High Temperature Afterfilters

HTA SERIES 100 to 11400 scfm (170 to 19369 nm³/h)

Filtration for High Temperature Applications

Hankison's HTA Series high temperature afterfilters are designed to capture large amounts of desiccant fines. Housing and element construction are ideally suited for installation downstream of heated desiccant air dryers.

- High dust loading capacity - long cartridge life
- Good for temperatures to 450°F (232°C)
- Removes all solid particles one micron and larger

Operation – Three Stage Filtration

Stage 1: Gravitational Setting

Compressed air leaves a desiccant dryer containing dust concentrations typically in the range of up to 0.05 ppm by weight in heatless type dryers and up to 5 ppm by weight in heated type dryers. Particle size ranges from 200 microns to about 1 micron. This desiccant laden compressed air enters the filter housing where a reduction in air velocity and a sharp change of direction cause particles in the range of 200 to 20 microns to drop to the bottom of the housing.

Stage 2: Surface Filtration

The air stream then enters the outside of the filter cartridge and flows through a layer of glass fabric cloth. Small diameter fibers, which form a web in the openings between thread strands, cause a dust layer to form as dust bridges the pores. Dust continues to collect on the outside of the cloth as separate loose particles. The voids between these particles form pores and flow-passages and become an efficient filter in itself.

As the dust bed continues to thicken it reaches a point where outer layers of dust shed off the cartridge into the bottom of the housing.

Stage 3: In-Depth Filtration

Air next travels through a multi-layer graded in-depth filter media where all remaining fines one micron and larger are captured.

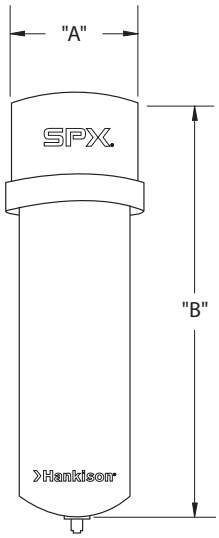
A final wrap of glass fabric cloth prevents fiber migration.

Hankison®

Product Specifications

Model	Maximum Flow @ 100 psig (6.7 barg)		Housing Type	MWP (1) @ 450°F (232°C)		In/Out Connection	Dimensions		Weight	Replacement Cartridge No.	Quantity Required
	scfm	nm³/h		psig	barg	in	A in	B in	lbs		
HTA100	100	170	Head/Bowl	250	17.6	1" NPT	4.25	14.31	13	**0740-1**	1
HTA200	200	340	Head/Bowl	250	17.6	1" NPT	4.25	23.81	19	**0740-2**	1
HTA400	400	680	Pressure Vessel	165	11.6	3" NPT	10.25	39.56	95	**0740-3**	1
HTA600	600	1019	Pressure Vessel	165	11.6	3" NPT	10.25	39.56	95	**0740-4**	1
HTA1200	1200	2039	Pressure Vessel	165	11.6	3" NPT	16.00	41.44	159	**0740-4**	2
HTA1800	1800	3058	Pressure Vessel	165	11.6	3" NPT	16.25	43.25	219	**0740-4**	3
HTA2400	2400	4078	Pressure Vessel	165	11.6	4" ANSI FLG	20.00	54.69	236	**0740-4**	4
HTA3000	3000	5097	Pressure Vessel	165	11.6	4" ANSI FLG	20.00	54.69	239	**0740-4**	5
HTA4800	4800	8155	Pressure Vessel	165	11.6	6" ANSI FLG	24.00	53.00	319	**0740-4**	8
HTA6600	6600	11213	Pressure Vessel	165	11.6	6" ANSI FLG	28.00	62.00	548	**0740-4**	11
HTA8400	8400	14272	Pressure Vessel	165	11.6	6" ANSI FLG	28.00	62.00	548	**0740-4**	14
HTA11400	11400	19369	Pressure Vessel	165	11.6	8" ANSI FLG	33.00	68.19	772	**0740-4**	19

(1) Units with higher MWP are available; contact factory. Model HTA1200 and larger are ASME code constructed and stamped.
Pressure drop: At rated flow conditions pressure drop will be less than 1 psig (0.07 barg). Pressure drop will increase only as the filter cartridges become loaded with solid particles.
Filter cartridge replacement: Filter cartridges should be replaced when pressure drop across the cartridge exceeds 10 psig (0.7 barg).
Maximum temperature: 450°F (232°C)



Sizing

To find the maximum flow at pressures other than 100 psig (6.7 barg), multiply the flow (from table above) by the correction factor corresponding to the minimum pressure at the inlet of the filter. Do not select filters by pipe size; use flow rate and operating pressure.

Minimum Inlet Pressure	psig	20	30	40	60	80	100	120	150	200	250
	barg	1.4	2.1	2.8	4.2	5.6	7.0	8.4	10.5	14.1	17.6
Correction Factor		0.30	0.39	0.48	0.65	0.82	1.00	1.17	1.43	1.87	2.31

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader.
For more information, please visit www.spx.com

1000 Philadelphia Street Canonsburg, PA 15317-1700 USA
P: (724) 745-1555 F: (724) 745-6040 E: hankison.sales@spx.com

ISSUED 09/2013 HTA