

Glossary of Terms

TERM USAGE

Aerosol Submicron particles suspended in air, gas or vapor. A fog, fume, or smoke.

Bulk Density Ratio of total mass or weight of the material divided by the volume of the

material (includes void volume in the case of solids).

Continuous Phase The basic product flowing through a filter or filter/separator which

continues on through a system after being subjected to solids and/or

water removal.

Delta P See "Pressure Drop" on reverse.

Discontinuous Phase The phase dispersed in the continuous phase; water is a discontinuous

phase to be separated from a hydrocarbon liquid or from air or gas.

Drop The quantity of liquid which makes up one spherical mass; a liquid globule.

Droplet A minute drop which may coalesce to form larger drops.

Effluent Stream of fluid at the outlet of a filter or filter/separator.

Opposite of influent.

Emulsion A dispersion of fine droplets in the continuous phase.

Entrained Water Discrete visible water droplets carried by a continuous hydrocarbon phase.

Fiber Migration Carry-over of fibers from filter or separator media material into the

effluent. Fiber migration is a qualitative part of total media migration.

Filtrate The fluid which has passed through filtering media. Also referred to as

effluent from filters.

Gravity Separation Separation of immiscible phases resulting from a difference in specific

gravity (Settling).

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Hydrophilic Water accepting or water wettable. Opposite of hydrophobic.

Hydrophobic Water repelling. Lacking affinity for water. Opposite of hydrophilic.

Immiscible Liquids which are mutually insoluble; opposite of miscible.

Influent Stream of fluid at the inlet of a filter or filter/separator.

Opposite of effluent.

Media Migration Carry-over of fibers and particles from filter or separator media

material into the effluent. Includes fiber migration, expressed as

milligrams per liter.

Miscible Liquids which are mutually soluble. Opposite of immiscible.

Pressure Drop The difference in pressure between two points, generally at the (Delta P: △P)

inlet and outlet of a filter or a filter/separator. Measured in pounds per square inch, inches of mercury, kilograms per square centimeter,

kilopascals (kPa) or bars (1 bar = 14.5 psi). (Also commonly

referred to as Delta P or differential pressure.)

Specific Gravity The ratio of weight of a fluid to the weight of an equal volume of

standard substance; i.e. water for solids and liquids, and air or

hydrogen for gases.

Static Generation Unbalanced or net electrical charge produced in a flowing

hydrocarbon liquid.

Surfactants Surface-active agents, which are also called detergents, emulsifiers,

or wetting agents. Polar compounds. (Most surfactants in Jet Fuel

can be removed by Clay Treatment.)

Three-Stage A filter/separator vessel containing coalescers, separators and

3rd stage monitor elements (e.g. CDF cartridges)

Two-Stage A filter/separator containing two kinds or types of elements

(coalescers and separators).

Velocity The time rate of motion or speed in a given direction.

Viscosity A molecular property of fluids: the friction of molecular motion.

A more viscous fluid has a higher pressure drop at a given rate

of flow, as compared to a less viscous fluid.



Velcon, Fischer-Robertson, Inc. 3890 Symmes Road Hamilton, Ohio 45015 p: 513-860-3445 f: 513-860-4744

sales@fischer-robertson.com www.fischer-robertson.com

COMPANY HEADQUARTERS: Velcon Filters, Inc. 4525 Centennial Blvd. Colorado Springs, CO 80919-3350 Phone: 1.800.531.0180 Fax: 719.531.5690 e-mail: vfsales@velcon.com www.velcon.com

MANUFACTURING PLANTS LOCATED AT: Colorado Springs, Colorado

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