. This is another use for our suction screens, in addition to being widely used in the carpet cleaning industry, disaster recovery, the commercial paint industry, and many other markets. Contact OFCO to see how we can help solve problems for you.





Application Bulletin

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Water Utilities Application Bulletin

In recent decades, with California leading the way, most states have mandated that screens be installed on all vacuum and air release valve vent openings. Cost effective compliance can be achieved through the use of pipe-mounted suction screens. This is another use for our suction screens which OFCO manufactures.

Ohio Fabricators Company manufactures these products which are available with either male or female threaded ends. In pipe sizes up to 24" and in a range of mesh sizes from 10-200 mesh. All these vent screens that are applied into the valve with heavy duty, long lasting, industrial strength epoxy.

CALIFORNIA ENVIRONMENTAL HEALTH

REGULATORY TITLE 26, SECTION 66000, SUBSECTION 66000.02, PARAGRAPH 66000.02.01, ITEM 10

(1) Vent openings shall be protected with a screen having a mesh size of 20 mesh or finer.

(2) Screens shall be made of a material that is resistant to corrosion and shall be installed in a manner that allows for easy access to the screen for inspection and cleaning.

(3) Screens shall be installed in a manner that allows for easy access to the screen for inspection and cleaning.





Unparalleled Delivery Performance • ISO 9001:2015 Certified

A Simplified Study in Filtration

PART 1 OF 10: INTRODUCTION

What follows is the first of 10 parts of an article written by Don Krause of Ohio Fabricators. Subsequent parts will follow in future newsletters.

Filtration has come a long way since the beginning of time. It goes all the way back to ancient times. The Egyptians used to strain their grape juice through fabric. Even the use of filters to purify water and make it fit for consumption is not new. Historical records dating back before the birth of Christ have many references to making water drinkable. The Bible has many references to water treatment and supply. Egyptians heated, then filtered their water through sand. Ancient Indo-European records refer to placing water in copper kettles, heating it, exposing it to sunlight, and running the water through charcoal. In ancient Rome around 300 B.C, water provided by the aqueducts was used not only for drinking but for bathing. Primitive filtration systems were used in the form of settling tanks to remove debris from the water to help purify it. So you see, the idea of filtration goes back a long, long way.



Enough of the history lesson in filtration. The development of science through the ages has brought us to the point that we not only filter solid particles but even molecules. Now that is getting pretty scientific! Just so you have a basic understanding of the relative sizes of particles, the human eye can see no smaller than 40 microns, human hair averages 50-70 microns in diameter, a grain of table salt is about 100 microns, white blood cells are 25 microns, red blood cells are 8 microns, and most bacteria (cocci) is about 2 microns. Now that's small! This is all fine and dandy and might come in handy during a Trivial Pursuit™

game, but how does it relate to the filtration of fluids in a multi-million dollar system?

If there is an area that, generally speaking, people do not think of very much when designing and maintaining a fluid power system, it's filtration. It isn't necessarily carelessness; it is simply a matter of something that is not given priority. However, it may be one of the most important areas in a system. Think about it for a moment—here you are with a \$15,000,000 power system, or even a \$5,000 car engine, the inlet filter plugs (if there is one), the pump cavitates, and there goes the system. The pump, the heart of all power systems, is destroyed—all because of a simple, inexpensive, suction filter, which was not maintained, or maybe one never existed in the first place. Too much resistance to flow creates considerable power loss and ineffectual operation, and sometimes destruction.



Filters are relatively inexpensive and well worth the investment. For the cost of a filter it may mean the difference between a good operation and a poor operation. In this day and age when we all want to get “more bang for the buck”, a properly maintained system, whether it be \$15,000,000 power system, a \$5,000 car engine, or a \$150 lawn mower, is a must. That doesn't only mean the filtration end of it either. All components in the system are important as well, and need to be protected and maintained. They all work as a team in getting the job done effectively, both in cost and in performance. Remember, if there is an area of filtration that is not very clear to you or if you have any questions concerning applications, contact a filtration specialist. After all is said and done, manufacturers, distributors, dealers, and users are all on the same side.



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