

General industry terms

Air to cloth ratio:	Ratio of air as a volume to cloth as an area: (air) $\text{m}^3/(\text{cloth}) \text{m}^2/(\text{time})\text{min}$ @ 12.7mm W.G. (water gauge) Example: $45 \text{ m}^3/\text{m}^2/\text{min}$ @ 12.7mm W.G. (12.7mm W.G. is the standard quotable air permeability gauge, $12.7\text{mm W.G.} = \frac{1}{2} \text{ inch W.G.} = 125 \text{ Pa}$)
Surface filtration:	Particles forming a cake on the surface of the filter media.
Depth filtration:	Particles are entrapped within the filter media fibres.
Cake filtration:	As a cake builds up on the surface of the bag: the dust itself becomes part of the filtration process.
Permeability:	The rate at which air/gas passes through a filtration media, expressed as: Imperial = $\text{ft}^3/\text{ft}^2/\text{min}$ Metric = $\text{m}^3/\text{m}^2/\text{min}$ Metric = $\text{L}/\text{dm}^2/\text{min}$
Dew point:	Dew point refers to moisture in a gas form, e.g. warm air hits a cold surface and forms a dew. Dew point temperatures vary from 25°C to 55°C in normal polyester bag applications. Moisture can rot the filter bags, particularly polyester and Nomex - called hydrolysis.
Hydrolysis:	Hydrolysis is a chemical reaction or process whereby a chemical compound is broken down as a result of a reaction with water.
Oleophobic treatments:	An oleophobic treatment to a fabric will result in its ability to repel water and oil.
Epitropic:	Carbon impregnation of a needlefelt utilized to achieve antistatic properties.
Pressure drop/differential pressure/resistance:	The measurement in air pressure between the dirty and clean air sides of a filter bag. Usually expressed in pascals, inches, W.G. or KPA.
Needlefelt:	A three dimensional material manufactured by way of needling fibres through a woven or spun-bonded base cloth then heat setting to stabilise.
Scrim:	The base cloth of a needlefelt. Can be woven or spun bonded.
Warp:	The threads running length-wise through a woven fabric.
Weft:	The threads running left to right across a woven fabric.