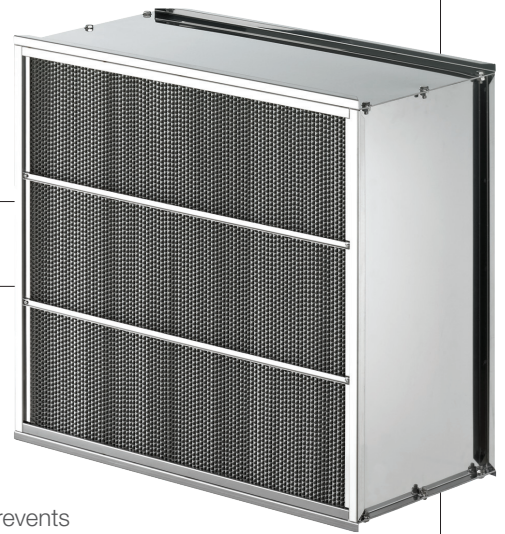


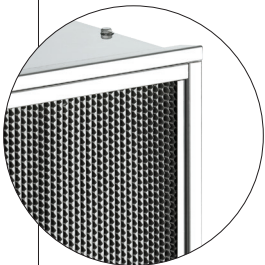
AstroCel® I HTP

HIGH TEMPERATURE HEPA FILTERS



- High temperature resistance up to a peak of 400 °C to protect ultra clean processes
- Handling high airflow rates up to 2100 m³/h for critical processes
- Stainless steel construction prevents potential damage from heat stretching
- Uses elastic fiberglass sealant, eliminating cracking or particle shedding seen with ceramic
- Free of silicone to safeguard air quality

The AstroCel I HTP high temperature HEPA filter from AAF is designed to provide excellent protection of high temperature processes in ultra clean environments that can be found in industries such as pharmaceutical or electronics. This filter supports compliance with the most stringent requirements so that high output quality requirements can be realized at minimized failure costs.



Stainless steel structure for superior durability during heating and cooling.

Reliable High Temperature Operation

In continuous service, the AstroCel I HTP filter offers a maximum temperature resistance of 350 °C, with a peak of 400 °C for one hour.

The robust all-stainless-steel structure prevents the media damage caused by thermal stresses, where materials with different expansion coefficients are used during temperature rising and falling. The elastic fiberglass media sealant is not prone to integrity breaches from stress cracks, giving a superior durability. Thorough heat-cycle tests have confirmed damage-free construction and consistent performance in pressure drop and efficiency at 350 °C. Bias crimped separators in combination with stabilizer bars inside the media pack ensure that uniformity of the media pack is maintained in operation. The AstroCel I HTP filter offers a unique combination of high temperature operation and superior durability, optimizing process results and limiting unscheduled downtimes.

High Air Quality Conditions

The AstroCel I HTP filter provides a high air quality level with a particulate collection efficiency of $\geq 99,97\%$ for 0,3 μm particles at a nominal airflow of 2.100 m³/h. With this high airflow rate, ventilation can be optimized to enable speedy temperature control. The silicone-free construction of the AstroCel I HTP filter further enhances the air purity level during the various steps of the sterilization process, without the risk of siloxane contamination. For critical process applications in which no concessions can be made to quality and yields, the AstroCel I HTP filter from AAF provides the right solution for ensuring that strict air cleanliness conditions are met.

Beneficial Total Cost of Ownership

The features described above can allow for a significant reduction in heating and cooling times, reducing the total cycle times of batch processes, increasing production throughput, and reducing overall cost.

Applications

Pharmaceutical: dry heat sterilization and depyrogenation

Electronics: clean oven for LCD and TFT manufacturing

Food and Beverage: drying facilities

Chemical: cleaning and drying for laboratory research

AstroCel® I HTP Filters

Standard Configuration

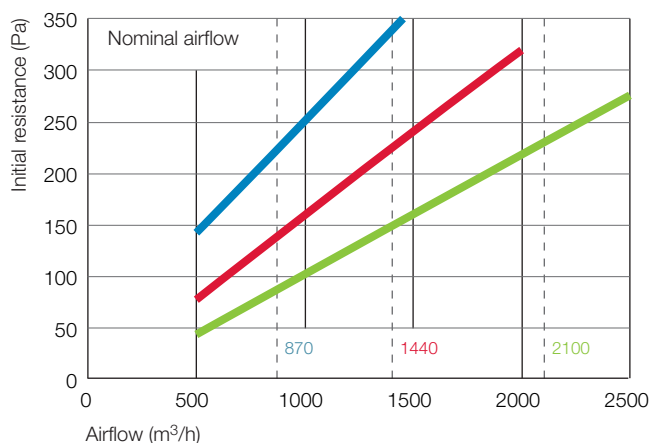
Filter medium		Filter frame	
Material	Fibreglass	Material	Stainless steel with 2 vertical support bars
Pack design	Deep-pleat	Sealant	Elastic fibreglass
Separator	Stainless steel in staggered position	Gasket	
		Material	Laminated fibreglass

Performance Data

Dimensions (mm)			Efficiency (%)		Nominal airflow		Filter medium surface (m ²)	Initial resistance (Pa)
W	H	D	at 0,3 µm	at MPPS	m ³ /h	m ³ /s		
305	610	84	≥ 99,99	≥ 99,95	390	0,11	3,6	≤ 250
457	457	84	≥ 99,99	≥ 99,95	450	0,13	4,1	≤ 250
457	610	84	≥ 99,99	≥ 99,95	630	0,18	5,5	≤ 250
610	610	84	≥ 99,99	≥ 99,95	870	0,24	7,5	≤ 250
762	610	84	≥ 99,99	≥ 99,95	1080	0,30	9,5	≤ 250
915	610	84	≥ 99,99	≥ 99,95	1320	0,37	11,5	≤ 250
305	610	150	≥ 99,99	≥ 99,95	660	0,18	7,3	≤ 250
457	457	150	≥ 99,99	≥ 99,95	750	0,21	8,3	≤ 250
457	610	150	≥ 99,99	≥ 99,95	1050	0,29	11,3	≤ 250
610	610	150	≥ 99,99	≥ 99,95	1440	0,40	15,3	≤ 250
762	610	150	≥ 99,99	≥ 99,95	1830	0,51	19,4	≤ 250
915	610	150	≥ 99,99	≥ 99,95	2190	0,61	23,4	≤ 250
305	610	290	≥ 99,99	≥ 99,95	990	0,28	13,0	≤ 250
457	457	290	≥ 99,99	≥ 99,95	1140	0,32	14,8	≤ 250
457	610	290	≥ 99,99	≥ 99,95	1530	0,43	20,2	≤ 250
610	610	290	≥ 99,99	≥ 99,95	2100	0,58	27,4	≤ 250
762	610	290	≥ 99,99	≥ 99,95	2640	0,73	34,6	≤ 250
915	610	290	≥ 99,99	≥ 99,95	3180	0,88	41,9	≤ 250

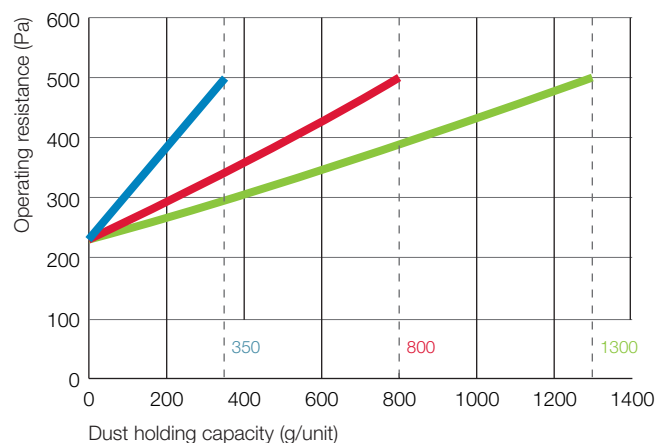
Other sizes available on request. Tests are performed under ambient conditions (20 °C), MPPS performance is based on EN1822:2009. Recommended final resistance is subject to optimisation of lifecycle costs, be it maximum 500 Pa. Filters can be operated at 50% - 100% of the nominal airflow. Maximum operating temperature is 350 (continuous) - 400 °C (1h peak).

Airflow versus operating resistance



610x610x290 mm / 610x610x150 mm / 610x610x84 mm

Dust holding capacity versus operating resistance



610x610x290 mm / 610x610x150 mm / 610x610x84 mm

AstroCel® is a registered trademark of AAF International in Europe and other countries.



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AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

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ISO Certified Firm HT_601_EN_052017