

Evaluation of Surface and Depth Filter Full Set Cartridge for Gas Turbine Intake Air Filtration

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Surface media has been used for gas turbine air intake filtration. These media have proven to be very efficient in removing airborne particles from the air stream. Recently though, the non pulsing systems are getting more attention since these systems do not require high pressurized air for cleaning of cartridges and hence savings in facility and running cost are evident. Depth filter media has been utilized for such non-pulsing air intake systems and have proven to be efficient in terms of particle retention efficiency and low pressure drop during the service time. Two samples have been investigated and compared with a commercial product to evaluate the filtration performance. Samples include two parts consisting of conical upper and cylindrical lower part. Both combined make a full set which is installed in a conventional pulsing gas turbine intake air system. Due to the different filtration properties, these media exhibit different filtration performance and comparison with the commercial product has confirmed just how good the media perform in removing the solid matter from air stream.