

 KOGERAIR®

The background image shows a close-up, slightly elevated view of several blue-painted cylindrical pipes. These pipes are stacked in a somewhat overlapping fashion. Each pipe features a large, circular metal flange attached to its side. The flanges have four small holes punched through them. The pipes appear to be made of a sturdy metal or plastic material, with a visible texture and some minor surface marks.

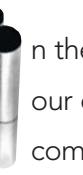
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FROM THE J. A. KOGER FAMILY AND OUR EMPLOYEES

So much has changed since we began in 1954 as a struggling two man sheet metal shop. From the start, it was our intention to provide dust collection systems for the booming furniture manufacturers at the time. We quickly developed into a major supplier of the design, fabrication, installation and service of industrial dust collection systems in the Mid-Atlantic region for the furniture manufacturing giants of the 60's through the 80's. Any industry generating wood dust and shavings became customers, including lumber, flooring, paneling, cabinetry, window and door, wood flour and more.



In the mid 1970's, we developed our own line of industrial air system component parts, airlocks, fans and cyclones for our use, and new system designs, replacement parts and retrofits for customers. As the U.S. manufacturing climate and customers' needs began to change in the 1990's, so did we. Design and fabrication methods were adapted to meet the requirements of evolving and emerging industries with industry-specific custom fabrication. Customer referral has always been an essential factor in our success, and helps to dictate our direction as we learn to accommodate new challenges and to service new markets and applications. We have evolved from servicing strictly the wood and furniture industries to include paper, rubber, printing and publishing, plastics, pharmaceuticals, grain, brick, foam rubber and more recently, robotics, thermal oxidation and

alternative fuels. Over the years, we have established and sustained strong relationships with hundreds of our customers who have been historically rated in the top 100 of their industry class. Typically, these customers are family-owned and operated businesses, and we've been very fortunate to have provided several generations with years of service.

Likewise, we have grown to become a family-owned and operated business today. Our journey has taken us from servicing the Mid-Atlantic region in the beginning, to the midwest, to nationwide, to North America, and now to global markets. We are committed to quality, to our customers, to our employees, and to the future. We are excited to accept each new challenge our customer presents, and to always be there with the best solutions we can offer in the years ahead.

BLOWERS - SPRAY BOOTHS - DUST COLLECTO	
Koger & Wade MARTINSVILLE, VA. DIAL ME 2-5767	
J. A. KOGER	J. L. WADE
SIZE INLET	CAPACITY CFM 2"SP.
8	1390
10	2180
12	3140
14	4275
16	5600
18	7000
20	8700
22	10500
24	12600
26	14700
28	17100
30	19600
32	22300
34	25200
36	28300
38	31500
40	34900

STANDARD UPBLAS
ACCES
FIXED RIVITE
SINGLE



Koger serves a variety of industries including [woodworking](#) [lumber](#) [pallet](#) [furniture](#) [wood](#) [flour](#) [cabinet](#) [flooring](#) [paneling](#) [window](#) [and](#) [door](#) [brick](#) [paper](#) [cardboard](#) [plastics](#) [printing](#) [and](#) [publishing](#) [rubber](#) [grain-handling](#) [glass](#) [pharmaceuticals](#) [foam](#) [rubber](#) [robotics](#) [thermal](#) [oxidation](#) [and](#) [alternative](#) [fuels](#)

# SYSTEMS



Whatever terminology you choose to use, from blowpipe, air handling/conveying, dust collection and control, pneumatic material conveying, Koger Air designs, builds, installs and services heavy-duty industrial systems for dust producing industries throughout North America.

Each Koger Air system is custom-designed to handle the specific airflow and product collection needs of the

customer, including transfer methods for waste collection, material separation or recycling. Our focus is quick and efficient capture of fugitive dust from the work area to secure a clean environment inside as well as outside the manufacturing facility.

Koger project managers work directly with the customer to tailor solutions to specific problems. Each customer receives prompt

attention, project evaluation, research and a proposed resolution. A dedicated hands-on project manager oversees a project from the first meeting with the customer to the completion of the project.

Koger Air is fully equipped and staffed for all phases of transporting, erecting, storing and on-site assembling of parts and systems. Each installation is completed by



Koger's highly trained field mechanics and project managers in accordance with the customer's specifications and time schedules, without interruption to manufacturing processes.

We honor and respect each customer and value the contributions we make toward keeping their plants and systems in full, efficient operation. The Koger Air technical staff is always ready to be of prompt assistance,

particularly when emergencies arise. Specifications and plans for all systems and components are kept on file for easy retrieval and duplication. Koger's components division is kept well stocked with standard system components for both daily and urgent service calls.

## Design, fabrication, installation and service of:

- Industrial Blowpipe/Dust Collection and Control
- Pneumatic Material Conveying
- Material Conveying
- Process Materials Management
- Pneumatic Trailer Loading
- Product Metering Bins

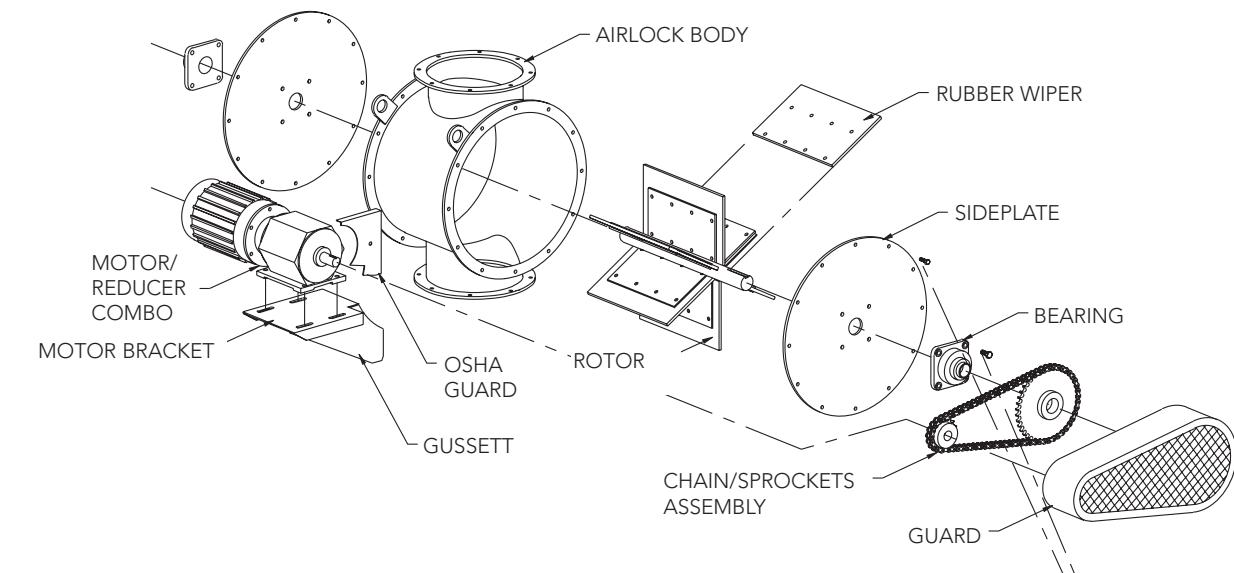
# AIRLOCKS



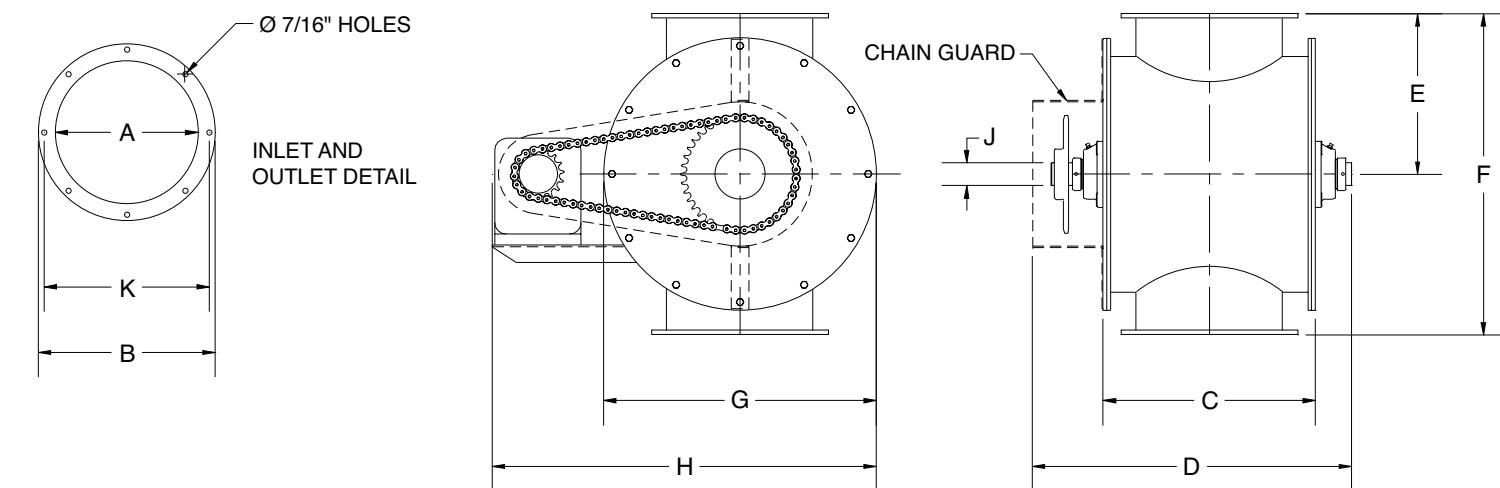
## Koger Air Industrial Rotary Airlock Feeders

- Maintains operating air pressure and control of pneumatic material conveying system; most effective in low pressure industrial applications.
- Roller chain and sprocket driven by a parallel shaft reducer with 2 HP, 3 phase, 60 hertz, 230/460 volt motor. Protective chain guard is constructed with an expanded metal front for easy visibility of chain operation.
- C-flange motor mount permits positive drive for more torque and increased efficiency.
- Variable metering speeds
- Four and six blade rotors are designed to meter larger foreign objects.
- 10 gauge HR housing formed to precision tolerances with smooth interior surface to assure free flow of materials.
- Heavy duty rubber wipers are reinforced with steel, durable, spark resistant, easily replaceable. Continually wipes down excess material from internal walls preventing blockage.

- Round inlet and outlet flanges are pre-drilled with  $\frac{7}{16}$ " bolt holes for quick and easy installation. Available with matching flanges.
- Easy service access to rotor through removable side plates.
- Performance fully guaranteed for one year.



## Maintenance



## Standard Chain Driven Airlock Feeders

A = Size	B	C	D	E	F	G	H	J	K		Motor HP	Voltage	No. of Vanes	RPM	Cubic Ft./Rev.	WT
									Bolt Hole Ctr.	# Holes						
10"	13 1/8"	14"	23 1/8"	13 5/8"	27 1/4"	23"	33 1/4"	1 15/16"	11 13/16"	6	2	230/460	4	28	1.85*	400 lb.
12"	15 1/8"	16"	24 3/8"	13 5/8"	27 1/4"	23"	33 1/4"	1 15/16"	14"	8	2	230/460	4	28	2.75*	410 lb.
14"	17 1/8"	18"	26 7/8"	13 5/8"	27 1/4"	23"	33 1/4"	1 15/16"	16"	8	2	230/460	6	28	3.00*	470 lb.
16"	19 1/8"	21 1/2"	30 3/4"	16 5/8"	33 1/4"	30"	41 1/4"	2 7/16"	18"	8	2	230/460	6	21	4.51*	690 lb.
20"	24 1/8"	24"	33 1/4"	18 5/8"	37 1/4"	34"	45 1/2"	2 7/16"	21 3/4"	12	2	230/460	6	16	8.50*	950 lb.
24"	28 1/8"	30"	40 5/8"	21 5/8"	43 1/4"	40"	51 3/4"	2 7/16"	25 7/8"	12	2	230/460	6	16	15.00*	1325 lb.

Standard 10" to 24" airlocks are normally shipped same day. Certified drawings with specific construction dimensions are available upon request.

\* Volumetric displacement is 100% as listed. Capacity selection is from 40% to 60%.

## Custom Options:

- Size
- Materials including Stainless and Abrasion Resistant Steel
- Square inlet and outlet flanges
- Special paint and color

# FANS



## Koger Air Industrial Material and Air Handling Fans

Koger Air Industrial Material and Air Handling Fans range from sizes 11" to 41" and are fabricated from  $\frac{1}{4}$ " or heavier plate to handle system capacities from 660 to 60,000 cfm of air. Each fan is totally interchangeable to a clockwise or counterclockwise discharge. In addition, the fans are precision balanced in two planes side-to-side and end-to-end to minimize noise and vibration. Standard size fans normally ship same day of order. Special order fans made of Abrasion Resistant, Stainless and Heat Resistant Steels are normally shipped within two weeks.

### Fan Wheel

- Radial open and self-cleaning
- Six bladed wheel is a solid weld design with single spokes in fan sizes 11 and 13, and dual spokes for fan sizes 15 through 41.

### Fan Bearings

- Self-aligning, double row tapered roller bearings
- One-piece cast iron bearing housing handles high radial and thrust loads

### Shafting

- Precision machined from ground, polished and straightened shafting.

### Scroll Housing

- 100% welded, heavy-duty scroll housing
- Interchangeable to a clockwise or counterclockwise discharge

### Pedestal

- Heavy-duty pedestal supports, bearings, shaft and wheel
- Bearing mounts allow easy removal of bearings while giving maximum support to moving parts
- Removable pedestal allows assembly in desired rotation

### Inlets and Outlets

- Fan inlet is proportional to the fan outlet
- Standard fan inlet is a straight collar design for removal of fan sleeve connection
- Standard fan outlet is a flanged construction to provide maximum strength and simplify outside bolt connection of ductwork

### Custom Options

- Shaft seal
- Custom materials for wheel and housing include Abrasion Resistant, Stainless and Heat Resistant Steels
- Unitary Steel Support
- Flexible Inlet and Outlet Connections
- Flanged Inlet
- Outlet Transition
- Access Door
- Drain
- Arrangement 9
- Backplate Wheels

### AMCA Licensed

Koger Air Corporation certifies that the Koger Industrial Material and Air Handling Fans shown on pages 12 to 23 are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



**SIZE**  
**11**

Inlet Size - 11" Dia. Outside  
Outlet Size - 9 $\frac{7}{16}$ " x 10 $\frac{7}{8}$ " Outside  
Wheel Diameter - 19 $\frac{1}{8}$ "  
Tip Speed = 5.01 X RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar.). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

SP*>>		1		2		3		4		5		6		7		8		9	
OV*	CFM*	RPM	BHP																
1000	660	737	0.29	1009	0.52	1234	0.87	1413	1.15	1571	1.44	1713	1.74	1844	2.05	1979	2.62	2094	2.97
1200	792	761	0.34	1024	0.60	1248	0.98	1426	1.29	1583	1.61	1726	1.94	1857	2.27	1979	2.62	2094	2.97
1400	924	788	0.39	1041	0.68	1264	1.09	1439	1.43	1597	1.78	1739	2.14	1870	2.50	1992	2.88	2106	3.25
1600	1056	818	0.46	1065	0.77	1285	1.22	1456	1.58	1610	1.96	1752	2.35	1883	2.74	2005	3.14	2119	3.55
1800	1188	853	0.54	1089	0.87	1253	1.62	1422	2.07	1575	2.55	1716	3.06	1847	3.57	1968	4.09	2081	4.62
2000	1320	890	0.64	1117	0.99	1309	1.36	1474	1.74	1627	2.15	1766	2.56	1896	2.98	2018	3.42	2132	3.85
2200	1452	930	0.75	1147	1.12	1333	1.51	1498	1.93	1644	2.35	1783	2.79	1911	3.24	2031	3.70	2145	4.16
2400	1584	974	0.87	1181	1.27	1361	1.68	1522	2.12	1668	2.57	1800	3.03	1928	3.51	2047	3.99	2159	4.48
2600	1716	1020	1.01	1217	1.44	1391	1.87	1546	2.32	1692	2.81	1823	3.29	1945	3.78	2064	4.30	2176	4.82
2800	1848	1066	1.17	1253	1.62	1422	2.07	1575	2.55	1716	3.06	1847	3.57	1968	4.09	2081	4.62	2192	5.17
3000	1980	1115	1.35	1291	1.82	1457	2.31	1606	2.81	1742	3.32	1871	3.86	1992	4.42	2105	4.98	2211	5.53
3200	2112	1164	1.54	1335	2.05	1493	2.57	1636	3.07	1772	3.62	1896	4.17	2016	4.76	2129	5.35	2235	5.94
3400	2244	1215	1.77	1379	2.30	1529	2.84	1671	3.38	1802	3.94	1925	4.52	2041	5.11	2153	5.73	2259	6.36
3600	2376	1266	2.01	1424	2.56	1566	3.13	1707	3.71	1833	4.28	1955	4.89	2069	5.51	2177	6.13	2283	6.79
3800	2508	1318	2.28	1470	2.85	1608	3.45	1743	4.07	1868	4.66	1986	5.28	2099	5.93	2204	6.57	2307	7.24
4000	2640	1370	2.57	1517	3.17	1653	3.81	1780	4.44	1904	5.08	2018	5.70	2129	6.37	2234	7.05	2333	7.72
4200	2772	1422	2.89	1566	3.53	1697	4.18	1817	4.84	1940	5.51	2053	6.17	2159	6.83	2264	7.54	2363	8.25
4400	2904	1477	3.25	1615	3.90	1742	4.58	1860	5.27	1976	5.97	2089	6.67	2194	7.36	2295	8.07	2393	8.81
4600	3036	1533	3.64	1665	4.31	1788	5.01	1904	5.73	2013	6.45	2125	7.19	2327	8.62	2424	9.39	2522	10.08
4800	3168	1589	4.06	1716	4.76	1834	5.47	1949	6.23	2053	6.97	2161	7.73	2265	8.50	2362	9.24	2454	9.98
5000	3300	1645	4.51	1767	5.23	1882	5.97	1994	6.75	2097	7.53	2198	8.31	2301	9.11	2398	9.90	2489	10.66
5200	3432	1701	4.99	1818	5.74	1931	6.50	2039	7.30	2141	8.11	2237	8.92	2337	9.74	2433	10.56	2525	11.39
5400	3564	1757	5.51	1870	6.28	1981	7.08	2085	7.89	2186	8.74	2280	9.57	2374	10.42	2470	11.28	2560	12.12
5600	3696	1814	6.07	1922	6.86	2031	7.69	2131	8.51	2231	9.39	2324	10.26	2412	11.12	2506	12.02	2596	12.90
5800	3828	1871	6.67	1975	7.48	2082	8.35	2180	9.19	2277	10.09	2369	10.99	2456	11.89	2543	12.79	2633	13.72
6000	3960	1928	7.31	2028	8.13	2132	9.03	2229	9.91	2323	10.82	2414	11.76	2500	12.68	2582	13.61	2669	14.55
6200	4092	1986	8.00	2083	8.84	2184	9.77	2279	10.67	2369	11.58	2459	12.55	2544	13.51	2625	14.46	2706	15.43
6400	4224	2043	8.71	2139	9.60	2235	10.53	2329	11.48	2416	12.39	2505	13.40	2589	14.39	2669	15.37	2746	16.36
6600	4356	2101	9.48	2194	10.39	2287	11.34	2379	12.32	2465	13.27	2551	14.28	2634	15.30	2714	16.33	2790	17.34
6800	4488	2159	10.30	2250	11.24	2339	12.20	2430	13.21	2515	14.20	2597	15.20	2680	16.27	2758	17.31	2834	18.37

SP*>>		10		11		12		13		14		15		16		17		18	
OV*	CFM*	RPM	BHP																
2000	1320	2241	4.30	2344	4.75	2455	5.61	2550	6.11	2640	6.60	2728	7.10	2813	7.62	2894	8.14	2975	8.65
2200	1452	2254	4.64	2357	5.12	2468	6.02	2563											

# SIZE 15

Inlet Size - 15" Dia. Outside  
 Outlet Size - 12 $\frac{3}{4}$ " x 14 $\frac{3}{4}$ " Outside  
 Wheel Diameter - 26 $\frac{1}{8}$ "  
 Tip Speed = 6.84 x RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar.). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

SP*,>		1		2		3		4		5		6		7		8		9	
OV*	CFM*	RPM	BHP																
1000	1230	539	0.69	739	1.18	903	1.87	1034	2.44	1150	3.01	1254	3.60	1350	4.20	1449	5.29	1533	5.97
1200	1476	557	0.79	749	1.32	913	2.07	1044	2.70	1159	3.32	1263	3.96	1359	4.62	1458	5.77	1542	6.50
1400	1722	576	0.90	762	1.48	913	2.07	1044	2.70	1159	3.32	1263	3.96	1369	5.05	1458	5.77	1542	6.50
1600	1968	599	1.03	779	1.65	925	2.29	1054	2.96	1169	3.65	1273	4.34	1369	5.05	1468	6.28	1551	7.05
1800	2214	624	1.19	797	1.85	940	2.53	1066	3.25	1179	3.98	1282	4.73	1378	5.49	1468	6.28	1551	7.05
2000	2460	651	1.37	817	2.07	958	2.81	1079	3.55	1191	4.34	1293	5.14	1388	5.95	1477	6.78	1561	7.63
2200	2706	680	1.58	840	2.32	975	3.09	1096	3.90	1203	4.71	1305	5.56	1487	7.31	1570	8.20		
2400	2952	713	1.82	864	2.60	996	3.41	1114	4.26	1221	5.14	1317	6.00	1411	6.93	1498	7.86	1581	8.81
2600	3198	746	2.09	890	2.92	1018	3.77	1132	4.65	1238	5.58	1335	6.52	1423	7.44	1511	8.44	1593	9.44
2800	3444	780	2.39	917	3.28	1040	4.15	1153	5.09	1256	6.05	1352	7.04	1441	8.04	1523	9.03	1605	10.09
3000	3690	815	2.73	944	3.65	1066	4.60	1175	5.56	1275	6.55	1370	7.59	1458	8.64	1541	9.71	1618	10.76
3200	3936	852	3.12	976	4.08	1092	5.08	1197	6.06	1297	7.12	1387	8.16	1476	9.29	1558	10.40	1636	11.53
3400	4182	889	3.54	1009	4.56	1119	5.60	1223	6.64	1319	7.71	1409	8.82	1494	9.95	1576	11.13	1653	12.31
3600	4428	926	4.00	1042	5.07	1146	6.16	1249	7.27	1341	8.34	1431	9.52	1514	10.68	1594	11.89	1671	13.13
3800	4674	964	4.52	1075	5.61	1177	6.77	1275	7.92	1367	9.07	1453	10.24	1536	11.48	1613	12.69	1689	13.98
4000	4920	1002	5.07	1109	6.21	1209	7.42	1302	8.63	1393	9.84	1477	11.04	1558	12.30	1635	13.59	1708	14.87
4200	5166	1040	5.67	1145	6.88	1242	8.14	1329	9.37	1419	10.65	1502	11.91	1580	13.16	1657	14.52	1729	15.85
4400	5412	1080	6.34	1181	7.59	1275	8.89	1361	10.20	1446	11.52	1528	12.83	1605	14.14	1679	15.48	1751	16.89
4600	5658	1121	7.08	1218	8.37	1308	9.69	1393	11.06	1473	12.43	1555	13.82	1631	15.19	1703	16.54	1774	17.99
4800	5904	1162	7.87	1255	9.21	1342	10.56	1425	11.98	1502	13.39	1581	14.83	1657	16.28	1728	17.69	1796	19.10
5000	6150	1203	8.73	1292	10.09	1377	11.50	1458	12.96	1534	14.44	1608	15.91	1684	17.44	1754	18.90	1821	20.36
5200	6396	1244	9.64	1330	11.06	1413	12.51	1492	14.02	1567	15.56	1636	17.05	1710	18.62	1781	20.20	1847	21.70
5400	6642	1285	10.62	1368	12.08	1449	13.59	1525	15.11	1599	16.71	1668	18.28	1737	19.88	1807	21.51	1873	23.09
5600	6888	1327	11.68	1406	13.16	1486	14.75	1559	16.27	1632	17.94	1700	19.57	1765	21.21	1834	22.90	1900	24.57
5800	7134	1368	12.79	1444	14.31	1522	15.94	1594	17.53	1665	19.22	1733	20.94	1797	22.64	1861	24.35	1926	26.06
6000	7380	1410	13.99	1483	15.54	1560	17.25	1630	18.88	1699	20.60	1766	22.38	1829	24.12	1889	25.86	1953	27.65
6200	7626	1452	15.27	1523	16.86	1597	18.60	1667	20.33	1733	22.04	1799	23.87	1861	25.67	1921	27.49	1980	29.29
6400	7872	1494	16.62	1564	18.29	1635	20.06	1703	21.81	1767	23.55	1832	25.43	1894	27.32	1953	29.18	2009	31.01
6600	8118	1536	18.05	1605	19.80	1673	21.58	1740	23.40	1803	25.19	1866	27.10	1927	29.03	1985	30.94	2041	32.85
6800	8364	1579	19.60	1645	21.35	1711	23.18	1777	25.07	1839	26.91	1900	28.83	1960	30.81	2018	32.81	2073	34.76

SP*,>		10		11		12		13		14		15		16		17		18	
OV*	CFM*	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	2460	1640	8.47	1716	9.35	1797	10.96	1866	11.89	1933	12.85	1997	13.81	2059	14.77	2119	15.76	2178	16.74
2200	2706	1650</																	

Inlet Size - 19" Dia. Outside  
 Outlet Size - 16" x 18 $\frac{3}{8}$ " Outside  
 Wheel Diameter - 33"  
 Tip Speed = 8.64 x RPM

Inlet Area - 1.97 Sq. Ft. Outside  
 Outlet Area - 1.92 Sq. Ft. Inside  
 Wheel Circumference - 8.64 Ft.  
 Max Safe Fan Speed - 1735 RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar.). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

SIZE  
**19**

SP*>>	1		2		3		4		5		6		7		8		9		
	OV*	CFM*	RPM	BHP															
1000	1950	427	1.41	584	2.30	715	3.50	819	4.47	910	5.45	992	6.43	1068	7.44	1147	9.24	1213	10.35
1200	2340	440	1.56	593	2.53	602	2.77	723	3.83	826	4.88	917	5.94	1000	7.03	1076	8.12	1154	10.01
1400	2730	456	1.76	616	3.07	732	4.17	834	5.31	925	6.47	1007	7.62	1083	8.81	1154	10.01	1220	11.21
1600	3120	473	1.97	616	4.57	933	7.00	1015	8.25	1091	9.52	1161	10.79	1228	12.10				
1800	3510	493	2.24	630	3.38	744	4.57												
2000	3900	514	2.54	646	3.74	757	4.99	853	6.25	942	7.56	1023	8.89	1098	10.24	1169	11.62	1235	13.00
2200	4290	537	2.89	663	4.14	771	5.45	867	6.81	952	8.17	1032	9.57	1107	11.01	1176	12.44	1243	13.93
2400	4680	562	3.28	683	4.62	787	5.97	881	7.40	965	8.83	1042	10.28	1116	11.80	1185	13.32	1251	14.89
2600	5070	588	3.72	703	5.13	804	6.54	895	8.02	1055	11.08	1126	12.63	1195	14.25	1260	15.88		
2800	5460	615	4.22	724	5.70	822	7.16	911	9.71	993	10.30	1069	11.93	1139	13.55	1205	15.20	1270	16.93
3000	5850	643	4.77	745	6.31	842	7.88	928	9.46	1008	11.11	1083	12.81	1153	14.53	1218	16.25	1280	18.00
3200	6240	671	5.38	770	7.00	863	8.67	946	10.27	1025	12.01	1097	13.73	1167	15.55	1232	17.37	1294	19.22
3400	6630	700	6.07	796	7.77	884	9.50	966	11.20	1042	12.95	1113	14.74	1181	16.61	1246	18.53	1307	20.44
3600	7020	730	6.83	822	8.59	905	10.38	986	12.18	1060	13.97	1131	15.88	1197	17.78	1260	19.73	1321	21.74
3800	7410	759	7.64	848	9.46	928	11.33	1007	13.24	1080	15.12	1148	17.02	1214	19.04	1275	21.01	1335	23.08
4000	7800	789	8.54	875	10.43	954	12.40	1028	14.36	1100	16.33	1166	18.26	1231	20.34	1292	22.42	1350	24.51
4200	8190	819	9.50	903	11.49	979	13.51	1049	15.54	1121	17.64	1187	19.69	1249	21.74	1309	23.89	1367	26.09
4400	8580	851	10.59	931	12.62	1005	14.72	1074	16.87	1142	19.02	1207	21.15	1268	23.26	1327	25.46	1384	27.73
4600	8970	883	11.77	960	13.87	1032	16.03	1099	18.24	1163	20.45	1228	22.72	1288	24.91	1345	27.09	1401	29.41
4800	9360	915	13.03	989	15.20	1058	17.38	1125	19.73	1185	21.97	1249	24.35	1309	26.67	1365	28.93	1419	31.22
5000	9750	947	14.38	1018	16.60	1085	18.85	1150	21.25	1211	23.67	1270	26.06	1329	28.45	1386	30.89	1439	33.24
5200	10140	979	15.82	1048	18.14	1114	20.50	1177	22.95	1236	25.41	1291	27.82	1350	30.36	1406	32.87	1459	35.34
5400	10530	1012	17.41	1078	19.78	1142	22.19	1203	24.68	1262	27.28	1316	29.77	1371	32.34	1427	4.98	1480	37.58
5600	10920	1044	19.05	1108	21.50	1171	24.03	1229	26.49	1287	29.17	1342	31.87	1393	34.46	1448	37.18	1500	39.84
5800	11310	1077	20.85	1138	23.33	1200	25.96	1257	28.52	1314	31.28	1367	33.98	1418	36.72	1469	39.45	1521	42.24
6000	11700	1110	22.76	1168	25.25	1229	27.99	1285	30.64	1340	33.42	1393	36.26	1443	39.07	1490	41.80	1542	44.74
6200	12090	1143	24.78	1200	27.39	1258	30.13	1314	32.93	1366	35.65	1419	41.50	1516	44.46	1563	47.31		
6400	12480	1176	26.92	1232	29.64	1288	32.44	1342	35.26	1393	38.05	1445	41.11	1494	44.12	1541	47.12	1585	50.02
6600	12870	1209	29.19	1263	31.93	1318	34.86	1371	37.77	1422	40.72	1471	43.68	1520	46.83	1566	49.89	1610	52.92
6800	13260	1243	31.65	1295	34.42	1348	37.40	1400	40.39	1450	43.41	1498	46.44	1546	49.65	1592	52.85	1636	56.02

SP*>>	10		11		12		13		14		15		16		17		18		
	OV*	CFM*	RPM	BHP															
2000	3900	1298	14.40	1358	15.83	1422	18.43	1477	19.97	1530	21.53	1580	23.05	1630	24.66	1677	26.26	1724	27.85
2200	4290	1305	15.40	1365	16.91														

SIZE  
**23**

Inlet Size - 23" Dia. Outside  
 Outlet Size - 19½" x 22¼" Outside  
 Wheel Diameter - 40"  
 Tip Speed = 10.47 x RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

SP <sup>*</sup> >>	1		2		3		4		5		6		7		8		9		
	OV*	CFM*	RPM	BHP															
1000	2880	346	0.77	474	1.57	580	2.83	666	3.88	746	5.62	818	7.62	881	9.04	944	11.51	998	13.07
1200	3456	358	0.96	480	1.85	585	3.23	671	4.41	751	6.28	823	8.42	886	9.96				
1400	4032	372	1.18	489	2.16	594	3.70	675	4.93	751	6.28	818	7.62	881	9.04				
1600	4608	387	1.44	500	2.52	594	3.70	675	4.93	751	6.28	818	7.62	881	9.04				
1800	5184	404	1.75	513	2.92	603	4.18	684	5.55	755	6.93	823	8.42	886	9.96	944	11.51	998	13.07
2000	5760	422	2.10	527	3.38	615	4.74	693	6.19	764	7.71	828	9.24	891	10.90	949	12.57	1003	14.25
2200	6336	442	2.52	542	3.90	628	5.36	704	6.90	773	8.50	837	10.16	896	11.85	954	13.65	1008	15.45
2400	6912	463	3.00	558	4.47	642	6.04	716	7.67	783	9.35	846	11.11	905	12.93	960	14.77	1013	16.67
2600	7488	484	3.53	576	5.12	657	6.79	729	8.50	796	10.33	856	12.13	914	14.04	969	16.01	1021	18.02
2800	8064	506	4.15	595	5.85	672	7.60	743	9.42	808	11.11	868	13.25	924	15.23	978	17.29	1030	19.42
3000	8640	528	4.83	614	6.64	689	8.51	758	10.43	822	12.42	881	14.46	936	16.53	988	18.65	1039	20.87
3200	9216	551	5.61	634	7.52	707	9.49	774	11.54	836	13.60	894	15.73	949	17.94	1001	20.19	1049	22.40
3400	9792	575	6.50	655	8.50	726	10.59	790	12.70	852	14.93	908	17.10	962	19.40	1013	21.73	1062	24.14
3600	10368	598	7.44	676	11.75	745	13.99	808	15.87	867	16.28	923	18.60	976	20.98	1026	23.39	1075	25.94
3800	10944	622	8.50	698	10.73	764	12.98	826	15.35	883	17.74	939	20.23	991	22.70	1040	25.19	1087	27.73
4000	11520	647	9.69	719	11.95	785	14.39	845	16.84	901	19.34	954	21.87	1006	24.50	1054	27.06	1101	29.74
4200	12096	671	10.94	742	13.36	806	15.89	864	18.42	919	21.02	970	23.62	1021	26.36	1069	29.08	1115	31.83
4400	12672	696	12.34	765	14.88	827	17.48	884	20.14	938	22.86	989	25.63	1037	28.39	1085	31.26	1130	34.09
4600	13248	722	13.84	788	16.50	848	19.16	904	21.94	957	24.79	1007	27.65	1054	30.52	1100	33.44	1145	36.42
4800	13824	748	15.45	811	18.24	870	21.01	925	23.92	976	26.81	1026	29.86	1072	32.80	1116	35.78	1161	38.94
5000	14400	775	17.24	835	20.15	892	22.97	946	26.00	996	29.00	1044	32.07	1091	35.28	1134	38.33	1176	41.45
5200	14976	801	19.10	859	22.19	915	25.14	968	28.28	1017	31.38	1063	34.47	1109	37.76	1152	40.97	1194	44.30
5400	15552	828	21.16	883	24.35	938	27.44	989	30.58	1038	33.88	1083	37.06	1128	40.44	1171	43.83	1212	47.22
5600	16128	854	23.28	908	26.73	961	29.87	1011	33.09	1059	36.50	1104	39.86	1147	43.24	1190	46.81	1230	50.25
5800	16704	881	25.62	932	29.16	985	32.53	1033	35.73	1080	39.24	1125	42.79	1167	46.26	1208	49.78	1249	53.51
6000	17280	908	28.11	957	31.82	1008	35.23	1056	38.64	1102	42.21	1146	45.85	1187	49.38	1227	52.99	1267	56.77
6200	17856	935	30.76	981	34.53	1032	38.18	1079	41.69	1124	45.32	1174	52.76	1247	56.43	1286	60.28		
6400	18432	962	33.56	1007	37.48	1056	41.27	1102	44.89	1146	48.57	1189	52.50	1229	56.27	1268	60.14	1305	63.91
6600	19008	989	36.53	1033	40.58	1080	44.53	1125	48.25	1168	51.98	1210	55.96	1250	59.93	1289	63.99	1325	67.80

Inlet Area - 2.88 Sq. Ft. Outside  
 Outlet Area - 2.85 Sq. Ft. Inside  
 Wheel Circumference - 10.47 Ft.  
 Max Safe Fan Speed - 1435 RPM

Inlet Size - 26" Dia. Outside  
 Outlet Size - 21<sup>15/16</sup>" x 25<sup>3/16</sup>" Outside  
 Wheel Diameter - 45<sup>1/8</sup>"  
 Tip Speed = 11.81 x RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

SP <sup>*</sup> >>	1		2		3		4		5		6		7		8		9		
	OV*	CFM*	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1000	3710	307	0.99	421	2.02	515	3.65	590	4.97	661	7.20	726	9.82	781	11.60	837	14.78	885	16.78
1200	4452	318	1.24	426	2.38	519	4.16</												

**SIZE**  
**29**

Inlet Size - 29" Dia. Outside  
Outlet Size - 24½" x 28" Outside  
Wheel Diameter - 50½"  
Tip Speed = 13.22 x RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar.). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

SP <sup>*</sup> >>	1		2		3		4		5		6		7		8		9		
	OV*	CFM*	RPM	BHP															
1000	4630	275	1.27	377	2.54	461	4.59	527	6.20	591	9.01	649	12.28	697	14.42	703	16.06	748	18.46
1200	5556	282	1.55	383	3.04	467	5.32	533	7.14	597	10.19	655	13.71	702	11.36	790	20.89		
1400	6482	291	1.90	389	3.56	473	6.08	539	8.12	602	11.36	655	13.71	703	16.06	790	20.89		
1600	7408	301	2.30	396	4.13	473	6.08	539	8.12	602	11.36	655	13.71	703	16.06	790	20.89		
1800	8334	312	2.74	403	4.73	479	6.88	544	9.08	602	11.36	655	13.71	703	16.06	790	20.89		
2000	9260	326	3.29	412	5.43	486	7.74	550	10.13	608	12.62	661	15.19	709	17.74	754	20.36	796	22.98
2200	10186	340	3.90	422	6.22	494	8.70	558	11.32	614	13.93	667	16.71	715	19.48	760	22.30	802	25.14
2400	11112	356	4.63	432	7.05	503	9.75	565	12.50	621	15.34	673	18.29	721	21.26	766	24.30	808	27.34
2600	12038	372	5.44	446	8.08	512	10.85	572	13.73	628	16.79	679	19.89	727	23.10	772	26.35	814	29.61
2800	12964	388	6.33	459	9.14	522	12.07	582	15.21	636	18.38	687	21.71	734	25.07	778	28.46	820	31.93
3000	13890	405	7.36	473	10.34	534	13.46	591	16.68	644	20.02	694	23.50	741	27.09	784	30.60	826	34.31
3200	14816	423	8.54	488	11.66	547	14.95	601	18.30	654	21.90	702	25.46	748	29.17	792	33.02	833	36.85
3400	15742	441	9.84	503	13.07	560	16.53	612	20.06	663	23.76	711	27.56	756	31.43	799	35.40	840	39.45
3600	16668	459	11.27	519	14.66	574	18.30	625	22.01	673	25.80	721	29.87	765	33.87	807	37.97	847	42.12
3800	17594	477	12.81	536	16.45	588	20.15	638	24.06	684	28.00	730	32.14	774	36.39	815	40.16	855	45.01
4000	18520	496	14.57	552	18.28	604	22.29	652	26.33	697	30.43	740	34.62	784	39.13	825	43.61	863	47.96
4200	19446	515	16.48	569	20.33	619	24.43	665	28.60	710	32.96	752	37.39	794	41.98	834	46.55	873	51.32
4400	20372	533	18.44	587	22.64	636	26.95	680	31.21	724	35.77	765	40.31	803	44.77	844	49.76	882	54.60
4600	21298	553	20.73	604	24.99	652	29.49	696	34.05	737	38.55	778	43.37	816	48.11	854	53.07	892	58.18
4800	22224	573	23.20	622	27.61	668	32.18	711	36.88	751	41.62	792	46.72	829	51.56	865	56.59	902	61.87
5000	23150	594	25.98	641	30.54	685	35.16	727	40.02	766	44.89	805	50.05	843	55.34	878	60.45	912	65.68
5200	24076	614	28.83	659	33.52	702	38.31	743	43.32	782	48.49	819	53.70	856	59.08	891	64.45	924	69.75
5400	25002	634	31.87	677	36.67	719	41.63	760	46.97	798	52.27	834	57.62	870	63.17	904	68.59	937	74.15
5600	25928	655	35.28	696	40.18	737	45.32	776	50.61	814	56.22	849	61.65	883	67.20	918	73.13	951	78.97
5800	26854	675	38.75	715	43.89	755	49.20	793	54.63	830	60.34	865	66.08	898	71.77	931	77.59	964	83.70
6000	27780	696	42.62	733	47.63	773	53.28	810	58.84	846	64.65	881	70.70	913	76.43	945	82.46	978	88.86
6200	28706	716	46.53	752	51.77	791	57.58	828	63.48	863	69.39	897	75.51	929	81.54	960	87.68	991	93.93
6400	29632	737	50.89	772	56.27	810	62.32	845	68.10	879	74.09	913	80.52	945	86.85	975	93.01	1005	99.45
6600	30558	758	55.50	792	61.03	828	67.05	863	73.18	896	79.24	929	85.73	961	92.37	991	98.82	1020	105.5

SP <sup>*</sup> >>	10		11		12		13		14		15		16		17		18		
	OV*	CFM*	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP									
2000	9260	836	25.67	874	28.38	916	33.86	951	36.86	990	43.04	1022	46.24	1054	49.61	1090	56.78	1119	60.23
2200	10186	842	28.03	880	30.95	922	36.69	957	39.90	990	43.04	1022	46.24	1054	49.61	1095	60.70	1125	64.43
2400	11112	848	30.44	886	33.57	922	36.69	962	42.87	996	46.35	1028	49.75	1060	53.33	1095	60.70	1125	64.43
2600	120																		

**SIZE**  
**37**

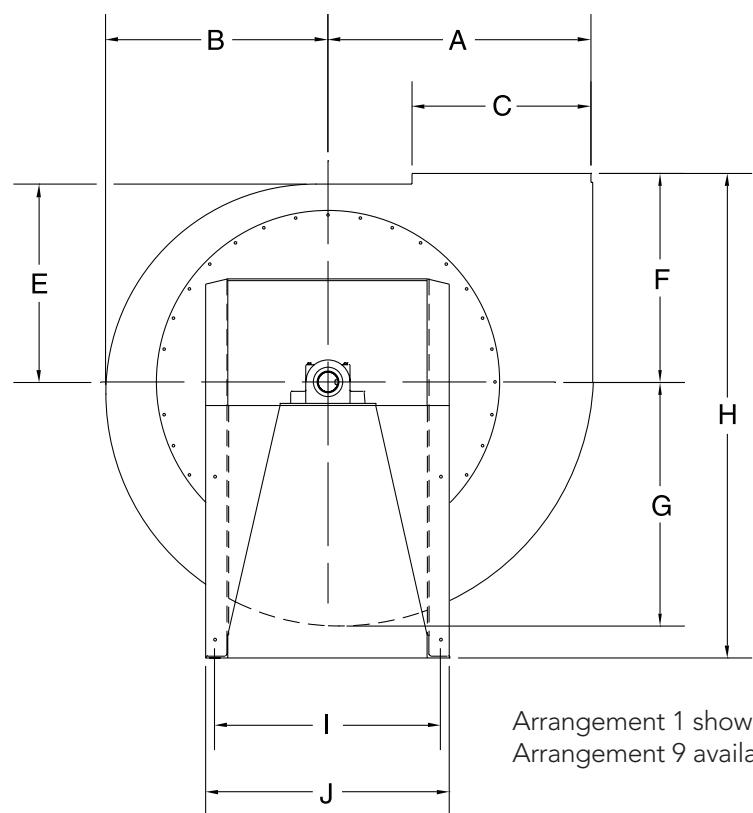
Inlet Size - 37" Dia. Outside  
Outlet Size - 31 $\frac{1}{4}$ " x 35 $\frac{13}{16}$ " Outside  
Wheel Diameter - 64 $\frac{3}{8}$ "  
Tip Speed = 16.85 x RPM

Power Rating (BHP) does not include transmission losses. Performance Ratings do not include the effects of appurtenances (accessories). All capacities based on standard air (density .075#/cu. ft. 70°F. 29.92" Hg. Bar.). Performances shown in the color zone are those operating at maximum static efficiency. Performances shown above colored line are those operating within optimum operation range. Performance certified is for installation type D - ducted inlet, ducted outlet.

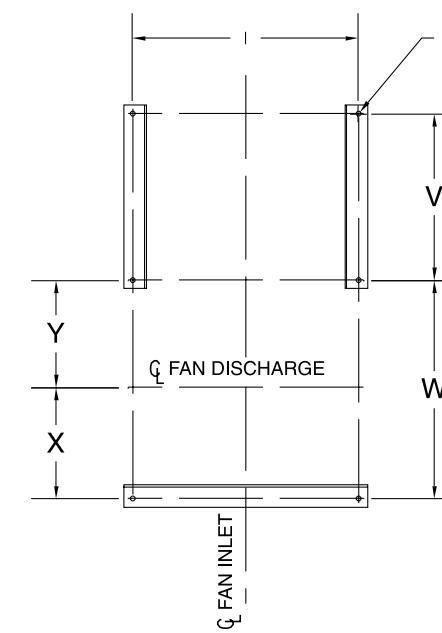
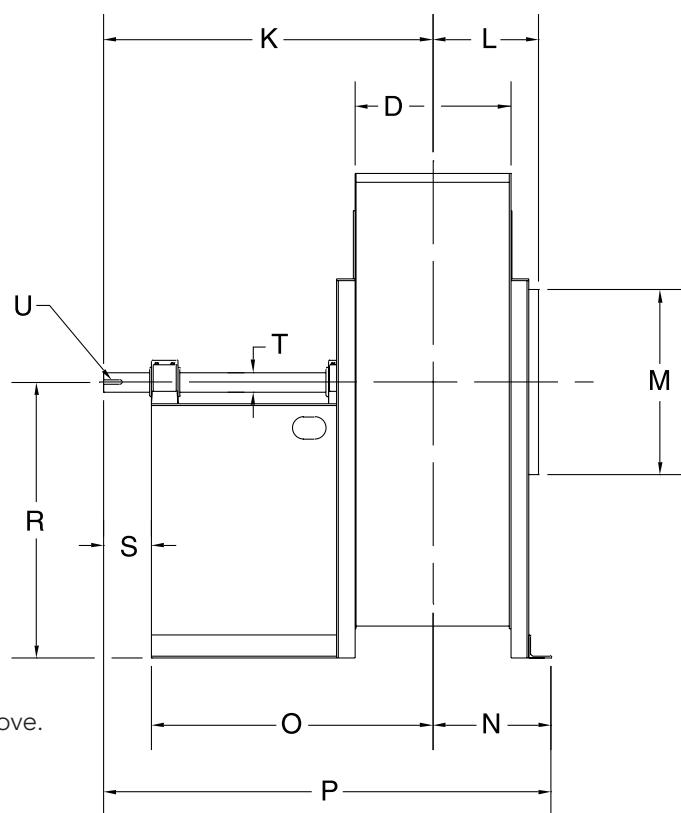
SP <sup>*</sup> >>	1		2		3		4		5		6		7		8		9		
	OV*	CFM*	RPM	BHP															
1000	7590	216	2.08	296	4.17	301	4.99	362	7.52	414	10.18								
1200	9108	222	2.57	301	4.99	366	8.67	418	11.66	464	14.76								
1400	10626	229	3.14	305	5.81	366	8.67	418	11.66	468	16.63	509	20.06	547	23.61				
1600	12144	236	3.75	311	6.77	371	9.94	423	13.29	468	18.66	514	22.44	552	26.33	587	30.22	620	34.19
1800	13662	246	4.54	317	7.80	376	11.27	427	14.88	473	18.66								
2000	15180	257	5.45	324	8.94	382	12.73	432	16.63	478	20.78	519	24.91	557	29.14	592	33.37	625	37.68
2200	16698	268	6.45	332	10.25	388	14.27	438	18.55	482	22.82	523	27.30	561	31.87	596	36.43	630	41.27
2400	18216	280	7.61	340	11.62	395	15.98	444	20.55	488	25.21	528	29.91	566	34.85	601	39.76	634	44.74
2600	19734	293	8.97	351	13.32	403	17.91	450	22.63	494	27.68	534	32.77	571	37.91	606	43.18	639	48.52
2800	21252	306	10.48	361	15.03	410	19.80	457	24.93	500	30.24	539	35.52	576	41.04	611	46.70	644	52.40
3000	22770	320	12.25	372	17.00	420	22.14	465	27.50	506	32.88	545	38.55	582	44.46	616	50.27	648	56.12
3200	24288	334	14.19	384	19.19	430	24.55	473	30.20	514	35.99	551	41.69	588	47.99	622	54.18	654	60.41
3400	25806	348	16.32	397	21.70	441	27.29	482	33.14	522	39.26	559	45.36	594	51.64	628	58.21	660	64.81
3600	27324	362	18.64	410	24.40	452	30.21	492	36.30	529	42.42	567	49.18	601	55.61	634	62.37	666	69.35
3800	28842	377	21.34	422	27.10	463	33.24	502	39.62	538	46.08	574	52.89	609	60.01	641	66.90	672	74.01
4000	30360	392	24.26	435	30.20	476	36.84	513	43.35	549	50.27	582	57.02	616	64.27	648	71.55	678	78.75
4200	31878	406	27.24	449	33.72	488	40.43	524	47.29	559	54.39	592	61.68	624	68.99	656	76.70	686	84.31
4400	33396	421	30.63	463	37.50	501	44.48	536	51.62	570	59.00	602	66.42	632	73.86	664	82.03	694	90.07
4600	34914	437	34.48	477	41.53	514	48.78	548	56.13	581	63.84	613	71.72	642	79.23	671	87.15	701	95.60
4800	36432	453	38.63	491	45.82	527	53.34	561	61.18	592	68.88	623	76.88	653	85.20	681	93.39	709	101.1
5000	37950	469	43.09	506	50.69	540	58.14	573	66.17	604	74.34	634	82.64	663	91.02	691	99.64	717	107.7
5200	39468	485	47.87	520	55.55	554	63.55	586	71.76	616	80.05	645	88.65	674	97.49	701	106.6	727	114.4
5400	40986	501	52.99	535	61.04	568	69.27	599	77.64	629	86.44	657	95.15	685	104.4	712	113.3	738	122.2
5600	42504	517	58.45	549	66.50	582	75.31	612	83.81	642	93.13	669	101.1	723	120.0	748	129.9		
5800	44022	534	64.64	564	72.65	596	81.66	625	90.28	654	99.68	682	109.9	707	118.8	733	128.8	759	138.8
6000	45540	550	70.85	579	79.16	610	88.34	639	97.50	667	106.6	694	116.6	720	126.6	744	136.6	770	146.6
6200	47058	566	77.44	594	86.00	625	95.82	653	105.5	680	114.4	707	124.4	732	134.4	756	144.4	781	155.5
6400	48576	583	84.85	610	93.57	639	103.3	667	113.3	693	122.2	720	133.3	745	143.3	769	154.4	791	163.3
6600	50094	599	92.26	626	101.1	654	111.1	681	121.1	707	131.1	733	142.2	758	153.3	781	163.3	804	174.4

SP <sup>*</sup> >>	10		11		12		13		14		15		16		17		18		
	OV*	CFM*	RPM	BHP															
2000	15180	656	42.00	686	46.48	691	50.74	719	55.46	746	60.25	773	65.35	803	75.95	827	81.15		
2200	16698	661	45.92	691	50.74	724	60.17	751	65.30	777	70.48	803	75.95	827	81.15				
2400	18216	665	49.73	695	54.88	724	60.17	751	65.30	782	75.98	807	81.51	832	87.33	855	92.93	878	98.53
2600	19734	670	53.85	700	59.36	728	64.73	756	70.47	782	75.98	807	81.51	8					

# MATERIAL HANDLING FAN



Arrangement 1 shown above.  
Arrangement 9 available.



Note: All dimensions in inches.

All fans shipped with Outlet Flanges unless otherwise specified.

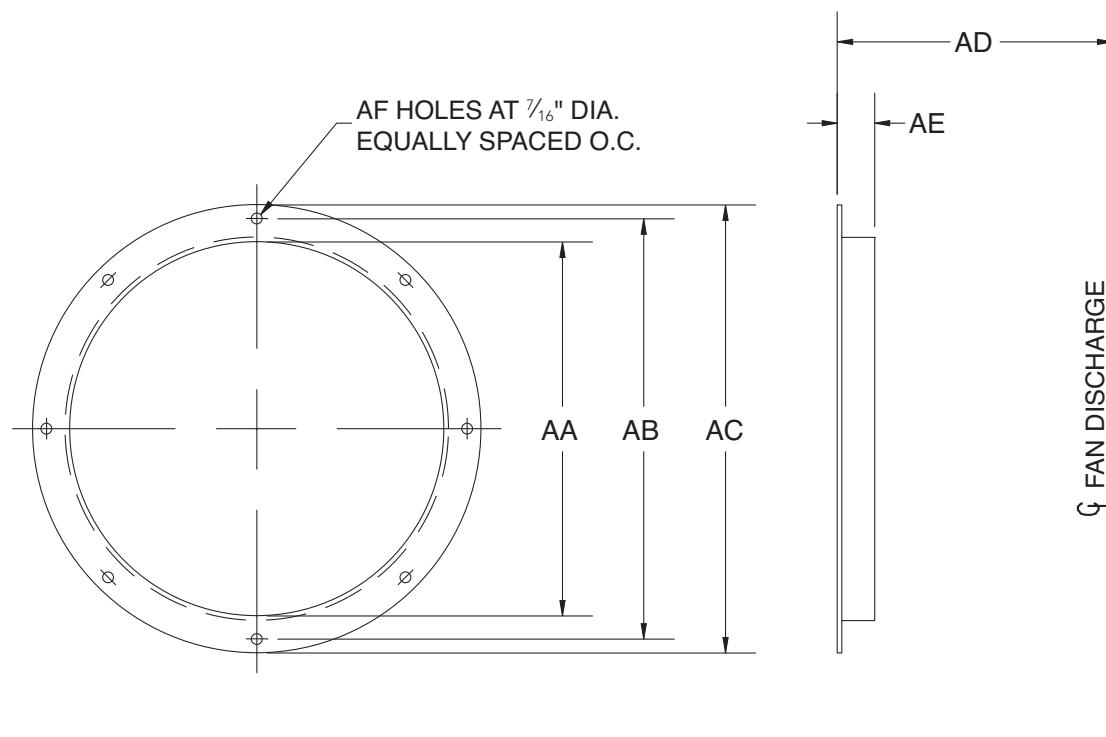
Only certified dimensions to be used for construction.

Certified Drawings available upon request.

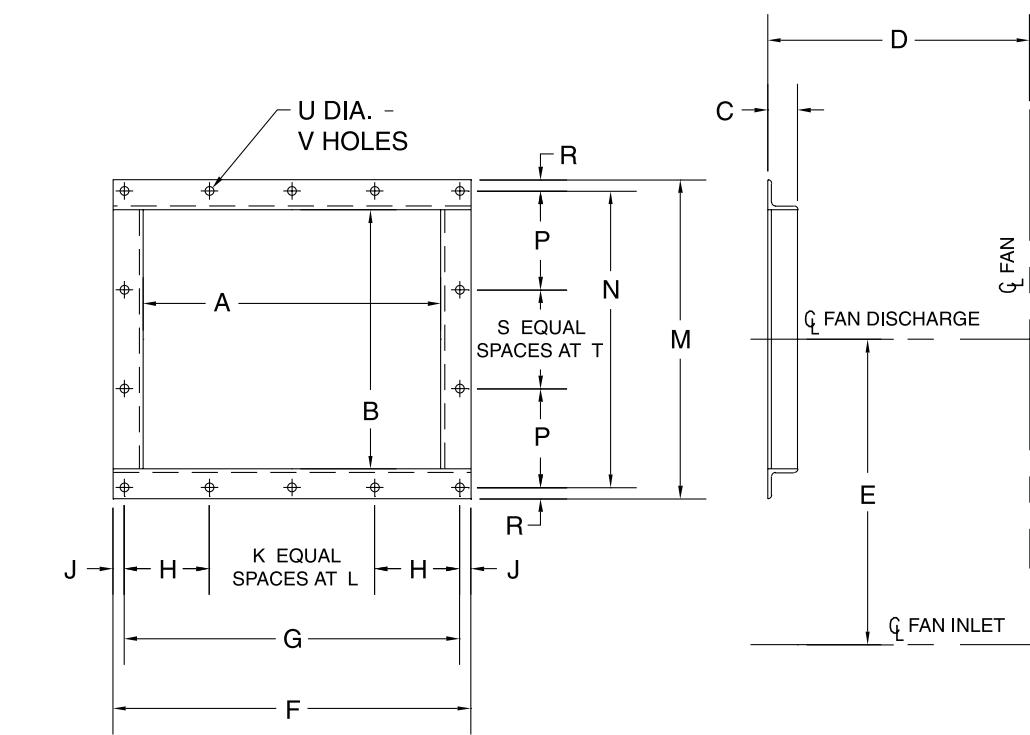
## Material Handling Fan

Size No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	Y	Z	Weight	Size No.
11	15 $\frac{11}{16}$	13 $\frac{7}{16}$	10 $\frac{7}{8}$	9 $\frac{7}{16}$	12 $\frac{1}{8}$	14 $\frac{5}{8}$	14 $\frac{1}{2}$	33 $\frac{3}{8}$	15 $\frac{1}{2}$	17	31 $\frac{1}{4}$	7 $\frac{1}{2}$	11	9 $\frac{1}{32}$	26 $\frac{5}{32}$	40 $\frac{9}{32}$	18 $\frac{3}{4}$	5 $\frac{3}{32}$	1 $\frac{11}{16}$	$\frac{3}{8}X\frac{3}{16}$	16 $\frac{7}{8}$	16 $\frac{9}{16}$	8 $\frac{9}{32}$	8 $\frac{9}{32}$	11/16	410	11
13	18 $\frac{7}{16}$	15 $\frac{7}{8}$	12 $\frac{13}{16}$	11	13 $\frac{3}{4}$	16 $\frac{1}{4}$	17 $\frac{5}{16}$	37 $\frac{1}{4}$	17	19	32 $\frac{11}{16}$	8 $\frac{5}{16}$	13	9 $\frac{13}{16}$	27 $\frac{11}{16}$	42 $\frac{1}{2}$	21	5	1 $\frac{11}{16}$	$\frac{3}{8}X\frac{3}{16}$	16 $\frac{3}{8}$	18 $\frac{7}{8}$	9 $\frac{1}{16}$	9 $\frac{13}{16}$	11/16	509	13
15	21 $\frac{5}{16}$	18 $\frac{1}{8}$	14 $\frac{3}{4}$	12 $\frac{3}{4}$	15 $\frac{7}{8}$	18 $\frac{3}{8}$	19 $\frac{15}{16}$	42 $\frac{11}{16}$	19 $\frac{1}{2}$	21	35 $\frac{7}{8}$	9 $\frac{3}{16}$	15	10 $\frac{11}{16}$	29 $\frac{11}{16}$	46 $\frac{9}{16}$	24 $\frac{5}{16}$	6 $\frac{3}{16}$	1 $\frac{15}{16}$	$\frac{1}{2}X\frac{1}{4}$	18 $\frac{3}{4}$	19 $\frac{7}{8}$	9 $\frac{15}{16}$	9 $\frac{15}{16}$	11/16	629	15
17	24 $\frac{1}{4}$	20 $\frac{1}{2}$	16 $\frac{9}{16}$	14 $\frac{7}{16}$	17 $\frac{15}{16}$	20 $\frac{7}{16}$	22 $\frac{9}{16}$	48	21 $\frac{1}{2}$	23	35 $\frac{7}{8}$	10	17	11 $\frac{17}{32}$	30 $\frac{21}{32}$	47 $\frac{13}{32}$	27 $\frac{9}{16}$	5 $\frac{7}{32}$	1 $\frac{15}{16}$	$\frac{1}{2}X\frac{1}{4}$	18 $\frac{1}{4}$	21 $\frac{7}{8}$	10 $\frac{25}{32}$	11 $\frac{3}{32}$	11/16	729	17
19	27	22 $\frac{7}{8}$	18 $\frac{3}{8}$	16	20	22 $\frac{1}{2}$	25 $\frac{1}{8}$	52 $\frac{5}{8}$	23 $\frac{1}{2}$	25	37 $\frac{3}{4}$	10 $\frac{13}{16}$	19	12 $\frac{5}{16}$	32	50 $\frac{1}{16}$	30 $\frac{1}{8}$	5 $\frac{3}{4}$	2 $\frac{3}{16}$	$\frac{1}{2}X\frac{1}{4}$	19 $\frac{7}{16}$	23 $\frac{1}{8}$	11 $\frac{5}{8}$	11 $\frac{5}{8}$	11/16	929	19
21	30	25	20 $\frac{1}{4}$	17 $\frac{11}{16}$	22 $\frac{5}{8}$	25 $\frac{5}{8}$	27 $\frac{5}{8}$	59 $\frac{1}{4}$	28	31	40 $\frac{1}{2}$	13 $\frac{3}{8}$	21	15 $\frac{5}{32}$	34 $\frac{13}{32}$	55 $\frac{21}{32}$	33 $\frac{5}{8}$	6 $\frac{3}{32}$	2 $\frac{7}{16}$	$\frac{5}{8}X\frac{5}{16}$	18	28 $\frac{1}{16}$	13 $\frac{21}{32}$	14 $\frac{13}{32}$	11/16	1180	21
23	32 $\frac{3}{4}$	26 $\frac{5}{8}$	22 $\frac{1}{4}$	19 $\frac{1}{2}$	23 $\frac{3}{8}$	26 $\frac{7}{8}$	30	62 $\frac{7}{8}$	30	33	44 $\frac{7}{8}$	14 $\frac{5}{16}$	23	16	38 $\frac{13}{16}$	60 $\frac{13}{16}$	36	6	2 $\frac{7}{16}$	$\frac{5}{8}X\frac{5}{16}$	21 $\frac{9}{16}$	29 $\frac{3}{4}$	14 $\frac{1}{2}$	15 $\frac{1}{4}$	11/16	1360	23
26	37	31	25 $\frac{3}{16}$	21 $\frac{15}{16}$	27 $\frac{3}{8}$	29 $\frac{7}{8}$	35 $\frac{1}{8}$	70	31	34	46 $\frac{3}{32}$	15 $\frac{1}{2}$	26	17 $\frac{9}{32}$	40 $\frac{3}{32}$	63 $\frac{3}{8}$	40 $\frac{1}{8}$	6	2 $\frac{15}{16}$	$\frac{3}{4}X\frac{3}{8}$	20 $\frac{1}{16}$	33 $\frac{1}{16}$	15 $\frac{25}{32}$	17 $\frac{9}{32}$	11/16	1659	26
29	41 $\frac{3}{8}$	34 $\frac{5}{8}$	28	24 $\frac{1}{2}$	30 $\frac{1}{2}$	33	39	81	36	39	52 $\frac{1}{2}$	16 $\frac{13}{16}$	29	18 $\frac{9}{16}$	45	71 $\frac{1}{16}$	48	7 $\frac{1}{2}$	2 $\frac{15}{16}$	$\frac{3}{4}X\frac{3}{8}$	25 $\frac{3}{16}$	34 $\frac{7}{8}$	17 $\frac{1}{16}$	17 $\frac{13}{16}$	13/16	2109	29
33	48	39	31 $\frac{7}{8}$	27 $\frac{3}{4}$	34 $\frac{1}{2}$	38	43 $\frac{1}{2}$	89	40	43	56	18 $\frac{7}{16}$	33	20 $\frac{3}{16}$	49 $\frac{7}{16}$	76 $\frac{3}{16}$	51	6 $\frac{9}{16}$	3 $\frac{7}{16}$	$\frac{7}{8}X\frac{7}{16}$	28	38 $\frac{1}{8}$	18 $\frac{11}{16}$	19 $\frac{7}{16}$	13/16	2779	33
37	53 $\frac{1}{8}$	44	35 $\frac{13}{16}$	31 $\frac{1}{4}$	39	41 $\frac{1}{2}$	48 $\frac{3}{8}$	96 $\frac{7}{8}$	45	49	63 $\frac{7}{8}$	21 $\frac{3}{16}$	37	23 $\frac{15}{16}$	54 $\frac{3}{4}$	87 $\frac{13}{16}$	55 $\frac{3}{8}$	9 $\frac{1}{8}$	3 $\frac{7}{16}$	$\frac{7}{8}X\frac{7}{16}$	30 $\frac{9}{16}$	44 $\frac{1}{8}$	21 $\frac{15}{16}$	22 $\frac{3}{16}$	13/16	3269	37
41	58 $\frac{3}{4}$	49 $\frac{1}{8}$	39 $\frac{9}{16}$	34 $\frac{1}{2}$	43 $\frac{3}{4}$	46 $\frac{1}{4}$	54	107 $\frac{1}{4}$	50	54	72 $\frac{7}{8}$	23 $\frac{1}{2}$	41	26 $\frac{5}{8}$	62 $\frac{3}{8}$	99 $\frac{5}{8}$	61	10 $\frac{1}{2}$	4 $\frac{7}{16}$	$1X\frac{1}{2}$	36 $\frac{7}{8}$	48 $\frac{3}{8}$	24 $\frac{5}{8}$	23 $\frac{3}{4}$	11/16	5890	41

## INLET FLANGE



## OUTLET FLANGE



Inlet Flange

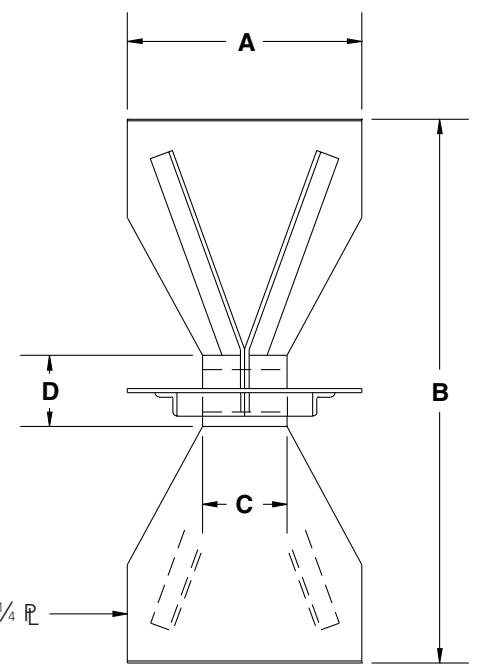
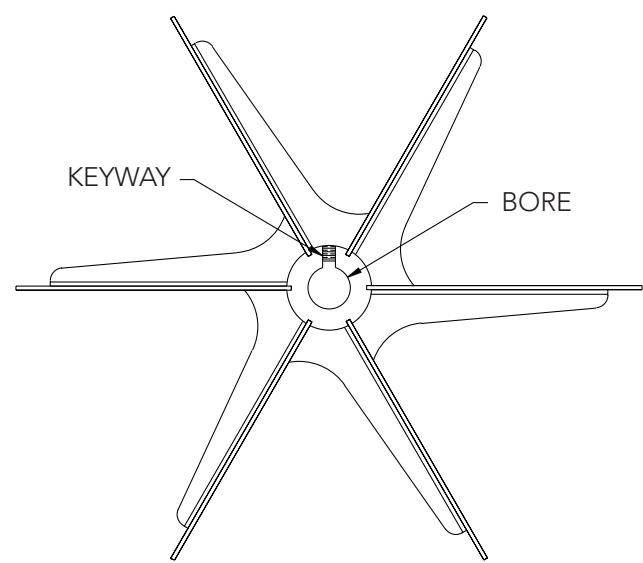
Fan Size	AA	AB	AC	AD	AE	AF
11	11 1/8	12 3/4	14 1/8	8	1 1/4	6
13	13 1/8	15	16 1/8	8 13/16	1 1/2	6
15	15 1/8	17	18 1/8	9 11/16	1 1/2	8
17	17 1/8	19	20 1/8	10 1/2	1 1/2	8
19	19 1/8	20 3/4	22 1/8	11 5/16	1 1/2	12
21	21 1/8	22 3/4	24 1/8	13 7/8	1 1/2	12
23	23 1/8	24 7/8	26 1/8	14 13/16	1 1/2	12
26	26 1/8	28 3/8	30 1/8	16	2	16
29	29 1/8	31 3/8	33 1/8	17 5/16	2	16
33	33 1/8	35 3/8	37 1/8	18 15/16	2	16
37	37 1/8	39 3/8	41 1/8	21 11/16	2	24
41	41 1/8	43 3/8	45 1/8	25 1/4	2	24

Note: All dimensions in inches.

Outlet Flange

Fan Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	Fan Size
11	11 1/8	9 9/16	1 1/2	14 7/8	9 3/4	14 1/16	12 13/16	6 13/32	5/8	0	0	12 9/16	11 5/16	5 21/32	5/8	0	0	7/16	8	11
13	12 15/16	11 1/8	1 1/2	16 1/2	11 1/2	15 15/16	14 7/16	4 13/16	3/4	1	4 13/16	14 1/8	12 5/8	6 5/16	3/4	0	0	7/16	10	13
15	14 7/8	12 15/16	1 1/2	18 5/8	13 7/16	17 7/8	16 3/4	4 1/4	9/16	2	4 1/8	15 15/16	14 13/16	4 15/16	9/16	1	4 15/16	7/16	14	15
17	16 3/4	14 5/8	1 1/2	20 9/16	15 7/16	19 3/4	18 1/2	4 5/8	5/8	2	4 5/8	17 5/8	16 3/8	4 3/16	5/8	2	4	7/16	16	17
19	18 1/2	16 1/8	2	22 3/4	17 5/16	22 1/2	21 1/4	5 1/4	5/8	2	5 3/8	20 1/8	18 3/4	6 1/4	11/16	1	6 1/4	7/16	14	19
21	20 5/16	17 3/4	2	25 7/8	19 3/8	24 5/16	22 5/16	5 5/32	1	2	6	21 3/4	19 3/4	6 5/8	1	1	6 1/2	7/16	14	21
23	22 3/8	19 5/8	2	27 1/8	21 1/8	26 3/8	24 3/8	6 3/16	1	2	6	23 5/8	21 5/8	4 13/16	1	2	6	7/16	16	23
26	25 3/8	22 1/8	2	30 1/8	23 7/8	29 3/8	27 5/8	5 3/16	7/8	3	5 3/4	26 1/8	24 3/8	6	7/8	2	6 3/16	7/16	18	26
29	28 1/8	24 5/8	2	33 1/4	26 7/8	32 1/8	30 5/8	6 1/8	3/4	3	6 1/8	28 5/8	27 1/4	6 13/16	11/16	2	6 13/16	7/16	18	29
33	32	27 7/8	2	38 1/4	31 9/16	36	34	6 1/2	1	3	7	31 7/8	30	6	15/16	3	6	7/16	20	33
37	36	31 3/8	2	41 3/4	34 11/16	40	38	7	1	4	6	35 3/8	33 3/8	4 11/16	1	4	6	7/16	24	37
41	39 3/4	34 5/8	2 1/2	46 1/2	38 15/32	44 3/4	42 1/4	6 1/8	1 1/4	5	6	39 5/8	37 1/4	6 1/4	1 3/16	4	6 3/16	9/16	26	41

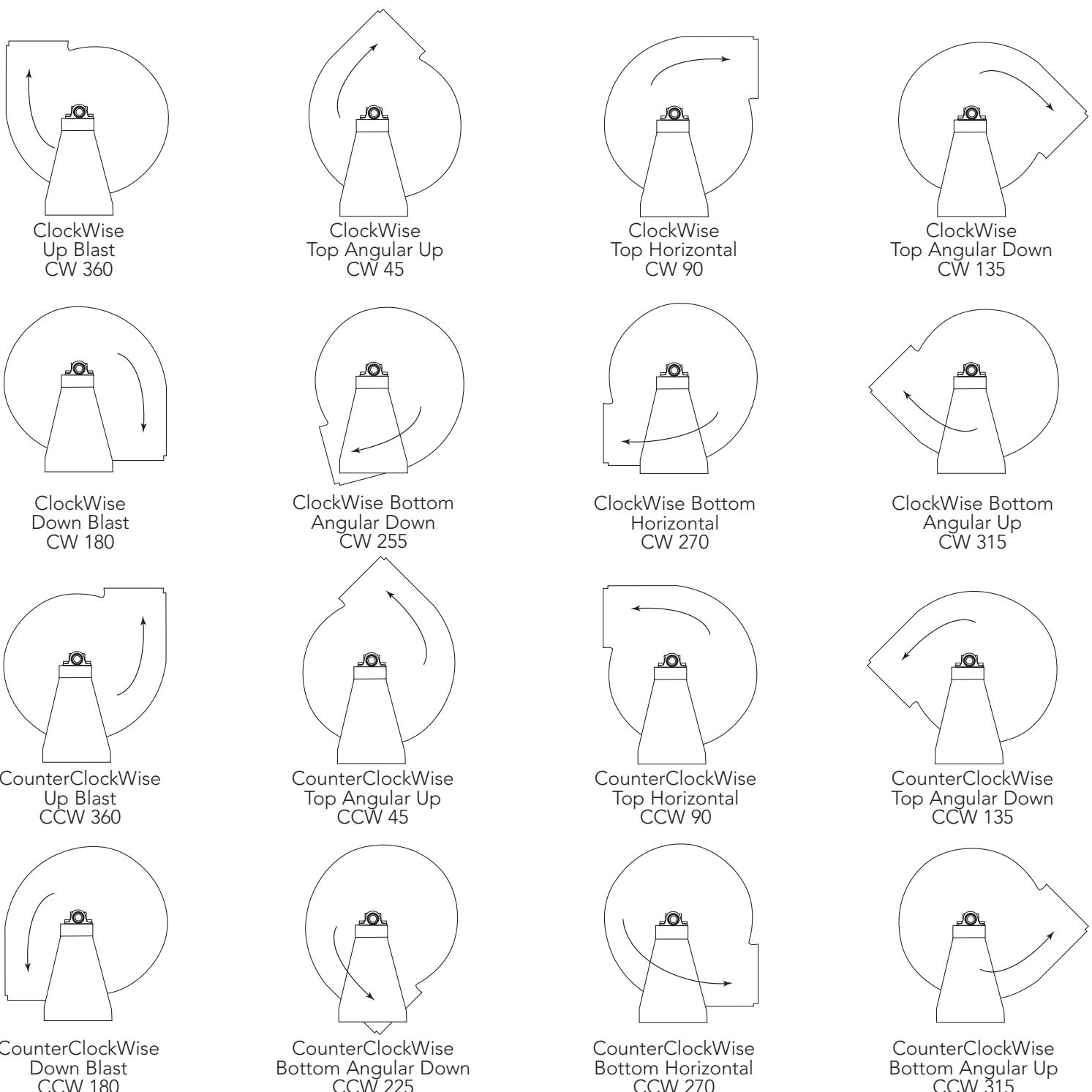
# FAN WHEEL



Fan Wheel							
Size No.	A	B	Bore	Shaft Length	Keyway	C	D
11	8	$19\frac{1}{8}$	$1\frac{11}{16}$	33	$\frac{3}{8} \times \frac{3}{16}$	$3\frac{1}{2}$	4
13	$9\frac{1}{2}$	$22\frac{5}{8}$	$1\frac{11}{16}$	$34\frac{7}{16}$	$\frac{3}{8} \times \frac{3}{16}$	$3\frac{1}{2}$	4
15	$10\frac{15}{16}$	$26\frac{1}{8}$	$1\frac{15}{16}$	$37\frac{7}{8}$	$\frac{1}{2} \times \frac{1}{4}$	4	4
17	$12\frac{7}{16}$	$29\frac{5}{8}$	$1\frac{15}{16}$	$37\frac{7}{8}$	$\frac{1}{2} \times \frac{1}{4}$	4	4
19	$13\frac{13}{16}$	33	$2\frac{3}{16}$	40	$\frac{1}{2} \times \frac{1}{4}$	$4\frac{1}{2}$	5
21	$15\frac{5}{16}$	$36\frac{1}{2}$	$2\frac{7}{16}$	43	$\frac{5}{8} \times \frac{5}{16}$	5	5
23	$16\frac{3}{4}$	40	$2\frac{7}{16}$	$47\frac{3}{8}$	$\frac{5}{8} \times \frac{5}{16}$	5	5
26	19	$45\frac{1}{8}$	$2\frac{15}{16}$	$48\frac{13}{16}$	$\frac{3}{4} \times \frac{3}{8}$	6	$5\frac{1}{2}$
29	$21\frac{3}{16}$	$50\frac{1}{2}$	$2\frac{15}{16}$	$55\frac{5}{8}$	$\frac{3}{4} \times \frac{3}{8}$	6	$5\frac{1}{2}$
33	24	57	$3\frac{7}{16}$	60	$\frac{7}{8} \times \frac{7}{16}$	8	7
37	$27\frac{1}{2}$	$64\frac{3}{8}$	$3\frac{7}{16}$	68	$\frac{7}{8} \times \frac{7}{16}$	8	7
41	$29\frac{1}{2}$	71	$4\frac{7}{16}$	78	$1 \times \frac{1}{2}$	10	8

Note: All dimensions in inches.

## DESIGNATIONS FOR ROTATION AND DISCHARGE OF CENTRIFUGAL FANS



### NOTES:

1. Direction of rotation is determined from drive side of fan.
2. On single inlet fans, drive side is always considered as the side opposite fan inlet.
3. Direction of discharge is determined in accordance with diagrams. Angle of discharge is referred to the vertical axis of fan and designated from such standard reference axis. Angle of discharge may be an intermediate angle as required.
4. For fan inverted for ceiling suspension, or side wall mounting, direction of rotation and discharge is determined when fan is resting on floor.

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# CYCLONES



## Koger Air A-B Cyclones Standard Construction

- Welded, bolted and flanged 12 gauge or heavier mild steel in inlet diameters 12" to 48".
- Design and construction minimizes abrasion as system particulate is collected and separated.
- Used as a pre-cleaner, the A-B cyclone separator reduces the load for the final filter
- Maximum efficiency is obtained when paired with final filter or in closed loop systems as atmospheric emissions are eliminated
- Bolted construction enables inlet position to be interchanged from clockwise to counterclockwise rotation
- Hot rolled plate construction is cleaned, primed and painted with selection of standard paint colors
- Flat top reinforced by gussets with lifting eyes

### Options

- Length and degree of cone
- Pressure relief vents
- Steel supports, service platforms and ladders
- Air outlet cap
- Size and materials including Galvanized, Abrasion Resistant Steel, Stainless, Hot Rolled Plate
- Inlet transitions
- Multiple inlets with automatic backdraft dampers
- Round or rectangular inlets
- Cone hopper to match airlock or other equipment
- Cone access doors
- Bolt-in wear plates

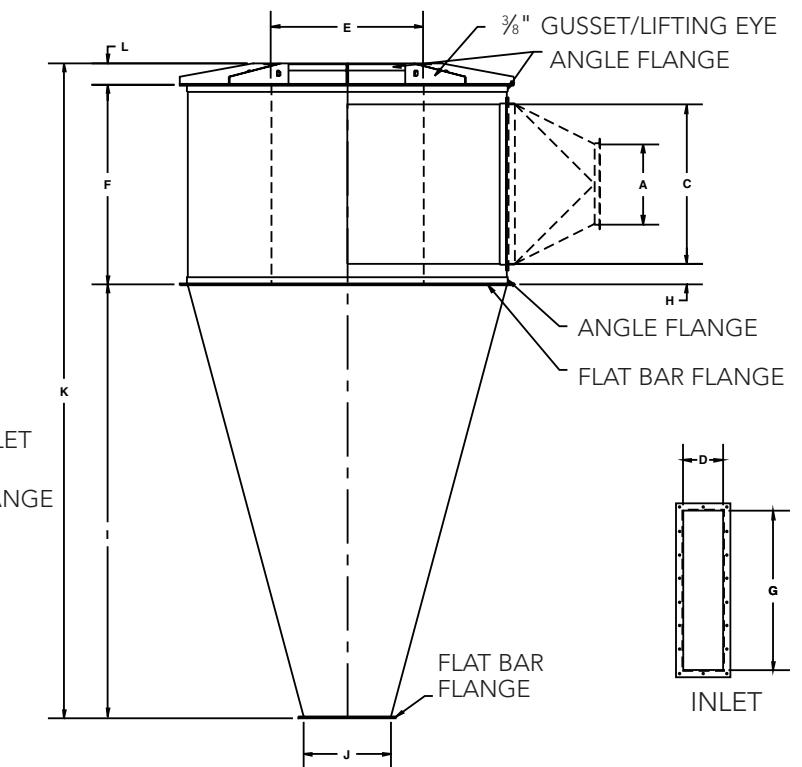
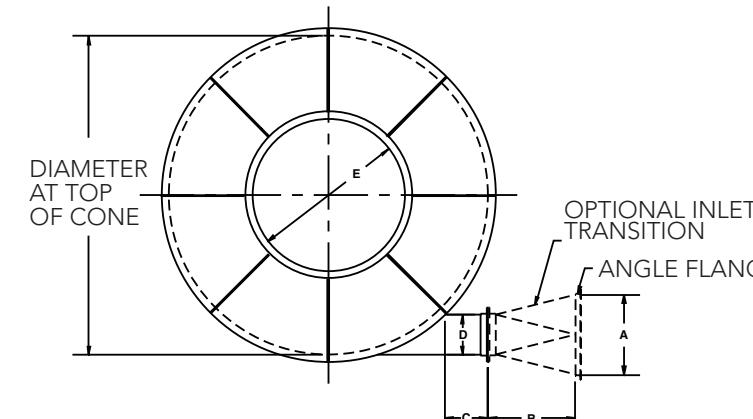
### Shipment

- Body diameters 104" and smaller are shipped in one piece
- Body diameters above 104" are shipped knocked down with flanged bodies and cones
- Average shipment 2 to 4 weeks from order subject to work schedules and material availability

## Standard A-B Cyclone

Top View - Clockwise Rotation Shown  
Counterclockwise Rotation also Available

Specify Rotation when Ordering



Certified drawings are available upon receipt of purchase order

## Standard A-B Cyclone Separators

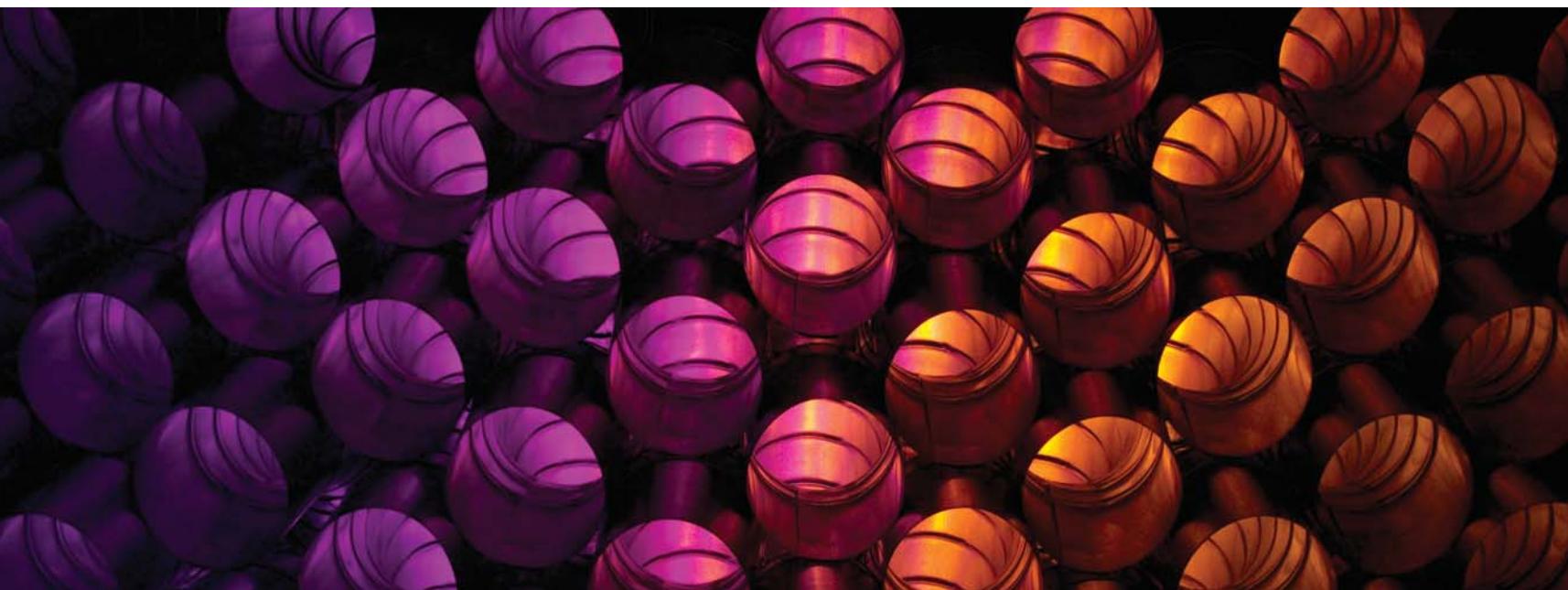
A Inlet Dia.	Capacity CFM@2"SP	Body Diameter	B	C	D	E	F	G	H	I	J	K	L
12	3150	48	18	12	6	22	30	24	3	45	24	80	5
14	4275	56	18	12	7	26	35	28	3.5	60	24	100 1/4	5 1/4
16	5600	64	18	12	8	30	40	32	4	75	24	120 1/2	5 1/2
18	7000	72	24	12	9	34	45	36	4.5	90	24	140 3/4	5 3/4
20	9150	80	24	12	10	38	50	40	5	105	24	161	6
22	11175	88	24	12	11	42	55	44	5.5	120	24	181 1/4	6 1/4
24	13390	96	30	12	12	46	60	48	6	135	24	201 1/2	6 1/2
26	15810	104	30	12	13	50	65	52	6.5	150	24	221 3/4	6 3/4
28	18450	112	30	12	14	54	70	56	7	164	24	241	7
30	21290	120	30	12	15	58	75	60	7.5	179	24	261 1/4	7 1/4
32	24320	128	36	12	16	62	80	64	8	194	24	281 1/2	7 1/2
34	27550	136	36	12	17	66	85	68	8.5	209	24	301 3/4	7 3/4
36	31000	144	36	12	18	70	90	72	9	224	24	322	8
38	34650	152	36	12	19	74	95	76	9.5	239	24	342 1/4	8 1/4
40	38450	160	36	12	20	78	100	80	10	254	24	342 1/2	8 1/2
42	42540	168	42	12	21	82	105	84	10.5	269	24	382 3/4	8 3/4
44	46800	176	42	12	22	86	110	88	11	283	24	402	9
46	51250	184	42	12	23	90	115	92	11.5	298	24	422 1/4	9 1/2
48	55290	192	42	12	24	94	120	96	12	313	24	442 1/2	9 1/2

- All dimensions in inches
- Weight is calculated based on size, type and thickness of material
- CFM (cubic feet per minute) @ 2" water gauge static pressure

### Applications

- Wood
- Brick
- Grain and Feed
- Agricultural
- Leather
- Rubber
- Textiles
- Pharmaceuticals
- Polymer and Plastics
- Sugar
- Foam
- Chemicals
- Minerals
- Asphalt
- Pulp and Paper
- Fly Ash
- Metal Grindings

## COMPONENT PARTS



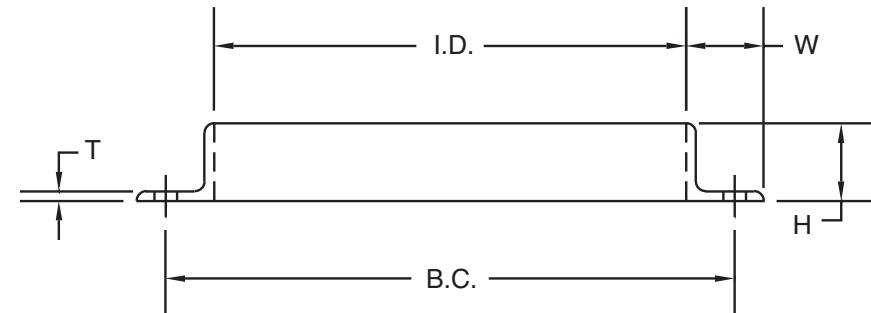
Koger offers a complete line of blowpipe component parts for sheet metal shops, contractors and resellers to use as new and existing system replacements, additions or retrofits. After our skilled craftsmen manufacture our products, using state-of-the-art machinery, standard parts are warehoused in our service center for immediate shipment upon receipt of order.

### Standard Pressed Angle Rings

Inside Diameter	H	W	T	Bolt Hole Centers	No. of Bolt Holes	Size of Bolt Holes	Weight lbs.	Pieces/Bundle
3 1/16"	7/8"	1"	11 GA	4 5/16"	6	9/32"	0.70	48
4 1/16"	15/16"	1"	11 GA	5 5/16"	6	9/32"	0.85	48
5 1/16"	1"	1"	11 GA	6 5/16"	6	9/32"	1.18	24
6 3/32"	1"	1"	11 GA	7 5/16"	6	9/32"	1.38	24
7 1/8"	1"	1 1/8"	11 GA	8 1/2"	6	3/8"	1.73	12
8 1/8"	1"	1 1/8"	11 GA	9 9/16"	6	3/8"	1.90	12
9 1/8"	1 1/8"	1 1/4"	11 GA	10 5/8"	6	7/16"	2.55	12
10 1/8"	1 1/4"	1 3/8"	11 GA	11 13/16"	6	7/16"	3.05	12
11 1/8"	1 1/4"	1 1/2"	11 GA	12 3/4"	6	7/16"	3.25	12
12 1/8"	1 1/4"	1 1/2"	11 GA	14"	8	7/16"	3.88	12
13 1/8"	1 1/2"	1 1/2"	11 GA	15"	8	7/16"	4.25	24
14 1/8"	1 1/2"	1 1/2"	11 GA	16"	8	7/16"	4.75	24

Stocked in:

- HR - Stainless Steel - Aluminum - Zinc plated



### STANDARD PRESSED ANGLE RINGS

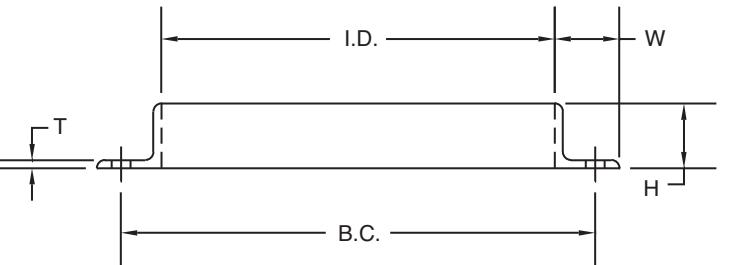


### STANDARD ROLLED ANGLE RINGS



- Roll-formed, welded hot rolled steel.
- Sizes 10" to 60" ship today, smaller and larger sizes made to order.
- With or without holes.
- Leg-in or leg-out.
- Precise measurements to ensure an easy tight fit.
- Flat bar rings available in sizes 14" and larger.
- Square and rectangular flanges can be fabricated in angle iron, flat bar or plate.
- Available in custom sizes and materials, including Galvanized, Stainless Steel and Aluminum.
- Precision punched.
- Hot Dipped Galvanized available 15" to 48".

Standard Rolled Angle Rings								
Inside Diameter	H	W	T	Bolt Hole Centers	No. of Bolt Holes	Size of Bolt Holes	Weight lbs.	Pieces/Bundle
6 1/8"	1"	1"	1/8"	7 5/16"	6	9/32"	1.25	-
7 1/8"	1"	1"	1/8"	8 5/16"	6	3/8"	1.50	-
8 1/8"	1"	1"	1/8"	9 5/16"	6	3/8"	1.75	-
9 1/8"	1"	1"	1/8"	10 5/16"	6	7/16"	1.88	-
10 1/8"	1 1/2"	1 1/2"	3/16"	11 13/16"	6	7/16"	4.75	24
11 1/8"	1 1/2"	1 1/2"	3/16"	12 3/4"	6	7/16"	5.25	24
12 1/8"	1 1/2"	1 1/2"	3/16"	14"	8	7/16"	5.65	24
13 1/8"	1 1/2"	1 1/2"	3/16"	15"	8	7/16"	6.13	24
14 1/8"	1 1/2"	1 1/2"	3/16"	16"	8	7/16"	6.50	24
15 1/8"	1 1/2"	1 1/2"	3/16"	17"	8	7/16"	7.25	24
16 1/8"	1 1/2"	1 1/2"	3/16"	18"	8	7/16"	8.00	24
17 1/8"	1 1/2"	1 1/2"	3/16"	19"	8	7/16"	8.25	24
18 1/8"	1 1/2"	1 1/2"	3/16"	20"	8	7/16"	8.50	24
19 1/8"	1 1/2"	1 1/2"	3/16"	20 3/4"	12	7/16"	8.75	24
20 1/8"	1 1/2"	1 1/2"	3/16"	21 3/4"	12	7/16"	9.50	24
21 1/8"	1 1/2"	1 1/2"	3/16"	22 3/4"	12	7/16"	10.25	24
22 1/8"	1 1/2"	1 1/2"	3/16"	23 3/4"	12	7/16"	10.75	24
23 1/8"	1 1/2"	1 1/2"	3/16"	24 7/8"	12	7/16"	11.25	24
24 1/8"	1 1/2"	1 1/2"	3/16"	25 7/8"	12	7/16"	11.50	24
25 1/8"	1 1/2"	1 1/2"	3/16"	26 7/8"	16	7/16"	12.00	24
26 1/8"	2"	2"	3/16"	28 3/8"	16	7/16"	16.75	12
27 1/8"	2"	2"	3/16"	29 3/8"	16	7/16"	17.38	12
28 1/8"	2"	2"	3/16"	30 3/8"	16	7/16"	18.00	12
29 1/8"	2"	2"	3/16"	31 3/8"	16	7/16"	18.75	12
30 1/8"	2"	2"	3/16"	32 3/8"	16	7/16"	19.50	12
31 1/8"	2"	2"	3/16"	33 3/8"	16	7/16"	20.38	12
32 1/8"	2"	2"	3/16"	34 3/8"	16	7/16"	20.75	12
33 1/8"	2"	2"	3/16"	35 3/8"	16	7/16"	21.25	12
34 1/8"	2"	2"	3/16"	36 3/8"	16	7/16"	22.00	12
35 1/8"	2"	2"	3/16"	37 3/8"	16	7/16"	22.50	12
36 1/8"	2"	2"	3/16"	38 3/8"	16	7/16"	23.00	12
37 1/8"	2"	2"	3/16"	39 3/8"	24	7/16"	23.75	6
38 1/8"	2"	2"	3/16"	40 3/8"	24	7/16"	24.50	6
39 1/8"	2"	2"	3/16"	41 3/8"	24	7/16"	25.00	6



Standard Rolled Angle Rings								
Inside Diameter	H	W	T	Bolt Hole Centers	No. of Bolt Holes	Size of Bolt Holes	Weight lbs.	Pieces/Bundle
40 1/8"	2"	2"	3/16"	42 3/8"	24	7/16"	25.75	6
41 1/8"	2"	2"	3/16"	43 3/8"	24	7/16"	26.13	6
42 1/8"	2"	2"	3/16"	44 3/8"	24	7/16"	26.50	6
43 1/8"	2"	2"	3/16"	45 3/8"	24	7/16"	27.38	6
44 1/8"	2"	2"	3/16"	46 3/8"	24	7/16"	28.00	6
45 1/8"	2"	2"	3/16"	47 3/8"	24	7/16"	28.63	6
46 1/8"	2"	2"	3/16"	48 3/8"	24	7/16"	29.00	6
47 1/8"	2"	2"	3/16"	49 3/8"	24	7/16"	29.88	6
48 1/8"	2"	2"	3/16"	50 3/8"	24	7/16"	30.75	6
49 1/8"	2"	2"	3/16"	51 3/8"	24	7/16"	31.50	6
50 1/8"	2"	2"	3/16"	52 3/8"	24	7/16"	32.00	6
51 1/8"	2"	2"	3/16"	53 3/8"	24	7/16"	32.75	6
52 1/8"	2"	2"	3/16"	54 3/8"	24	7/16"	33.38	6
53 1/8"	2"	2"	3/16"	55 3/8"	24	7/16"	34.00	6
54 1/8"	2"	2"	3/16"	56 3/8"	24	7/16"	34.75	6
55 1/8"	2"	2"	3/16"	57 3/8"	32	7/16"	35.38	6
56 1/8"	2"	2"	3/16"	58 3/8"	32	7/16"	36.00	6
57 1/8"	2"	2"	3/16"	59 3/8"	32	7/16"	36.50	6
58 1/8"	2"	2"	3/16"	60 3/8"	32	7/16"	37.00	6
59 1/8"	2"	2"	3/16"	61 3/8"	32	7/16"	37.75	6
60 1/8"	2"	2"	3/16"	62 3/8"	32	7/16"	38.50	6
61 1/8"	2"	2"	3/16"	63 3/8"	32	7/16"	39.00	6
62 1/8"	2"	2"	3/16"	64 3/8"	32	7/16"	39.75	6
63 1/8"	2"	2"	3/16"	65 3/8"	32	7/16"	40.38	6
64 1/8"	2"	2"	3/16"	66 3/8"	32	7/16"	41.00	6
65 1/8"	2"	2"	3/16"	67 3/8"	32	7/16"	41.75	6
66 1/8"	2"	2"	3/16"	68 3/8"	32	7/16"	42.38	6
67 1/8"	2"	2"	3/16"	69 3/8"	32	7/16"	43.00	6
68 1/8"	2"	2"	3/16"	70 3/8"	32	7/16"	43.50	6
69 1/8"	2"	2"	3/16"	71 3/8"	32	7/16"	44.25	6
70 1/8"	2"	2"	3/16"	72 3/8"	32	7/16"	44.88	6
71 1/8"	2"	2"	3/16"	73 3/8"	32	7/16"	45.50	6
72 1/8"	2"	2"	3/16"	74 3/8"	32	7/16"	46.25	6

Elbows				
Diameter	C.L.R.	GA	Weight (lbs.)	
<b>90° Long Radius</b>				
3"	7 1/2"	20	2.40	
4"	10"	22	4.00	
5"	12 1/2"	22	6.00	
6"	15"	22	8.00	
7"	17 1/2"	22	10.00	
8"	20"	22	13.00	
9"	22"	20	18.00	
10"	25"	20	22.00	
11"	27 1/2"	20	26.00	
12"	30"	20	33.00	
13"	32 1/2"	20	35.00	
14"	35"	20	38.00	
<b>45° Long Radius</b>				
3"	7 1/2"	20	1.50	
4"	10"	22	2.50	
5"	12 1/2"	22	3.50	
6"	15"	22	4.50	
7"	17 1/2"	22	6.00	
8"	20"	22	8.00	
9"	22 1/2"	20	12.00	
10"	25"	20	14.75	
11"	27 1/2"	20	16.50	
12"	30"	20	18.7	

## GORED ELBOWS



Standard Gored Elbows

Diameter	C.L.R.	No. Pieces	GA	WT	GA	WT	GA	WT	GA	WT	Diameter
15"	29 1/2"	7	18	35	16	43	14	53	12	73	15"
16"	32"	7	18	54	16	56	14	82	12	113	16"
17"	32 1/2"	7	18	54	16	66	14	82	12	113	17"
18"	33"	7	18	54	16	66	14	82	12	113	18"
19"	33 1/2"	7	18	54	16	66	14	82	12	113	19"
20"	40"	7	18	69	16	85	14	105	12	145	20"
21"	43 1/2"	9	18	78	16	95	14	118	12	156	21"
22"	44"	9	18	86	16	106	14	131	12	180	22"
23"	47 1/2"	9	18	90	16	112	14	138	12	190	23"
24"	48"	9	18	95	16	138	14	170	12	235	24"
25"	48 1/2"	9			16	146	14	180	12	250	25"
26"	52"	9			16	150	14	196	12	272	26"
27"	55 1/2"	9			16	175	14	215	12	295	27"
28"	56"	9			16	185	14	230	12	320	28"
29"	56 1/2"	9			16	200	14	250	12	340	29"
30"	60"	9			16	215	14	265	12	365	30"
31"	60 1/2"	9			16	265	14	330	12	455	31"
32"	64"	9			16	265	14	330	12	455	32"
33"	64 1/2"	9			16	265	14	330	12	455	33"
34"	65"	11			16	265	14	330	12	455	34"
35"	69 1/2"	11				14	360	12	500	35"	
36"	72"	11				14	360	12	500	36"	
37"	72 1/2"	11				14	360	12	500	37"	
38"	73"	11				14	360	12	500	38"	
39"	73 1/2"	11				14	475	12	650	39"	
40"	74"	11				14	475	12	650	40"	
41"	74 1/2"	11				14	475	12	650	41"	
42"	75"	11				14	475	12	650	42"	
43"	75 1/2"	11				14	475	12	650	43"	
44"	76"	11				14	475	12	650	44"	
45"	76 1/2"	11				14	660	12	900	45"	
46"	77"	11				14	660	12	900	46"	
47"	77 1/2"	11				14	660	12	900	47"	
48"	78"	11				14	660	12	900	48"	
49"	78 1/2"	11				14	660	12	900	49"	
50"	79"	11				14	660	12	900	50"	

- Available in custom sizes, gauges and materials.
- With or without flanges.
- Priced per customer's specifications.

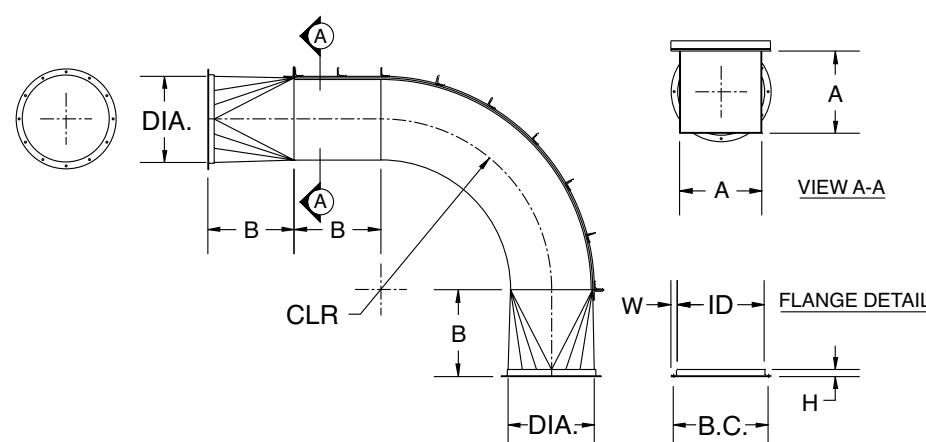
- Ideal for use in areas of heavy abrasion.
- Flanged construction standard.
- Available in custom sizes and materials.
- Priced per customer's specifications.

## REPLACEABLE BACK ELBOWS



Standard Heavy Duty, Replaceable Back Elbows

Diameter	A	B	C.L.R.	Housing Gauge	Sq to Rd Gauge	Wrapper Gauge	ID	H	W	B.C.	No. of Holes	Hole Dia.	WT	Diameter
6"	5"	6"	12"	12	12	10	6 3/32"	1"	1"	7 5/16"	6	9/32"	80	6"
7"	6"	7"	14"	12	12	10	7 1/8"	1"	1 1/8"	8 5/16"	6	3/8"	100	7"
8"	7"	8"	16"	12	12	10	8 1/8"	1"	1 1/8"	9 5/16"	6	3/8"	120	8"
9"	8"	9"	18"	12	12	10	9 1/8"	1 1/8"	1 1/4"	10 5/16"	6	7/16"	140	9"
10"	9"	10"	20"	12	12	10	10 1/8"	1 1/4"	1 3/8"	11 13/16"	6	7/16"	160	10"
11"	10"	11"	22"	12	12	10	11 1/8"	1 1/4"	1 3/8"	12 3/4"	6	7/16"	180	11"
12"	11"	12"	24"	12	12	10	12 1/8"	1 1/4"	1 1/2"	14"	8	7/16"	200	12"
13"	12"	13"	26"	12	12	10	13 1/8"	1 1/2"	1 1/2"	15"	8	7/16"	220	13"
14"	13"	14"	28"	12	12	10	14 1/8"	1 1/2"	1 1/2"	16"	8	7/16"	240	14"
15"	14"	15"	30"	10	12	3/16"	15 1/8"	1 1/2"	1 1/2"	17"	8	7/16"	300	15"
17"	16"	17"	34"	10	12	3/16"	17 1/8"	1 1/2"	1 1/2"	18"	8	7/16"	380	17"
19"	18"	19"	38"	10	12	3/16"	19 1/8"	1 1/2"	1 1/2"	20 3/4"	12	7/16"	500	19"
21"	20"	21"	42"	10	12	3/16"	21 1/8"	1 1/2"	1 1/2"	22 3/4"	12	7/16"	550	21"
23"	22"	23"	46"	10	10	1/4"	23 1/8"	1 1/2"	1 1/2"	24 7/8"	12	7/16"	600	23"
26"	25"	26"	52"	10	10	1/4"	26 1/8"	2"	2"	28 3/8"	16	7/16"	1200	26"



## STANDARD DIVERTER VALVES



### Diverter Valves

- 16 gauge to 10 gauge carbon steel in sizes 8" to 24".
- Manual, pneumatic or electric operated.
- Flanged connections allow easy installation.
- Suitable for both air and material handling systems.
- Available in custom sizes and materials.
- Shop drawings available.
- Not a stock item.
- Options:
  - Removable Side Plates
  - Access Door

## BLAST GATES



### Blast Gates

- 10 gauge steel in sizes 4" to 24", larger sizes available.
- 4" to 20" Manual operated blast gates are normally in stock.
- Manual, pneumatic or electric operated.
- Flanged connections allow easy installation.
- Provides a more positive seal than cut-offs.
- Works efficiently with positive or negative pressure.
- Available in custom sizes and materials.
- Available with square inlets and outlets.
- Shop drawings available.

## CUT-OFFS



### Cast Aluminum Cut Offs

- Locking screws permit manual blade adjustment for volume control.
- Total airflow can be shut off for energy conservation.

### Diameters Available

Half Cut-Offs	Full Cut-Offs
3"	2"
4"	3"
5"	4"
6"	5"
7"	6"
8"	7"
9"	8"
10"	9"
11"	10"
12"	11"
14"	12"
16"	14"
	16"
	18"
	20"

## CLEANOUTS



### Cast Aluminum Bolted Curved Cleanouts

Pipe Diameter	Opening Size
6"	4" x 7" oval
8"	4" x 7" oval
10"	4" x 7" oval
12"	4" x 7" oval
14"	4 1/2" x 9" oval
16"	4 1/2" x 9" oval
20"	9" x 18" oval

### Cast Aluminum Hinged Curved Cleanouts

Pipe Diameter	Opening Size
6"	4" x 7" oval
8"	4" x 7" oval
10"	4" x 7" oval
12"	4" x 7" oval
14"	4 1/2" x 9" oval
16"	4 1/2" x 9" oval

### Flat Cleanouts

Bolted Flat Cleanouts	Hinged Flat Cleanouts*
4 1/2" x 9" oval	4 1/2" x 9" oval
9" x 18" oval	9" x 18" oval

\* Quick-opening hinged cleanouts can be used for easy product sampling while system is in operation or for emergency servicing or unplugging.

### Round Carbon Steel Cleanouts

Each cleanout has a large opening with easy opening, locking latch, and positive seal.

### Round Carbon Steel Cleanouts

Opening Size	Overall Height	Weight (lbs.)
10" O.D.	4 5/16"	14
12" O.D.	4 5/16"	17



## ACCESS DOORS



### Square Cast Aluminum Access Door

- 18" x 18" hinged.

## FITTINGS



### Tee On Tapers

The most widely used branch fittings in the blowpipe industry. 90° to 15°, with or without angle rings.

- Tee on pipe – 15° to 90°, with or without angle rings
- Tees to fit pipe – 15° to 90°, with or without angle rings
- Y Branches
- Taper Joints – on center or offset
- Custom Manifolds
- Made to order in custom sizes and gauges in galvanized steel or hot rolled and stainless steel.
- Priced per customer's specifications.

### Transitions

- A streamlined change from rectangle to round.
- Used for equipment connections at fan discharge outlets, collector inlets, etc.
- Furnished with or without flanged construction on both ends.
- Available on center, offset or double offset.

### Support Bands

Two-piece pipe support hanger bands separate for easy installation and are secured with heavy duty bolts. Available in rolled flat bar or angle iron.

Bands are priced per customer's specifications and are also made to order in custom sizes and materials.

### Standard Galvanized Steel Pipe

Galvanized steel with riveted and soldered or welded seams with smooth interiors for quiet, efficient airflow, and large and small ends to facilitate lapping joints. Angle flanges can be furnished for field bolting.

Standard pipe is made in 4" to 60" diameters from 20 to 12 gauge, in 3' sections up to 11" in diameter and in 4' sections for 12" diameters and above.

All pipe is priced per customer's specifications and is also made to order in custom sizes and materials including Mild Steel and Stainless. Larger sizes up to  $\frac{3}{16}$ " thickness.

## RUBBER FLEX HOSE



### TD-HS Flexible Rubber Hose

Two ply vinyl coated polyester over wire with scuff strips (black with orange strips). Temperature range - 40° to 200°. 3" to 12". Call for pricing.

### 620-WD Heavy Duty Flexible Rubber Hose

One layer of black rubber over wire, abrasion resistant and lightweight. It is designed for more abrasive material handling, wood chips and sawdust and rated to 220°F. 3" to 12". Call for pricing.

## STANDARD FLOOR SWEEPS



### Standard Floor Sweeps

- Installed near machines in areas not serviced by dust collection system.
- Tightfitting door prevents air loss when floor sweep is not in use.
- 4" to 6", 16 gauge. Call for pricing.
- Made to order in custom size connections.
- With or without angle ring.

## BALL JOINTS



### Spun Steel Ball Joints

- 3" to 14".
- Call for pricing.

## HEAVY DUTY TUBING ELBOWS



### Heavy Duty Tubing Elbows

- Available in sizes 3" to 10".
- With or without angle rings.
- Call for pricing.

## FABRICATION CAPABILITIES



### Custom Fabrication

At Koger Air Corporation, we believe that the right people coupled with the right materials and tools are the keys to meeting the exact needs of our customers.

Trained and experienced project managers are equipped with the latest CAD capabilities and staff computer programmers develop all industry-specific software to drive our plasma arc cutting systems. In recent years, we have been asked to program, form and fabricate thousands of customized shapes for a variety of industrial applications.

Our shop fabricators are highly specialized in forming and fabricating industrial strength steel parts and our installation mechanics are fully equipped to travel throughout North America to complete each project to 100% customer satisfaction.

#### Braking

- Up to 14' of  $\frac{3}{8}$ " Mild Steel Plate

#### Rolling (Flat Metal)

- Up to 10' of  $\frac{3}{8}$ " Mild Steel or  $\frac{1}{4}$ " plate of Abrasion Resistant Steel

#### Rolling (Angle and Flat-Bar)

- Up to 3" x 3" x  $\frac{3}{8}$ " leg-out angle iron, 2" x 2" x  $\frac{1}{4}$ " leg-in angle iron, 3" x  $\frac{3}{8}$ " flat-bar.

#### Shearing

- Up to 10' of  $\frac{1}{4}$ " thick Mild Steel Plate.

#### Burning

- Up to 2" Mild Steel Plate

#### Blanking, Drawing and Stamping

#### Cutting and Punching

#### Materials Handling

#### Welding

#### Pipe Seam Welding

#### Pressure Cleaning and Painting

## FACILITIES

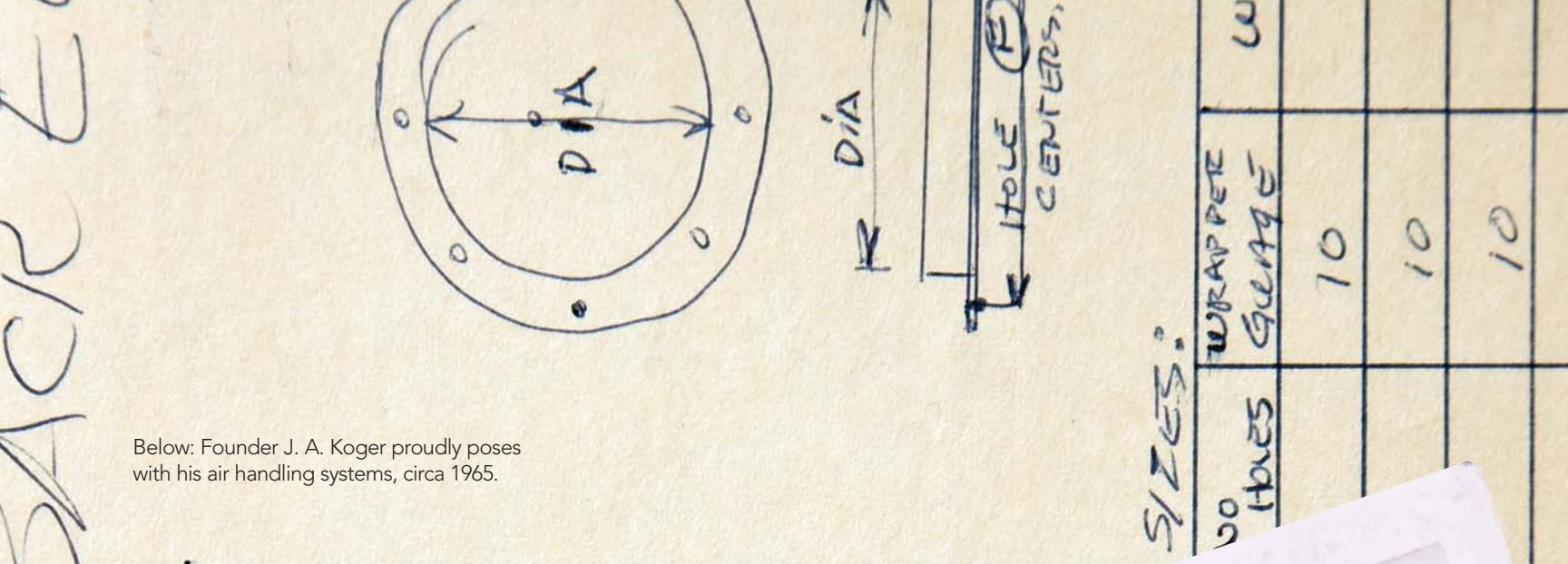


Koger Air Corporation's 100,000 square foot operation is centrally located between Roanoke, Virginia and Greensboro, North Carolina. This operation consists of three separate manufacturing plants, warehouse and service center stocked with components and material handling equipment for factory direct shipment today.

BACK TO

THE

ACADE



Below: Founder J. A. Koger proudly poses with his air handling systems, circa 1965.





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