

TECH TIPS

Common Industry Terms VI

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The filtration industry uses industry-recognized terminology to communicate information relative to filters. What type of filter is it? How does it work? What components are included within the filter and what does that tell us? What are the performance levels of the filter itself? These terms help us to understand the characteristics of all filters, regardless of brand.

Here are a few common industry terms relative to filtration.

Abrasives

Those particles, which when caught between moving surfaces, will “abrade” or wear surfaces.

Abrasion

The wearing, grinding, or rubbing away by friction. Abrasion in a filtration system is usually due to the presence of foreign matter such as dirt, grit or metallic particles in the lubricant.

Cavitation

The formation and collapse of vapor bubbles caused by a partial vacuum within a liquid.

Cavitation Corrosion/Erosion

Formation of voids or air bubbles in a liquid when subjected to intense vibrations or sudden pressure drop. The shock waves created by the collapse of these voids or air bubbles can cause severe mechanical damage to the surfaces of metal.

Chemical Corrosion

Sulfur that is generated from the combustion of fuel mixed with water, which becomes acidic and degrades or corrodes the metal engine parts.

Electrolytic Corrosion

Two differing metals in contact with each other in a liquid, such as the cooling system, have an ion “exchange.” One metal “gives off” to the other. The degradation of one metal to the other is measured in an ASTM test known as the Corrosion in Glassware test.

Erosion

The mechanical wearing away of metal by the action of liquid or gas.

Pitting Corrosion

Localized attack in which the depth of penetration is at least the same order as the diameter of the area corroded. A dangerous form of corrosion.

The preceding information is available online at www.baldwinfilter.com/techtips.html.

BALDWIN FILTERS® **BALDWIN**

4400 East Highway 30 ■ P.O. Box 6010
Kearney, Nebraska 68848-6010
Phone: (308) 234-1951 ■ Toll Free: (800) 822-5394
Fax: (800) 828-4453 ■ Int'l Fax: (308) 237-9769
Internet: www.baldwinfilter.com