

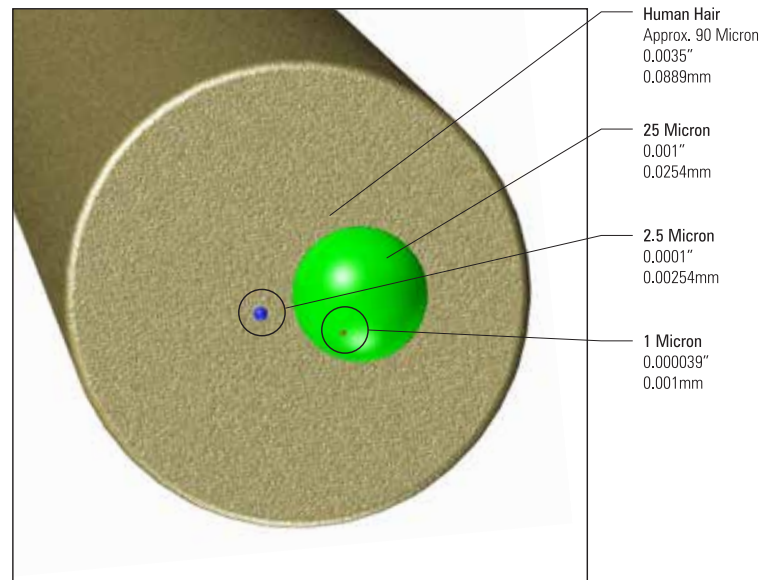
## Understanding - Micron Ratings For Fuel Filters

The improvements being applied to modern fuel systems on vehicles are advancing at such an unprecedented rate they require a filter that can provide very high levels of operating efficiencies and reliability. This means the higher pressures being used with a reduced tolerance to impurities requires exceptionally clean fuel. With these requirements in mind specialised equipment is required to accurately establish the micron rating, efficiency and flow rate of the fuel through the filter.

A micron rating for a fuel filter is a generalized way of indicating the ability of the filter's media to remove contaminants by the size of particles it is exposed to. The micron rating does not properly or fully describe either the efficiency or the contaminant-holding capacity of the filter media.

We see many examples of filters being advertised out in the market at, for example, 5 micron filter with no other supporting information.

Even the most basic filter media has the ability to trap a 5 micron particle. However, to back up the claim we need the efficiency rating to be included.



For example, 5 microns at 99% efficiency, means only 1 in every 100 particles of 5 micron size will pass through the filter. However, a 5 micron filter with 90% efficiency means 1 in every 10 particles can pass through the filter.

If this can also be backed up with the test procedure used to test the filter, for example ISO 19438, you can then be assured the filter does what it says on the box.

Be wary of filters that only tell you the micron rating if they can't state the efficiency.

Also note, fuel filters that capture particles as small as 5 microns will collect more contamination from the fuel and reach its dust holding capacity more quickly. This may result in the filter having to be replaced more frequently than a larger micron filter. Remember a good filter is low cost protection for expensive engine components.

