

PRODUCT HIGHLIGHTS

Micron Ratings

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Engine design has changed significantly over the past 10 years. Newer engines typically require finer filtration of contaminants to ensure long life of critical, expensive engine components. Micron ratings are often used in an effort to communicate the contaminant removal capability of a liquid filter, however, micron ratings can be misleading if one does not fully understand how to use them.

Let's first look at what a micron is. A micron is a unit of measure in the metric system equal to 1 millionth of a meter in length (about 39 millionths of an inch). The average cross-section of a human hair is 40-90 microns. The human eye cannot see anything smaller than 40 microns in size.

Two filters may be considered to be 10 micron filters, however, one may remove a greater percentage of 10 micron size particles of contaminant, thus the filters would not be considered equal in performance. For a micron rating to be useful, you must know the filters' removal efficiency of the specific particle size in question.

The term "nominal" micron rating typically means that the filter is capable of removing 50% of a specific size particle, however, some companies' "nominal" micron ratings may range anywhere from 1 to 98.6% efficient at removing a specific particle size. The term "absolute" micron rating means that the filter is capable of removing at least 98.7% of a specific size particle. This rating is far more accurate.

Related Literature

- Form 95-11** Filter Performance and Micron Ratings
TSB-89-5R3 The Micron Rating for Media in Fluid Filters

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