

# FD CYCLONES

High Efficiency Centrifugal Particulate Separators



**Farr Cyclones Offer High Temperature Capability and Cost-Effectiveness** These high efficiency cyclones are frequently used as product receivers, as precleaners to high efficiency fabric-type dust collectors, or as independent collectors for coarse dusts.



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*Air Pollution Control*

## Advantages of Cyclones

- Stable pressure drop for a given gas flow
- Constant efficiency for a given particulate condition
- No moving parts; no replaceable filters
- Ability to handle extremely high dust concentrations
- High temperature capability

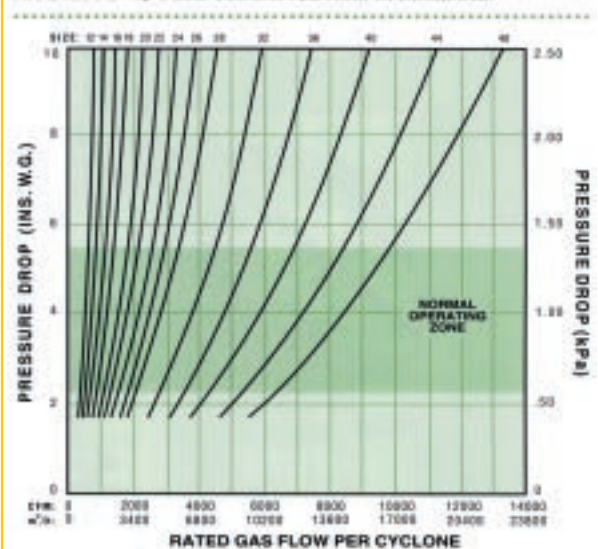
## Efficiency

On Industrial Coarse Particulate FD Cyclones are 95% to 98% efficient. 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 product specific gravity
- Lower gas density
- A decrease in cyclone diameter (two smaller cyclones in parallel will have a higher efficiency than one larger cyclone with an equal pressure drop)
- Smaller outlet diameter. An increase in pressure drop also results.

**Selection Criteria** — The curves indicate the proper selection of one or more cyclones for a given application.

**MODEL FD-45 PERFORMANCE** based on Standard Air



Product Sheet

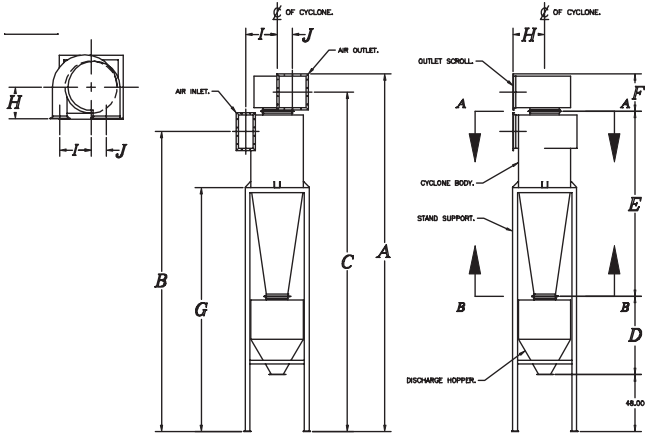
FD Cyclones

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# Ordering Information

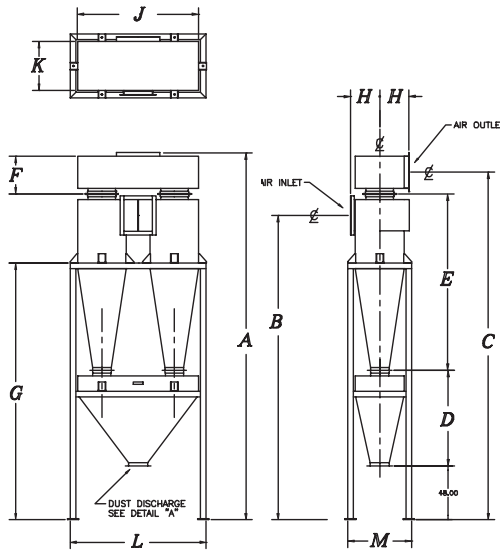
## Model FD-45 One Cyclone

SIZE	A	B	C	D	E	F	G	H	I	J
12	121.00	103.69	115.75	18.00	43.50	11.50	91.50	7.25	7.25	4.88
14	132.25	113.00	126.38	21.00	50.50	12.75	98.62	8.50	8.38	5.38
16	143.50	122.38	137.00	24.00	57.50	14.00	105.75	9.75	9.62	6.00
18	154.75	131.75	147.62	27.00	64.50	15.25	112.94	11.00	10.75	6.25
20	166.00	141.12	158.25	30.00	71.50	16.50	120.12	12.25	12.00	6.75
22	177.25	150.50	168.62	33.00	78.50	17.75	127.25	13.50	13.25	7.25
24	189.00	160.31	179.75	36.00	86.00	19.00	134.94	14.75	14.38	7.75
26	200.25	169.69	190.38	39.00	93.00	20.25	142.06	16.00	15.62	8.25
28	211.50	178.06	201.50	42.00	100.00	21.50	148.25	17.50	16.75	8.81
32	234.00	196.75	222.50	48.00	114.00	24.00	162.56	19.00	19.25	9.81
36	256.50	215.50	243.75	54.00	128.00	26.50	176.88	21.50	21.62	10.88
40	279.00	234.19	265.00	60.00	142.00	29.00	191.19	24.00	24.00	11.94
44	301.50	253.94	286.25	66.00	168.00	31.50	205.50	26.50	26.38	13.00
48	324.00	271.62	307.50	72.00	170.00	34.00	219.81	29.00	28.75	14.00



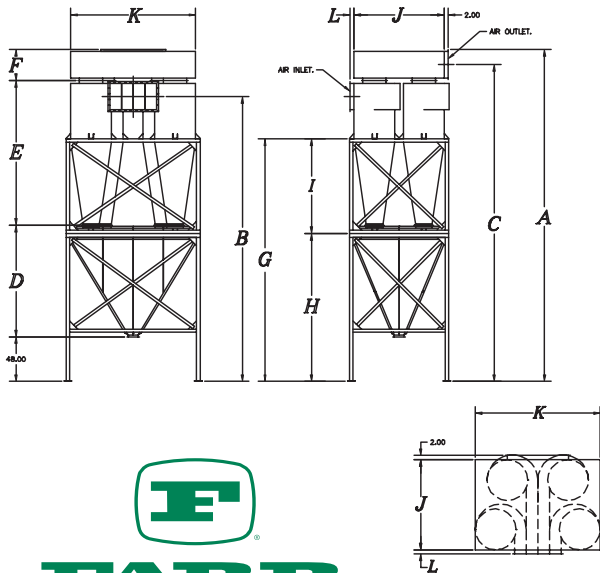
## Model FD-45 Two Cyclones

SIZE	A	B	C	D	E	F	G	H	J	K	L	M
12	129.00	111.69	123.75	26.00	43.50	11.50	99.50	7.25	29.88	12.00	33.38	15.50
14	141.25	122.00	135.38	30.00	50.50	12.75	107.62	8.50	34.75	14.00	38.25	17.50
16	153.50	132.38	147.00	34.00	57.50	14.00	115.75	9.75	39.75	16.00	43.25	19.50
18	166.75	143.75	159.62	39.00	64.50	15.25	124.94	11.00	44.50	18.00	48.00	21.50
20	179.00	154.12	171.25	43.00	71.50	16.50	133.12	12.25	49.62	20.00	53.12	23.50
22	191.25	164.50	182.62	47.00	78.50	17.75	141.25	13.50	54.75	22.00	59.75	27.00
24	204.00	175.31	194.75	51.00	86.00	19.00	149.94	14.75	59.50	24.00	64.50	29.00
26	216.25	185.69	206.38	55.00	93.00	20.25	158.06	16.00	64.62	26.00	69.62	31.00
28	229.50	196.06	219.50	60.00	100.00	21.50	166.25	17.50	69.38	28.00	74.38	33.00
32	255.00	217.75	243.50	69.00	114.00	24.00	183.56	19.00	79.50	32.00	85.50	38.00
36	281.50	240.50	268.75	79.00	128.00	26.50	201.19	21.50	89.38	36.00	95.38	42.00
40	308.00	263.19	294.00	89.00	142.00	29.00	220.19	24.00	99.25	40.00	105.25	46.00
44	334.50	285.94	319.50	99.00	156.00	31.50	238.50	26.50	109.12	44.00	115.12	50.00
48	361.00	308.62	344.50	109.00	170.00	34.00	256.81	29.00	119.00	48.00	125.00	54.00



## Model FD-45 Four Cyclones

SIZE	A	B	C	D	E	F	G	H	J	K	L
12	135.00	117.69	129.75	32.00	43.50	11.50	105.50	73.00	28.00	36.62	1.25
14	148.25	129.00	142.38	37.00	50.50	12.75	114.62	78.00	32.00	42.75	1.50
16	161.50	140.38	155.00	42.00	57.50	14.00	123.75	83.00	36.00	48.75	1.75
18	174.75	151.75	167.62	47.00	64.50	15.25	132.94	88.00	40.00	54.50	2.00
20	188.00	163.12	180.25	52.00	71.50	16.50	142.12	93.00	44.00	60.88	2.25
22	202.25	175.50	193.62	58.00	78.50	17.75	152.25	96.00	49.00	67.25	2.50
24	217.00	188.31	207.75	64.00	86.00	19.00	162.94	102.00	54.00	73.00	2.75
26	231.25	200.69	221.38	70.00	93.00	20.25	173.06	108.00	59.00	79.38	3.00
28	246.50	213.06	236.50	77.00	100.00	21.50	183.25	114.00	64.00	85.12	3.50
32	271.00	233.75	259.50	85.00	114.00	24.00	199.56	119.00	72.00	97.50	3.00
36	295.50	254.19	282.75	93.00	128.00	26.50	215.88	127.00	80.00	109.62	3.50
40	324.00	279.19	310.00	105.00	142.00	29.00	236.19	139.00	88.00	121.75	4.00
44	355.50	306.94	340.25	120.00	156.00	31.50	259.50	154.00	97.00	133.88	4.50
48	387.00	334.62	370.50	135.00	170.00	34.00	282.81	169.00	106.00	146.00	5.00



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### Options

Outlet scroll, plenum, hopper, and/or leg support structure.

### Construction

Standard construction in welded mild steel.