

CYCLONE
HE-HF-GP Series



High Efficiency Centrifugal
Particulate Separators



Cyclone – Airex Industries (Standard)

General Points

Cyclones are frequently used as product receivers, as pre-cleaners to high efficiency fabric-type dust collectors, or as independent collectors for coarse dusts.

Airex Industries Standard

Three cyclone designs are offered in order to best meet the application's requirements. The GP series is designed for economical first cost and is currently used for general purposes. The HE series is tuned to obtain a higher efficiency in more critical applications. The HF series is used in high flow applications in order to have a more compact configuration.

How Cyclones Work

As the dirty air enters the cyclone, it is forced into a swirling motion. This results in a centrifugal force acting on the dust particles suspended in the air stream. The particles, denser than the air, are forced to move outwards, and towards the cyclone wall. They then fall downwards, towards the dust bottom collon. The clean air is eventually directed towards the centre of the cyclone and leaves through the top gas exit.

Cyclone Advantages

- Stable pressure drop for a given gas flow
- Constant efficiency for a given particulate condition
- No moving parts; no replaceable filters, robust construction
- Ability to handle extremely high dust concentrations
- High temperature and pressure capability
- Low capital investment and maintenance costs
- Compact (in most applications)

Efficiency

Efficiency is a function of the physical parameters of the application and the design parameters of the cyclone. Cyclone efficiency increases with:

- Coarse particle size distribution
- Higher products specific gravity
- Lower gas density
- Smaller outlet diameter. An increase in pressure drop also results.





Selection Criteria

Selection Criteria

In order for Airex Industries to help you in making the right cyclone selection, the following data will be required:

- Air Flow (cfm);
- Temperature of the Application (F);
- Air Speed at Inlet (fpm);
- Dust Quantity entering the Cyclone (lbs/hr);
- Particle Density (lbs/ft³).

Options

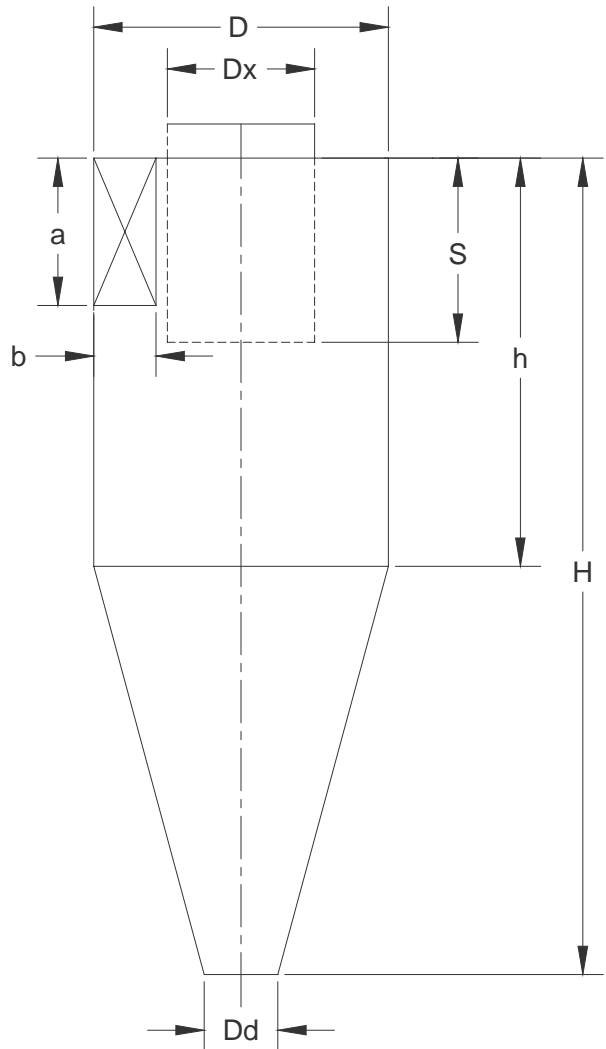
- Abrasive Wear Liners;
- Refractory Lining;
- High Efficiency Dust Collectors;





Technical Data Sheet – Cyclone / HF SERIES

MODEL	D	Dx	Dd	H	h	S	a	b
HF-12	12	9	4,5	48	18	10	9	4
HF-14	14	10	5,0	56	21	12	10	5
HF-16	16	12	6,0	64	24	14	12	6
HF-18	18	13	6,5	72	27	16	13	7
HF-20	20	15	7,5	79	30	17	15	7
HF-22	22	16	8,0	87	33	19	16	8
HF-24	24	18	9,0	95	36	21	18	9
HF-26	26	19	9,5	103	39	23	19	10
HF-28	28	21	10,5	111	42	24	21	10
HF-30	30	22	11,0	119	45	26	22	11
HF-32	32	24	12,0	127	48	28	24	12
HF-34	34	25	12,5	135	51	30	25	13
HF-36	36	27	13,5	143	54	31	27	13
HF-38	38	28	14,0	151	57	33	28	14
HF-40	40	30	15,0	159	60	35	30	15
HF-42	42	31	15,5	167	63	36	31	16
HF-44	44	33	16,5	175	66	38	33	16
HF-46	46	34	17,0	183	69	40	34	17
HF-48	48	36	18,0	191	71	42	36	18
HF-50	50	37	18,5	199	74	43	37	19
HF-52	52	39	19,5	207	77	45	39	19
HF-54	54	40	20,0	215	80	47	40	20
HF-56	56	42	21,0	223	83	49	42	21
HF-58	58	43	21,5	230	86	50	43	22
HF-60	60	45	22,5	238	89	52	45	22
HF-62	62	46	23,0	246	92	54	46	23
HF-64	64	47	24,0	254	95	56	47	24
HF-66	66	49	24,5	262	98	57	49	25
HF-68	68	50	25,5	270	101	59	50	25
HF-70	70	52	26,0	278	104	61	52	26
HF-72	72	53	27,0	286	107	63	53	27
HF-74	74	55	27,5	294	110	64	55	28
HF-76	76	56	28,5	302	113	66	56	28
HF-78	78	58	29,0	310	116	68	58	29
HF-80	80	59	30,0	318	119	69	59	30
HF-82	82	61	30,5	326	122	71	61	31
HF-84	84	62	31,5	334	125	73	62	31
HF-86	86	64	32,0	342	128	75	64	32
HF-88	88	65	33,0	350	131	76	65	33
HF-90	90	67	33,5	358	134	78	67	34
HF-92	92	68	34,5	366	137	80	68	34
HF-94	94	70	35,0	374	140	82	70	35
HF-96	96	71	36,0	381	143	83	71	36



Dimensions in inches

In order to have our product meet the highest technological standards, we reserve the right to modify its specifications without notice.

HEAD OFFICE

8030, Metropolitan Blvd East
 Montreal (QC) H1K 1A1
 T : (514) 351-2303
 F : (514) 352-5891

ONTARIO DIVISION

6800, Kitimat Road, unit 32
 Mississauga (ON) L5N 5M1
 T : (905) 821-3674
 F : (905) 821-4857

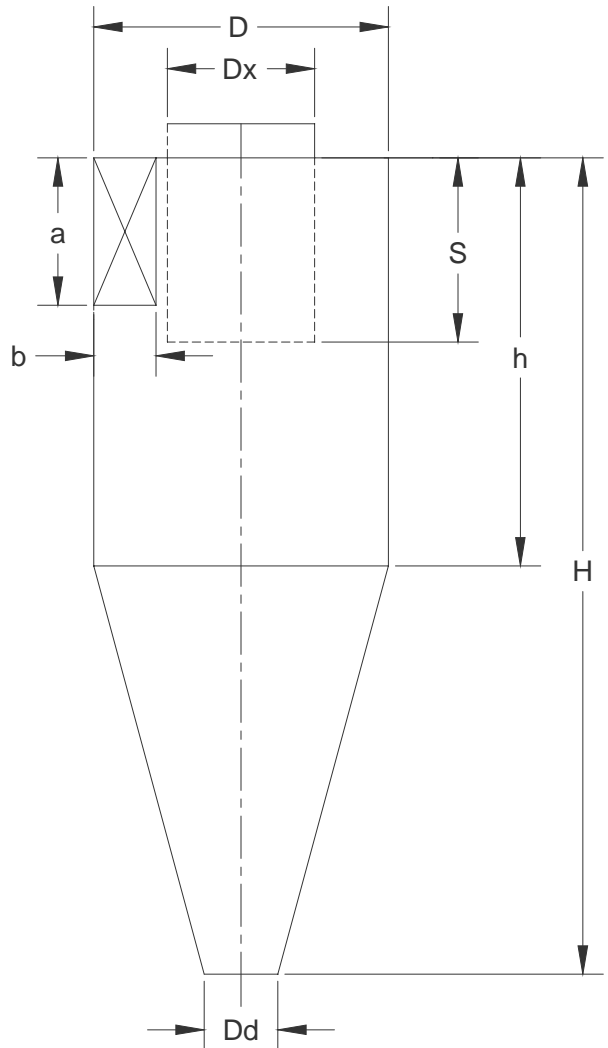
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3025, Bernier Road
 Drummondville (QC) J2C 6Y4
 T : (819) 477-3030
 F : (819) 477-3437



Technical Data Sheet – Cyclone Standard / HE SERIES High Efficiency

MODEL	D	Dx	Dd	H	h	S	a	b
HE-12	12	6	4,5	48	18	6	6	2
HE-14	14	7	5,0	56	21	7	7	3
HE-16	16	8	6,0	64	24	8	8	3
HE-18	18	9	7,0	72	27	9	9	4
HE-20	20	10	7,5	80	30	10	10	4
HE-22	22	11	8,0	88	33	11	11	4
HE-24	24	12	9,0	96	36	12	12	5
HE-26	26	13	10,0	104	39	13	13	5
HE-28	28	14	10,5	112	42	14	14	6
HE-30	30	15	11,0	120	45	15	15	6
HE-32	32	16	12,0	128	48	16	16	6
HE-34	34	17	13,0	136	51	17	17	7
HE-36	36	18	13,5	144	54	18	18	7
HE-38	38	19	14,0	152	57	19	19	8
HE-40	40	20	15,0	160	60	20	20	8
HE-42	42	21	16,0	168	63	21	21	8
HE-44	44	22	16,5	176	66	22	22	9
HE-46	46	23	17,0	184	69	23	23	9
HE-48	48	24	18,0	192	72	24	24	10
HE-50	50	25	19,0	200	75	25	25	10
HE-52	52	26	19,5	208	78	26	26	10
HE-54	54	27	20,0	216	81	27	27	11
HE-56	56	28	21,0	224	84	28	28	11
HE-58	58	29	22,0	232	87	29	29	12
HE-60	60	30	22,5	240	90	30	30	12
HE-62	62	31	23,0	248	93	31	31	12
HE-64	64	32	24,0	256	96	32	32	13
HE-66	66	33	25,0	264	99	33	33	13
HE-68	68	34	25,5	272	102	34	34	14
HE-70	70	35	26,0	280	105	35	35	14
HE-72	72	36	27,0	288	108	36	36	14
HE-74	74	37	28,0	296	111	37	37	15
HE-76	76	38	28,5	304	114	38	38	15
HE-78	78	39	29,0	312	117	39	39	16
HE-80	80	40	30,0	320	120	40	40	16
HE-82	82	41	31,0	328	123	41	41	16
HE-84	84	42	31,5	336	126	42	42	17
HE-86	86	43	32,0	344	129	43	43	17
HE-88	88	44	33,0	352	132	44	44	18
HE-90	90	45	34,0	360	135	45	45	18
HE-92	92	46	34,5	368	138	46	46	18
HE-94	94	47	35,0	376	141	47	47	19
HE-96	96	48	36,0	384	144	48	48	19



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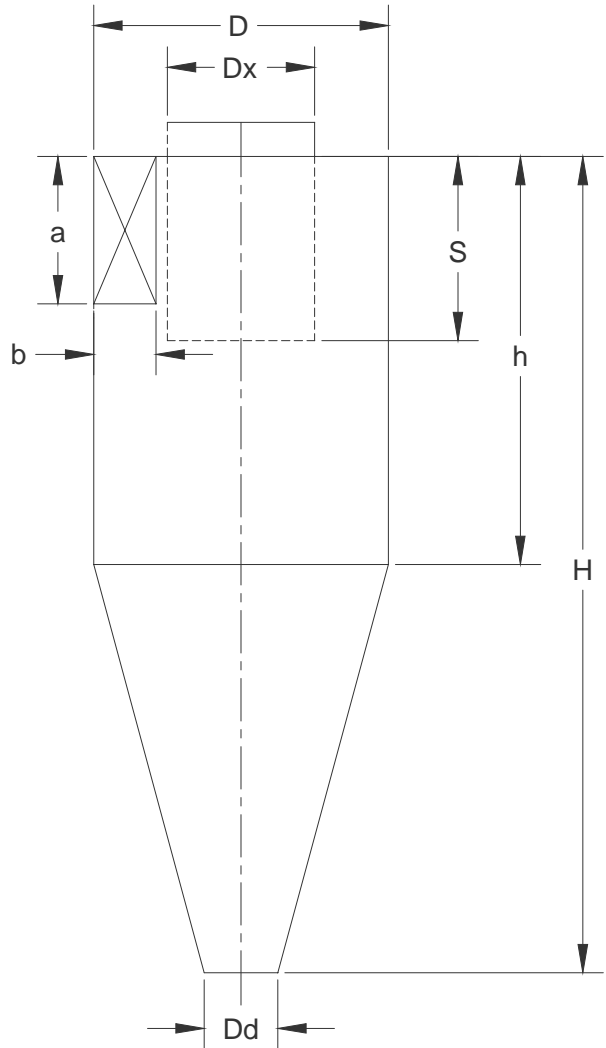
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Technical Data Sheet – Cyclone / GP SERIES

ODEL	D	Dx	Dd	H	h	S	a	b
GP-12	12	6	6,0	38	16	7	7	2
GP-14	14	7	7,0	44	19	8	8	3
GP-16	16	8	8,0	51	21	9	9	3
GP-18	18	9	9,0	57	24	10	10	4
GP-20	20	10	10,0	63	27	12	12	4
GP-22	22	11	11,0	70	29	13	13	5
GP-24	24	12	12,0	76	32	14	14	5
GP-26	26	13	13,0	82	35	15	15	5
GP-28	28	14	14,0	89	37	16	16	6
GP-30	30	15	15,0	95	40	17	17	6
GP-32	32	16	16,0	101	43	19	19	7
GP-34	34	17	17,0	108	45	20	20	7
GP-36	36	18	18,0	114	48	21	21	7
GP-38	38	19	19,0	120	51	22	22	8
GP-40	40	20	20,0	127	53	23	23	8
GP-42	42	21	21,0	133	56	24	24	9
GP-44	44	22	22,0	139	59	26	26	9
GP-46	46	23	23,0	146	61	27	27	10
GP-48	48	24	24,0	152	64	28	28	10
GP-50	50	25	25,0	159	67	29	29	10
GP-52	52	26	26,0	165	69	30	30	11
GP-54	54	27	27,0	171	72	31	31	11
GP-56	56	28	28,0	178	74	33	33	12
GP-58	58	29	29,0	184	77	34	34	12
GP-60	60	30	30,0	190	80	35	35	12
GP-62	62	31	31,0	197	82	36	36	13
GP-64	64	32	32,0	203	85	37	37	13
GP-66	66	33	33,0	209	88	38	38	14
GP-68	68	34	34,0	216	90	40	40	14
GP-70	70	35	35,0	222	93	41	41	15
GP-72	72	36	36,0	228	96	42	42	15
GP-74	74	37	37,0	235	98	43	43	15
GP-76	76	38	38,0	241	101	44	44	16
GP-78	78	39	39,0	247	104	45	45	16
GP-80	80	40	40,0	254	106	47	47	17
GP-82	82	41	41,0	260	109	48	48	17
GP-84	84	42	42,0	266	112	49	49	7
GP-86	86	43	43,0	273	114	50	50	18
GP-88	88	44	44,0	279	117	51	51	18
GP-90	90	45	45,0	285	120	52	52	19
GP-92	92	46	46,0	292	122	54	54	19
GP-94	94	47	47,0	298	125	55	55	20



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