

## **HS-Sand Trap, Sandstorm Filter**

HS-Sand Trap is designed to separate and settle out sand and granulated coarse dust prior to filtration and air filtration systems. The filters are equipped to meet demands for filtration units in deserts and regions with high winds. They prevent coarse particles from entering the ventilation system and eliminate premature depletion of other static filters. Sand and coarse particle are discharged into a chamber at the lower side of the grid. During assembly, observe the correct fitting position of the filtration unit.

Filter efficiency

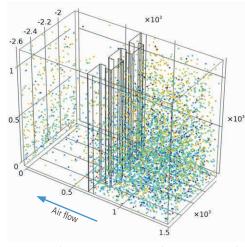
- 80 % of particles and sand grains with a size of 20 to 50  $\mu m$  - 65 % of particles and sand grains with a size of 1 to 70  $\mu m$ 

The geometrical construction of the precipitation grid is perfectly suited to meet demanding applications by using computational fluid dynamics (CFD). The grid is made from either aluminum or stainless steel; the frame is constructed from galvanized steel sheets and extruded aluminum profiles.

The separation grid is always followed by static filters as a second stage, which may either contain pocket filter, panel filters or metal mesh filters.

HS-Sand Trap Filters are designed related to their individual requirements.

Panel filters:       HS-Alpha Pak HS-Beta Pak       M5 to F7 (EN 779) ISO coarse to ISO ePM1 (ISO 16890)         Grease collectors: (metal mesh)       HS-Grease collector       G1 to G2 (EN 779) ISO coarse (ISO 16890)         Dimensions & operational conditions       • dimension depends on process requirements • can be used as initial stage for air ducts • mandatory inflow velocity > 0.5 m/s         Image: State of the	Installable filtertypes		Filterpoperties	
HS-Beta Pak HS-Beta Pak HS-Grease collector: HS-Grease collector (metal mesh) Dimensions & operational conditions • dimension depends on process requirements • can be used as initial stage for air ducts • mandatory inflow velocity > 0.5 m/s HS-Sandtrap HS-Sandtrap HS-Sandtrap HS-Sandtrap HS-Sandtrap HS-Sandtrap HS-Sandtrap HS-Sandtrap • as complete filter unit or as as easy to assemble single components ptions • design: profiles made from stainless steel 1.4301 • connection flange according to demand • additional filtration stages for fine dust collection and odor cont • monitoring station for differential pressure • pressure switch	5		G4 to M5 (EN 779) ISO coarse to ISO ePM10 (ISO 16890)	
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Visualization of the excellent separation performance by means of flow and particle distribution simulation of an HS-Sand Trap with a grain size of 25  $\mu m$  and a flow velocity of 1.7 m / s.

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