

ECOSPUN Spun bond Media: The best choice for your Dust Collector?

The unique spun bond media used in the ECOSPUN filter elements will provide outstanding results in your dust collection system. This media is unlike traditional felt or woven fabrics and solves many of the toughest filtration problems. Following are some of the questions asked most often with regards to ECOSPUN polyester media:

Q. How is ECOSPUN media manufactured compared to traditional felt media?

A. Traditional felt media is constructed by needling bats of fiber into a woven scrim. ECOSPUN media is manufactured by layering fine denier fibers from multiple spinning heads onto a moving mat. This depth of fibers is then calendared under heat and pressure. The result is a stiffened media with a tight, consistent pore structure, which resists dust penetration, yields high filtering efficiencies and regenerates higher operating airflows.

Q. How efficient is ECOSPUN media versus traditional felt fabrics?

A. Comparative testing has shown that ECOSPUN polyester media allows half the outlet emissions than that of felt fabrics. With test parameters using 0.5 micron silica dust, the same air-to-cloth and grain loading of 30 gr/ACF, outlet emissions were only 0.0025 gr/ACF. The 16 oz polyester felt media was over twice as high with outlet emissions of 0.0060 gr/ACF.

Q. Will I have higher operating differential pressure with ECOSPUN polyester media?

A. No. They will be lower. During the same testing, pressure was monitored and the ECOSPUN media maintained superior filtration efficiencies while operating at a differential pressure of 3" wg. (Which is 40% less than standard felt fabric operating pressure of 4.7" wg.) The ECOSPUN media resists penetration of the particulate, which results in higher regeneration of airflows.

Q. What is the required compressed air pressure to clean ECOSPUN filter elements?

A. The operating pressure to clean the filters will depend on the characteristics of the collected dust and the dust loading. However, since the ECOSPUN media does not require a dust cake to develop, the required compressed air pressure is normally in the 50-70 psi range, versus the required 90-100 psi range for the traditional felt bag. The integral support mesh or metal core also promotes even distribution of the compressed air. Finally, since the pleated elements are shorter (maximum 84" long), you can be assured that the compressed air has enough energy to reach to bottom of the element.

Q. Will my dust cake release and cleaning efficiencies improve with the ECOSPUN media?

A. Yes. Felt fabrics have millions of rough surface fibers and protruding fiber ends that can attach to the dust cake causing poor dust cake release. In fact, it needs to retain a considerable depth of dust cake to reach an acceptable level of efficiency. The smooth, calendared finish of the ECOSPUN media allows for easy release of particulate.

Q. What is the temperature limitation of this media?

A. The same as the standard polyester felt and woven media. ECOSPUN media is manufactured with polyester fibers with similar chemical composition as those used in standard media. It can withstand temperatures up to 265F. Temperature ratings of the filter element will differ depending upon components used for top and inner support.

Q. Where else has this media been used before?

A. ECOSPUN media has been used in Europe and other parts of the world for many years. It has been recognized as a superior filter media over traditional felts and paper products and captures 30% of the filtration market share. It has been used successfully in the US in various configuration since the late 80's.