

FRP Fans:
CMH Series
Performance and
Technical Information

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Ceilcote Air Pollution Control Backup Services

Ceilcote Air Pollution Control sales representatives are backed by engineers, laboratory technicians and technical service personnel to provide application assistance and after-installation service. This includes repair, rebuilding and field balancing.



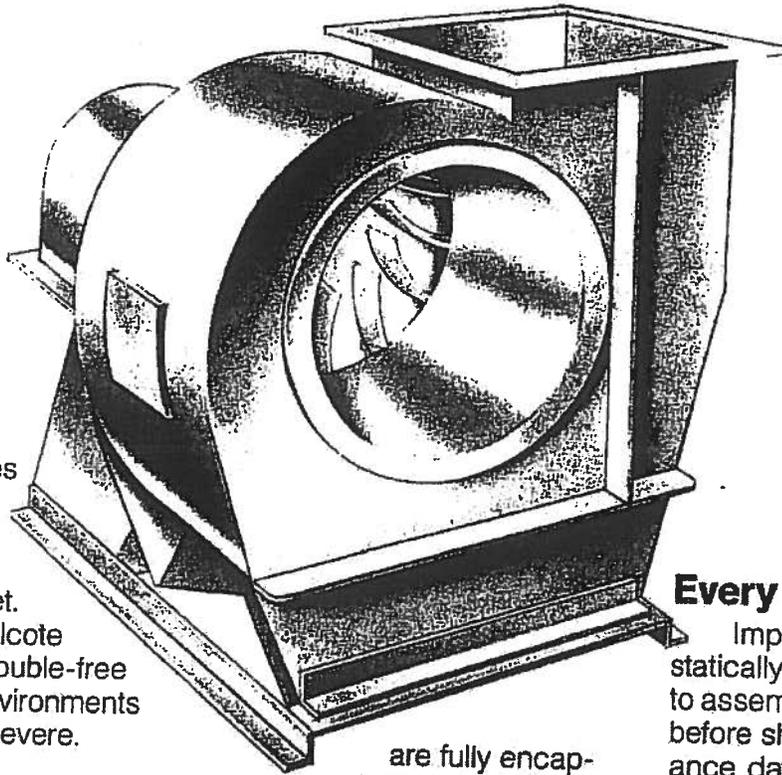
CLM Centrifugal Low to Medium Pressure
CMH Centrifugal Medium to High Pressure
CH Centrifugal High Pressure
FL/FLR Tube Axial

**AMCA
LICENSED**



Ceilcote Air Pollution Control certifies that the CMHR fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based upon tests and procedures performed in accordance with AMCA's Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Medium to High Pressure FRP Centrifugal Fans



Ceilcote's CMH Series fiberglass fans offer the widest range of performance of any FRP fan on the market. For over 15 years Ceilcote fans have provided trouble-free service in corrosive environments ranging from mild to severe.

Constructed to highest standards.

Housings are made of premium corrosion-resistant, fire-retardant polyester resin systems. Impellers are manufactured of premium vinylester to assure structural integrity under the intense dynamic forces of rotation. All fiberglass components are fabricated in accordance with ASTM C582 and ASTM 4167 specifications for fiberglass laminates and fiberglass blowers. All metal parts exposed to the process gases

are fully encapsulated in FRP to assure maximum protection against chemical attack. Fan and motor bases are heavy-gauge steel coated with Ceilcote 750 high build vinyl. Other Ceilcote protective coatings are available for severe service conditions.

Wide choice of sizes and performance characteristics.

The CMH Series is available in sizes 4" through 54"

Every unit pretested.

Impellers are balanced statically and dynamically prior to assembly. Each fan is test run before shipment. Fan performance data has been obtained from tests conducted in accordance with standards published by AMCA.

Using this bulletin.

The following pages include all the information you need to select a CMH Series fan for most applications. If you require technical assistance, call your Ceilcote representative or district office. Phone numbers are on the back of this bulletin.

Optional Features for Design Flexibility

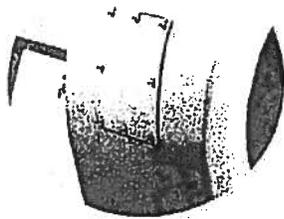
Carbon gel. All FRP surfaces exposed to the gas stream are graphite-impregnated to eliminate static buildup. Grounding connectors are located externally.

Access doors. Stud-mounted bolted access doors available on all sizes.

Flanges. Available for inlet or outlet. Drilled or undrilled.

Drains. PVC coupling or flanged FRP.

Stud mounting access door.

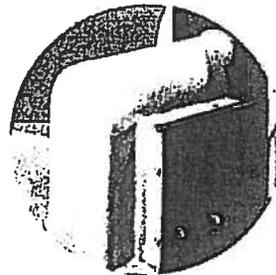


Discharge transition. Rectangular to round. Can be made integral to fan or supplied for flanging to fan.

Shaft seals. Teflon® is standard. Stuffing box type is available for more severe requirements.

Guards. All guards are FRP construction and can be supplied as full canopy covering motor, drive and shaft; belt drive only and shaft only. All types can be made available OSHA rated.

Flexible connectors. Standard connectors are neoprene sleeve type with stainless steel drawbands.



Weather canopy on arrangement 10 fan.

Shafts. Carbon steel is standard. Stainless or other alloys are available as required.

Vibration Isolators. Rubber or spring vibration isolators are available as needs dictate.

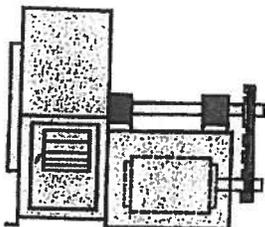
Miscellaneous. Bird screens, back vanes, inlet boxes, vibration monitors, disconnects, zero speed switches and speed controls are also available.

Class Construction

Ceilcote Air Pollution Control fans are designed and fabricated to provide safe and reliable performance throughout the full range listed in the tables. In order to assure an adequate safety factor, we have established a maximum tip speed of 17,500 FPM at 70° F. Above 150° F tip speeds must be derated to assure safe operation.

Arrangement Versatility

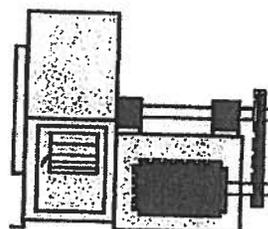
Standard for sizes 1500 through 2550.



ARR. 10 SWSI - For belt drive. Wheel over-hung, two bearings, with prime mover inside base.

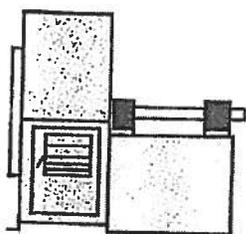
Sizes 1500 through 2550 are offered in arrangement 10 as standard, while Arrangement 9 is standard in sizes 3000 through 6000. Other arrangements are available if required. Fans are available in clockwise or counterclockwise rotation and all 8 standard discharge positions.

Standard for sizes 3000 through 6000.

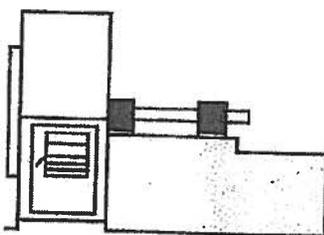


ARR. 9 swsi - For belt drive. Wheel over-hung, two bearings, with prime mover outside base.

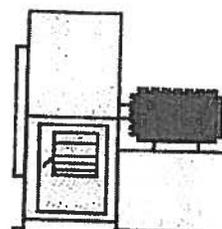
Optional arrangements available for special requirements.



ARR. 1 SWSI - For belt drive or direct connection. Wheel over-hung. Two bearings on base.



ARR. 8 SWSI - For belt drive or direct connection. Arrangement 1 plus extended base for prime mover.



ARR. 4 SWSI - For direct drive. Wheel overhung on prime mover shaft. No bearings on fan. Prime mover base mounted or directly connected.

Rotation and Discharge Options

Direction of rotation is determined from drive side of fan. On single inlet fans, drive side is always considered as the side opposite fan inlet. Direction of discharge is determined in accordance with

diagrams (below). Angle of discharge is referred to the horizontal axis of fan and designated in degrees above or below such standard reference axis. For

fan inverted for ceiling suspension or side wall mounting, direction of rotation and discharge is determined when the fan is resting on floor.



Clockwise
Top Horizontal



Clockwise
Top Angular Down



Clockwise
Down Blast



Clockwise
Bottom Angular Down



Clockwise
Top Angular Up



Clockwise
Up Blast



Clockwise
Bottom Angular Up



Clockwise
Bottom Horizontal



Counterclockwise
Top Horizontal



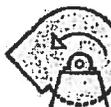
Counterclockwise
Top Angular Up



Counterclockwise
Up Blast



Counterclockwise
Bottom Angular Up



Counterclockwise
Top Angular Down



Counterclockwise
Down Blast



Counterclockwise
Bottom Angular Down



Counterclockwise
Bottom Horizontal

How to Specify FRP Fans

■ *The following construction details can be used as a guide when writing specifications which demand the highest quality equipment. These specifications are in compliance with accepted design standards.*

Fan performance to be certified by the manufacturer that it meets AMCA Standards Handbook 99, Test Code for Air Moving Devices 210 and Certified Ratings Program for Air Moving Devices 211.

Seller shall furnish sound power level ratings in the format outlined in the AMCA Method for Publishing Sound Ratings (Standard 301), said ratings to be the results of tests made in accordance with the AMCA Test Code for Sound Rating AMDs (Standard 300).

Design criteria

Sizing. Axial and centrifugal fans shall be sized so an increase in speed of 10% will not exceed the maximum RPM of that class of fan.

Curves. Performance curves clearly showing the maximum RPM line for each fan quoted shall be furnished.

Rating. The size and the capacity rating for each fan quoted shall be furnished.

Laminate. Fan housings shall be constructed of an FRP laminate consisting of an appropriate fire-retardant resin and the proper fiberglass or synthetic reinforcement capable of resisting continuous fume temperatures of 200°F. The fire-retardant qualities which equal or exceed the ASTM E-84 Tunnel Test Rating of less than 25. For optimum structural integrity, the impeller shall be constructed of vinyl ester resin.

All interior surfaces exposed to the corrosive air stream shall be resin rich and contain not more than 20% of the appropriate

surface veil, such as "C" grade fiberglass veil for most service conditions and Nexus surface veil when fluorides are present.

All surfaces exposed to the atmosphere shall be resin rich of a paraffinated resin stabilized against ultraviolet degradation and include a reinforcement not to exceed more than 20% of "C" grade fiberglass, to serve as protection against weathering, fumes, spillage and ultraviolet attack.

Immediately beneath the surfacing veil of the interior and exterior surfaces of the laminate shall be layers of chopped strand mat. The chopped strand mat shall be Type E glass of 1.5 ounces per square foot in weight.

When conductivity is required, the interior of fan housing and the impeller shall have a carbon gel coat that has a surface conductivity range of 0-30,000 ohms resistance. A grounding lug shall be provided to facilitate the discharging of static electricity to an external ground.

Metal parts. No metal parts shall be exposed to the corrosive air stream.

Shaft. The shaft shall be of such design and size so as to operate below its first critical speed.

Bearings. Fan to be equipped with heavy-duty bearings, rated for a L-10 life of 100,000 hours, grease packed and sealed against dust and moisture.

Belt drives. Fan to be equipped with belt drives using heavy-duty matched "deep V" type V-belts sized to handle 1.5 times the rated brake horsepower of the fan motor and incorporating heavy-duty industrial type companion sheaves.

Balancing. Fan shall be statically and dynamically balanced at its rated operating speed, and a certification of the test is to be supplied at time of delivery.

Guards. Fan shall be provided with a combination belt guard and weather cover of FRP construction to protect the belt drive, motor and personnel. If required, the guard is to be designed to meet OSHA requirements.

Tube axial and roof axial fans. Fan shaft, bearings and belt drive shall be isolated from the corrosive air stream. The bearings and shaft shall be easily removed from the bearing tunnel without cutting or otherwise damaging the drive housing and tunnel.

Fan bearings shall have polypropylene lubrication lines extended to the exterior of the casing and to terminate there in Alemite type fittings equipped with automatic pressure relief.

Standard finish for motor mounting plate and frame is a corrosion-resistant coating. Special paint or coating specifications can be furnished upon request, as can fabrication of motor mounting plate and frame out of stainless steel.

Roof axial fans. Roof exhaust shall be provided with automatic damper of FRP construction, resin to be the same as selected for the fan. Dampers to open and close without the aid of springs or other mechanical devices. Damper rods to be of FRP or stainless steel construction.

A curb base shall be integral with fan and of FRP construction fabricated of same resin as the fan.

How to Select a CMH Series Fan

Rating table information

Performance ratings shown in the tables for CMH Series fans are based on:

1. Standard air at the fan inlet, with a density of 0.075 pounds per cubic foot. This corresponds to 70°F and 29.92 inches barometric pressure at sea level.
2. Including V-belt drive and all bearing losses.

Effect of temperature and altitude

For selection of fans handling other than standard air, temperature and altitude must be taken into consideration. Since a fan is a constant volume machine, it will deliver the same volume regardless of the air density. The fan static pressure developed and horsepower required will vary directly with the density.

The density of air is inversely proportional to the absolute temperature (rise in temperature

gives a lower density) and directly proportional to the absolute pressure (rise in pressure gives a higher density). For example: The ratio to standard conditions for air at 3,000 ft. altitude (26.81" Hg) and at 250°F would be 0.669.

The temperature-pressure relationship is tabulated below. For gases other than air, the gas density, in relationship to standard air density of 0.075 pounds per cubic foot, must also be taken into consideration.

Table of Air Density Factors for Various Temperatures and Altitudes

Air Temp. °F	Altitude in Feet Above Sea Level							
	0	1,000	2,000	3,000	4,000	5,000	6,000	7,000
	Barometric Pressure in Inches of Mercury							
	29.92	28.86	27.82	26.82	25.84	24.90	23.98	23.09
70	1.000	0.964	0.930	0.896	0.864	0.832	0.801	0.772
100	0.946	0.912	0.880	0.848	0.818	0.787	0.758	0.730
125	0.908	0.875	0.846	0.809	0.784	0.755	0.721	0.700
150	0.869	0.838	0.808	0.770	0.751	0.723	0.696	0.671
175	0.836	0.806	0.777	0.745	0.722	0.695	0.669	0.645
200	0.803	0.774	0.747	0.720	0.694	0.668	0.643	0.620
225	0.775	0.747	0.721	0.694	0.669	0.645	0.620	0.598
250*	0.747	0.720	0.720	0.669	0.645	0.622	0.598	0.576

*Maximum allowable operating temperature for FRP construction.

Fan selection

The "cold static" method is the most common system for fan selection. This method is based on the assumption that, at constant CFM and RPM, the static pressure and BHP vary inversely as the absolute temperature and directly as the air density.

Example:

A fan is required to handle 1,300 ACFM at 12" SP at 200° F and 3,000 ft. altitude.

1. Density factor from Table 1 = 0.720.
2. Convert SP to standard 12" + 0.72 = 16.67".
3. Using the fan performance curves (which are available for your specific requirement) we select a CMHP 8 fan, see figure and read a speed of 3,350 RPM and 5.75 BHP.
4. Correct BHP to actual conditions
 $5.75 \times .72 = 4.14$ BHP.

5. BHP at cold start: Density factor at 70°F at 3,000' elevation is 0.896, therefore the cold start BHP is $5.75 \times 0.896 = 4.8$ BHP.

Therefore we would select a CMHP 8 fan to deliver 1,300 ACFM at 12" SP rotating at 3,350 RPM using 4.14 BHP. At cold start the BHP would be 4.8, therefore a 5 HP motor must be supplied.

CMHR-24

(Forward Curved Radial-Tipped Impeller)

Wheel Dia. 37.86" dia. Inlet Dia. 24" I.D. Outlet Size 22.0" x 19.5"
 Tip Speed = 9.85 x RPM Inlet Area 6.28 Outlet Area 2.91 sq. ft.

Volume CFM	OV FPM	7 " w.g.		8 " w.g.		9 " w.g.		10 " w.g.		11 " w.g.		12 " w.g.		13 " w.g.		14 " w.g.		15 " w.g.	
		RPM	BHP																
7000	2350	952	11.4	1013	13.1	1071	14.9												
7500	2517	960	12.1	1018	13.9	1075	15.8	1130	17.7	1184	19.6								
8000	2685	967	12.9	1026	14.8	1081	16.7	1134	18.7	1186	20.7	1287	22.7						
8500	2853	976	13.8	1033	15.7	1088	17.7	1140	19.7	1190	21.8	1240	23.9	1288	26.1	1336	28.8		
9000	3021	985	14.6	1041	16.6	1096	18.7	1148	20.8	1197	22.9	1245	25.1	1292	27.3	1338	29.6	1383	31.9
9500	3189	995	15.6	1051	17.6	1104	19.8	1155	21.9	1205	24.1	1252	26.4	1297	28.7	1342	31.0	1386	33.4
10000	3367	1005	16.5	1061	18.7	1113	20.9	1163	23.1	1212	25.4	1260	27.7	1304	30.0	1348	32.4	1391	34.9
10500	3524	1015	17.5	1071	19.8	1123	22.0	1172	24.4	1220	26.7	1267	29.1	1313	31.5	1356	33.9	1398	36.5
11000	3692	1026	18.5	1080	20.9	1134	23.2	1182	25.6	1229	28.1	1275	30.5	1320	33.0	1364	35.5	1405	38.1
11500	3860	1038	19.6	1091	22.0	1143	24.5	1193	27.0	1239	29.5	1284	32.0	1328	34.6	1371	37.2	1413	39.8
12000	4028	1050	20.8	1102	23.2	1153	25.8	1202	28.3	1250	30.9	1294	33.5	1337	36.2	1379	38.9	1421	41.6
12500	4196	1064	22.0	1114	24.5	1164	27.1	1212	29.7	1260	32.4	1305	35.1	1347	37.8	1389	40.6	1429	43.4
13000	4364	1078	23.3	1127	25.8	1175	28.5	1223	31.2	1269	34.0	1315	36.7	1358	39.6	1399	42.4	1439	45.3
13500	4531	1092	24.6	1141	27.3	1188	30.0	1234	32.7	1279	35.6	1324	38.4	1368	41.3	1409	44.2	1449	47.2
14000	4699	1107	26.0	1155	28.7	1201	31.5	1246	34.3	1291	37.2	1334	40.2	1377	43.1	1419	46.1	1459	49.2
14500	4867	1121	27.4	1169	30.3	1216	33.1	1259	36.0	1308	39.0	1345	42.0	1387	45.0	1428	48.1	1469	51.2
15000	5035	1137	28.9	1184	31.8	1229	34.8	1273	37.8	1315	40.8	1357	43.8	1398	47.0	1438	50.1	1478	53.3
15500	5203	1152	30.4	1199	33.6	1244	36.5	1287	39.6	1329	42.8	1370	45.8	1410	49.0	1449	52.2	1488	55.5
16000	5371	1167	32.0	1214	35.1	1258	38.3	1301	41.5	1342	44.6	1383	47.8	1422	51.0	1461	54.3	1499	57.7
Volume CFM	OV FPM	16 " w.g.		17 " w.g.		18 " w.g.		19 " w.g.		20 " w.g.		21 " w.g.		22 " w.g.		23 " w.g.		24 " w.g.	
		RPM	BHP																
9000	3021	1423	34.3																
9500	3189	1429	35.8	1472	38.2	1515	40.7												
10000	3357	1433	37.4	1474	39.9	1516	42.4	1556	45.0	1597	47.6								
10500	3524	1439	39.0	1479	41.6	1519	44.2	1558	46.9	1597	49.5	1636	52.3	1675	55.0				
11000	3692	1446	40.7	1485	43.3	1524	46.0	1563	48.7	1600	51.5	1638	54.3	1675	57.1	1712	60.0	1749	62.8
11500	3860	1454	42.4	1493	45.2	1531	47.9	1568	50.7	1606	53.5	1642	56.4	1678	59.3	1714	62.2	1750	65.1
12000	4028	1461	44.3	1501	47.0	1539	49.9	1576	52.7	1612	55.6	1648	58.5	1683	61.5	1718	64.4	1753	67.5
12500	4196	1469	46.2	1508	49.0	1547	51.9	1584	54.8	1620	57.7	1655	60.7	1689	63.7	1724	66.8	1758	69.9
13000	4364	1478	48.2	1516	51.1	1554	54.0	1591	57.0	1628	59.9	1663	63.0	1697	66.1	1731	69.2	1764	72.4
13500	4531	1487	50.2	1525	53.2	1562	56.2	1599	59.2	1635	62.3	1671	65.4	1705	68.5	1738	71.7	1771	74.9
14000	4699	1497	52.2	1535	55.3	1571	58.4	1607	61.5	1643	64.7	1678	67.8	1712	71.0	1747	74.2	1779	77.5
14500	4867	1508	54.4	1545	57.5	1581	60.7	1617	63.9	1651	67.1	1686	70.4	1720	73.6	1754	76.9	1787	80.2
15000	5035	1518	56.5	1555	59.8	1591	63.0	1626	66.3	1661	69.6	1695	73.0	1728	76.3	1761	79.7	1794	83.1
15500	5203	1527	58.8	1565	62.1	1602	65.4	1637	68.8	1671	72.2	1704	75.6	1738	79.0	1770	82.5	1802	86.0
16000	5371	1537	61.1	1574	64.5	1611	67.9	1647	71.4	1681	74.8	1715	78.3	1747	81.8	1779	85.4	1811	88.9

Performance shown is installation Type B: Free Inlet, Ducted outlet. Power rating (BHP) does not include transmission loss No. 060306
 Performance ratings do not include the effects of appurtenances (accessories).

CMHR-30

(Forward Curved Radial-Tipped Impeller)

Wheel Dia.
Tip Speed =

47.06" dia.
12.31 x RPM

Inlet Dia.
Inlet Area

30" I.D.
4.91

Outlet Size
Outlet Area

27.5" x 24.375"
4.65 sq. ft.

Volume CFM	OV FPM	8 "w.g.		9 "w.g.		10 "w.g.		11 "w.g.		12 "w.g.		13 "w.g.		14 "w.g.		15 "w.g.		16 "w.g.	
		RPM	BHP																
10000	2148	808	19.0																
11000	2968	811	30.5	858	23.9	904	26.2												
12000	2578	817	22.2	862	25.1	905	28.1	948	31.19	990	34.3								
13000	2793	825	24.0	869	27.0	911	30.2	951	33.36	991	36.6	1081	40.0	1069	43.4				
14000	8008	888	25.9	876	29.1	918	32.8	958	35.64	996	39.0	1084	42.5	1071	46.0	1107	49.8	1148	53.8
15000	3222	848	27.9	885	31.2	926	34.6	966	38.05	1003	41.6	1040	45.2	1075	48.8	1110	52.6	1145	56.9
16000	8427	853	30.0	895	33.5	935	37.0	978	40.64	1011	44.3	1047	48.0	1082	51.8	1116	55.6	1149	59.6
17000	3652	862	32.2	905	35.8	945	39.6	982	43.88	1019	47.1	1055	51.0	1090	54.9	1124	58.9	1156	62.9
18000	3867	873	34.5	914	38.9	955	42.2	992	46.12	1028	50.1	1063	54.1	1097	58.2	1131	62.8	1164	66.4
19000	4082	885	36.9	925	40.9	964	44.9	1008	49.09	1039	53.2	1073	57.4	1106	61.6	1139	65.9	1171	70.2
20000	4297	898	39.5	937	43.6	975	47.8	1012	52.06	1049	56.4	1084	60.7	1116	65.1	1149	69.5	1180	74.0
21000	4511	912	42.3	949	46.5	986	50.8	1022	55.28	1058	59.7	1098	64.2	1127	68.8	1159	73.4	1190	78.0
22000	4726	926	45.3	963	49.6	999	54.0	1034	58.57	1089	63.2	1108	67.8	1136	72.6	1170	77.3	1200	82.1
23000	4941	941	48.4	978	52.9	1019	57.5	1047	62.08	1080	66.8	1119	71.6	1146	76.5	1178	81.4	1210	86.4
24000	5156	957	51.6	992	56.3	1027	61.1	1060	65.82	1093	70.8	1125	75.6	1167	80.6	1188	85.7	1219	90.8
25000	5371	972	54.9	1008	59.9	1042	64.8	1075	69.77	1107	74.7	1138	79.7	1169	84.9	1199	90.1	1230	95.4
Volume CFM	OV FPM	17 "w.g.		18 "w.g.		19 "w.g.		20 "w.g.		21 "w.g.		22 "w.g.		23 "w.g.		24 "w.g.		25 "w.g.	
		RPM	BHP																
15000	3222	1179	60.2	1212	64.1	1246	68.0												
16000	3437	1182	63.5	1214	67.6	1246	71.8	1278	75.8	1310	80.0								
17000	3652	1188	67.0	1219	71.2	1250	75.4	1280	79.7	1311	84.0	1341	88.3	1370	92.8	1400	97.2		
18000	3867	1195	70.7	1226	75.0	1258	79.9	1286	83.7	1315	88.1	1344	92.6	1372	97.2	1401	101.8	1429	106.4
19000	4082	1203	74.5	1234	78.9	1263	83.4	1292	87.9	1321	92.5	1349	97.1	1377	101.8	1404	106.5	1432	111.3
20000	4297	1211	78.5	1241	83.1	1271	87.6	1301	92.8	1328	97.0	1356	101.7	1383	106.6	1410	111.4	1437	116.3
21000	4511	1220	82.7	1250	87.4	1279	92.1	1308	96.9	1336	101.7	1364	106.6	1391	111.5	1417	116.5	1443	121.5
22000	4726	1230	87.0	1259	91.8	1288	96.7	1316	101.7	1344	106.7	1371	111.7	1398	116.7	1425	121.8	1451	126.9
23000	4941	1240	91.4	1269	96.4	1298	101.5	1325	106.6	1353	111.7	1379	116.9	1406	122.1	1432	127.4	1458	132.6
24000	5156	1250	96.0	1280	101.2	1308	106.4	1355	111.7	1382	117.0	1408	122.3	1415	127.7	1441	133.1	1466	138.5
25000	5371	1259	100.7	1289	106.0	1318	111.5	1346	116.9	1378	122.4	1399	127.9	1425	133.4	1450	139.0	1475	144.8

Performance shown is installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses.
Performance ratings do not include the effects of appurtenances (accessories).

No. 060306

CMHR-36

(Forward Curved Radial-Tipped Impeller)

Wheel Dia.
Tip Speed =

66.5" dia.
14.78 x RPM

Inlet Dia.
Inlet Area

36" I.D.
7.07

Outlet Size
Outlet Area

33" x 29.25"
6.76 sq. ft.

Volume CFM	OV FPM	8 RPM	"w.g. BHP	9 RPM	"w.g. BHP	10 RPM	"w.g. BHP	11 RPM	"w.g. BHP	12 RPM	"w.g. BHP	13 RPM	"w.g. BHP	14 RPM	"w.g. BHP	15 RPM	"w.g. BHP	16 RPM	"w.g. BHP
14000	2090	673	26.7																
15000	2239	674	28.3	714	32.2														
16000	2388	676	29.9	715	33.9	753	38.0												
17000	2537	680	31.5	717	35.7	754	39.9	789	44.3										
18000	2687	684	33.2	721	37.5	756	41.9	791	46.5	825	51.1	858	55.8						
19000	2836	688	35.1	725	39.5	760	44.0	793	48.7	826	53.4	859	58.2	891	63.2				
20000	2985	693	37.0	729	41.5	764	46.2	797	50.9	829	55.8	861	60.8	891	65.9	922	71.0	952	76.3
21000	3134	698	38.9	734	43.7	768	48.4	802	53.3	833	58.3	864	63.4	894	68.6	923	73.9	952	79.3
22000	3284	704	41.0	739	45.8	773	50.8	806	55.8	838	60.9	868	66.2	897	71.5	926	76.9	954	82.4
23000	3433	710	43.1	745	48.1	778	53.2	810	58.4	842	63.7	872	69.0	901	74.5	929	80.0	957	85.6
24000	3582	716	45.2	751	50.5	784	55.7	815	61.1	846	66.5	876	72.0	906	77.5	934	83.2	961	89.0
25000	3731	721	47.5	757	52.9	790	58.3	821	63.3	851	69.4	881	75.0	910	80.7	938	86.5	965	92.4
26000	3881	728	49.8	762	55.3	796	61.0	827	66.6	857	72.4	886	78.2	914	84.0	942	90.0	970	95.9
27000	4030	734	52.3	768	57.9	801	63.7	833	69.6	863	75.4	892	81.4	920	87.4	947	93.5	974	99.7
28000	4179	742	54.8	774	60.6	807	66.5	838	72.5	869	78.6	897	84.7	925	90.9	952	97.2	979	103.5
29000	4328	749	57.4	781	63.4	813	69.4	844	75.6	874	81.8	904	88.1	931	94.5	958	100.9	984	107.4
30000	4478	757	60.3	789	66.3	820	72.5	850	78.7	880	85.1	909	91.6	937	98.1	964	104.7	989	111.3
31000	4627	766	63.2	797	69.3	827	75.6	857	82.0	886	88.6	914	95.2	943	101.9	970	108.6	995	115.4
32000	4776	774	66.2	805	72.5	834	78.8	863	85.4	892	92.1	920	98.8	948	105.7	976	112.6	1001	119.6
21000	3134	981	84.7	1010	90.3														
22000	3284	982	88.0	1010	93.7	1038	99.4												
23000	3433	984	91.4	1011	97.2	1038	103.0	1065	109.0	1091	115.0								
24000	3582	988	94.8	1014	100.7	1040	106.8	1068	112.8	1091	119.0	1116	125.2	1142	131.5				
25000	3731	991	98.4	1017	104.4	1043	110.6	1068	116.8	1098	123.1	1117	129.4	1142	135.9	1166	142.4	1180	148.9
26000	3881	996	102.0	1021	108.2	1046	114.5	1071	120.9	1095	127.3	1119	133.8	1143	140.3	1167	147.0	1180	153.7
27000	4030	1000	105.9	1026	112.1	1051	118.6	1075	125.0	1099	131.6	1122	138.2	1146	144.9	1169	151.7	1192	158.5
28000	4179	1005	109.8	1030	116.2	1055	122.7	1079	129.3	1103	136.0	1126	142.8	1149	149.6	1172	156.5	1194	163.5
29000	4328	1009	113.9	1035	120.5	1059	127.1	1084	133.8	1107	140.6	1130	147.5	1153	154.4	1175	161.5	1197	168.6
30000	4478	1015	118.0	1039	124.8	1064	131.6	1088	138.4	1112	145.3	1135	152.3	1157	159.4	1179	166.5	1201	173.8
31000	4627	1020	122.3	1045	129.2	1069	136.1	1093	143.1	1116	150.2	1139	157.3	1162	164.4	1184	171.7	1205	179.1
32000	4776	1026	126.6	1050	133.7	1074	140.8	1098	148.0	1121	155.2	1143	162.5	1166	169.8	1188	177.1	1210	184.6

Performance shown is installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

No. 060306

CMHR-42

(Forward Curved Radial-Tipped Impeller)

Wheel Dia. 65.88" dia. Inlet Dia. 42" I.D. Outlet Size 38.5" x 34.125"
 Tip Speed = 17.24 x RPM Inlet Area 9.62 Outlet Area 9.12 sq. ft.

Volume CFM	OV FPM	8 RPM	"w.g. BHP	9 RPM	"w.g. BHP	10 RPM	"w.g. BHP	11 RPM	"w.g. BHP	12 RPM	"w.g. BHP	13 RPM	"w.g. BHP	14 RPM	"w.g. BHP	15 RPM	"w.g. BHP	16 RPM	"w.g. BHP
20000	2198	577	37.9																
21000	2303	578	39.4	612	44.8														
22000	2412	580	41.0	613	46.5	646	52.2												
23000	2522	582	42.7	615	48.3	646	54.1	677	60.1										
24000	2632	585	44.4	617	50.2	647	56.1	678	62.2	707	68.4								
25000	2741	588	46.1	619	52.1	649	58.1	679	64.4	708	70.7	736	77.2						
26000	2851	591	48.0	622	54.0	652	60.2	681	66.6	709	73.1	736	79.7	764	86.4				
27000	2961	594	49.9	625	56.0	655	62.4	683	68.9	711	75.5	738	82.2	764	89.1	791	96.1		
28000	3070	597	51.8	628	58.2	658	64.6	686	71.2	713	78.0	739	84.8	765	91.8	791	99.0	817	106.2
29000	3180	601	53.8	631	60.3	660	66.9	689	73.6	715	80.5	742	87.5	767	94.6	792	101.9	817	109.3
30000	3289	604	55.9	634	62.5	663	69.3	692	76.1	718	83.1	744	90.2	769	97.5	794	104.9	818	112.4
31000	3399	608	58.0	638	64.8	666	71.7	694	78.7	722	85.8	747	93.0	772	100.5	796	108.0	820	115.6
32000	3509	612	60.2	642	67.1	670	74.2	697	81.3	724	88.6	750	95.9	775	103.5	799	111.1	822	118.9
33000	3618	615	62.4	646	69.5	674	76.7	701	84.0	727	91.5	753	98.9	778	106.6	802	114.4	825	122.3
34000	3728	619	64.6	650	71.9	677	79.3	704	86.8	730	94.4	756	102.0	781	109.8	805	117.6	828	125.7
35000	3838	623	67.0	653	74.4	681	82.0	708	89.6	734	97.4	759	105.2	783	118.1	808	121.1	831	129.2
36000	3947	627	69.4	656	76.9	685	84.7	712	92.5	737	100.4	762	108.4	786	116.4	810	124.6	834	132.8
37000	4057	631	71.8	660	79.6	688	87.4	716	95.4	741	103.5	766	111.7	790	119.9	813	128.2	836	136.6

Volume CFM	OV FPM	17 RPM	"w.g. BHP	18 RPM	"w.g. BHP	19 RPM	"w.g. BHP	20 RPM	"w.g. BHP	21 RPM	"w.g. BHP	22 RPM	"w.g. BHP	23 RPM	"w.g. BHP	24 RPM	"w.g. BHP	25 RPM	"w.g. BHP
29000	3180	842	116.8	866	124.4														
30000	3289	842	120.0	866	127.8	890	135.6												
31000	3399	844	123.4	867	131.2	890	139.2	918	147.3										
32000	3509	845	126.8	868	134.8	891	142.9	919	151.1	935	159.4	958	167.8						
33000	3618	848	130.3	870	138.4	892	146.6	914	155.0	936	163.4	958	172.0	979	180.6				
34000	3728	850	133.8	872	142.1	894	150.5	916	158.9	937	167.5	958	176.2	979	184.9	1000	193.8		
35000	3838	853	137.5	875	145.9	896	154.4	918	163.0	939	171.7	959	180.5	980	189.4	1000	198.4	1021	207.5
36000	3947	856	141.2	878	149.7	899	158.4	920	167.1	941	175.9	961	184.9	981	193.9	1001	203.0	1021	212.2
37000	4057	859	145.0	881	153.7	902	162.4	922	171.3	943	180.3	963	189.3	983	198.5	1003	207.8	1022	217.1
38000	4167	862	149.0	884	157.7	905	166.6	925	175.6	945	184.7	965	193.9	985	203.2	1005	212.6	1024	222.1
39000	4276	864	153.1	886	161.9	908	170.8	928	180.0	948	189.2	968	198.5	987	208.0	1007	217.5	1026	227.1
40000	4386	868	157.2	889	166.2	910	175.3	931	184.4	951	193.8	971	203.3	990	212.8	1009	222.5	1028	232.2

Performance shown is installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

No. 060306

CMHR-48

(Forward Curved Radial-Tipped Impeller)

Wheel Dia.
Tip Speed =

79.31" dia.
19.71 x RPM

Inlet Dia.
Inlet Area

48" I.D.
12.57

Outlet Size
Outlet Area

44" x 38"
11.92 sq. ft.

Volume CFM	OV FPM	8 RPM	"w.g. BHP	9 RPM	"w.g. BHP	10 RPM	"w.g. BHP	11 RPM	"w.g. BHP	12 RPM	"w.g. BHP	13 RPM	"w.g. BHP	14 RPM	"w.g. BHP	15 RPM	"w.g. BHP	16 RPM	"w.g. BHP
29000	2494	508	54.0	536	61.3	565	68.7												
30000	2517	509	55.7	537	63.1	565	70.6	592	78.4										
31000	2501	511	57.4	539	64.9	568	72.6	592	80.5	619	88.6								
32000	2686	513	59.1	540	66.8	567	74.6	593	82.7	619	90.9								
33000	2769	515	60.9	542	68.7	568	76.7	594	84.8	619	93.2	644	101.7						
34000	2853	517	62.7	544	70.6	570	78.7	595	87.1	620	95.5	644	104.2	668	113.0				
35000	2937	519	64.5	546	72.6	572	80.9	597	89.3	621	97.9	645	106.7	668	115.7	691	124.8		
36000	3021	521	66.6	548	74.7	574	83.1	599	91.6	622	100.4	646	109.3	669	118.4	692	127.6	714	137.0
37000	3105	523	68.6	550	76.9	576	85.3	601	94.0	624	102.9	647	112.0	670	121.2	692	130.5	714	140.1
38000	3189	525	70.8	552	79.0	578	87.6	603	96.4	626	105.4	649	114.6	671	124.0	693	133.5	715	140.1
39000	3273	528	72.6	554	81.3	580	90.0	605	98.9	628	108.0	650	117.4	673	126.9	694	136.5	716	146.3
40000	3357	531	74.7	557	83.5	582	92.4	606	101.5	630	110.7	652	120.2	674	129.8	696	139.5	717	149.6
41000	3441	533	76.8	559	85.8	584	94.9	608	104.1	632	113.5	654	123.0	676	132.7	697	142.7	718	152.7
42000	3524	536	79.0	562	88.1	588	97.4	610	106.8	634	116.3	657	125.9	678	135.8	699	145.8	719	156.0
43000	3608	538	81.2	564	90.5	589	99.9	612	109.5	636	119.1	658	128.9	680	138.9	701	149.0	721	159.4
44000	3692	540	83.5	567	92.9	591	102.5	615	112.2	638	122.1	660	132.0	682	142.0	703	152.3	723	162.8
45000	3776	543	85.8	569	95.4	594	105.2	617	115.0	640	125.0	662	135.1	684	145.3	705	155.6	725	166.2
46000	3860	545	88.1	572	97.9	597	107.8	620	117.9	642	128.0	664	138.3	686	148.6	707	159.1	727	169.8
47000	3944	548	90.5	574	100.4	599	110.5	622	120.7	645	131.1	666	141.5	688	152.0	708	162.7	729	173.4
48000	4028	551	93.0	576	103.0	601	113.3	626	123.7	647	134.2	669	144.7	690	155.4	710	166.2	731	177.1
49000	4112	554	95.5	579	105.7	604	116.1	628	126.6	650	137.3	671	148.0	692	158.9	713	169.9	733	180.9
50000	4196	557	98.0	582	108.4	606	118.9	630	129.6	652	140.5	674	151.4	694	162.4	715	173.6	735	184.8
51000	4280	560	100.7	585	111.2	609	121.9	632	132.7	655	143.7	676	154.8	697	166.0	717	177.3	737	188.7
52000	4364	564	103.4	588	114.0	611	124.8	635	135.8	657	147.0	679	158.3	699	169.6	719	181.1	739	192.6
37000	3105	736	149.7																
38000	3189	736	152.9	758	162.9														
39000	3273	737	156.2	758	166.3	778	176.5												
40000	3357	737	159.5	758	169.7	778	180.1	799	190.8										
41000	3441	738	162.9	759	173.2	779	183.7	798	194.3	818	205.1								
42000	3524	740	166.3	760	176.5	779	187.4	799	198.2	818	209.1	837	220.1						
43000	3608	741	169.8	761	180.4	780	191.2	799	202.0	819	213.1	837	224.2	856	235.5				
44000	3692	743	173.4	762	184.1	781	195.0	800	206.0	819	217.1	838	228.4	856	239.8	876	251.3		
45000	3776	745	177.0	764	187.8	783	198.9	802	210.0	820	221.3	838	232.7	857	244.2	876	255.9	893	267.7
46000	3860	747	180.6	766	191.6	784	202.8	803	214.1	821	225.5	839	237.0	857	248.7	876	260.5	893	272.4
47000	3944	749	184.4	768	195.5	786	206.8	804	218.2	823	229.7	840	241.4	858	253.2	876	265.1	893	277.1
48000	4028	751	188.1	770	199.4	788	210.5	806	222.4	824	234.1	842	245.9	859	257.8	877	269.8	894	282.0
49000	4112	752	192.1	772	203.4	790	215.0	808	226.6	826	238.5	843	250.4	861	262.4	878	274.6	895	286.9
50000	4196	754	196.1	773	207.5	792	219.1	810	231.0	828	242.9	845	255.0	862	267.2	879	279.5	896	291.9
51000	4280	756	200.2	775	211.7	794	223.4	812	235.3	829	247.4	847	259.6	864	272.0	880	284.4	897	297.0
52000	4364	758	204.3	777	216.0	796	227.9	814	239.8	831	252.0	849	264.4	865	276.8	882	289.4	899	302.1

Performance shown is installation Type B: Free Inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

No. 060306

CMHR-54

(Forward Curved Radial-Tipped Impeller)

Wheel Dia.
Tip Speed =

84.718" dia.
18.71 x RPM

Inlet Dia.
Inlet Area

44" I.D.
12.57

Outlet Size
Outlet Area

44" x 39"
11.92 sq. ft.

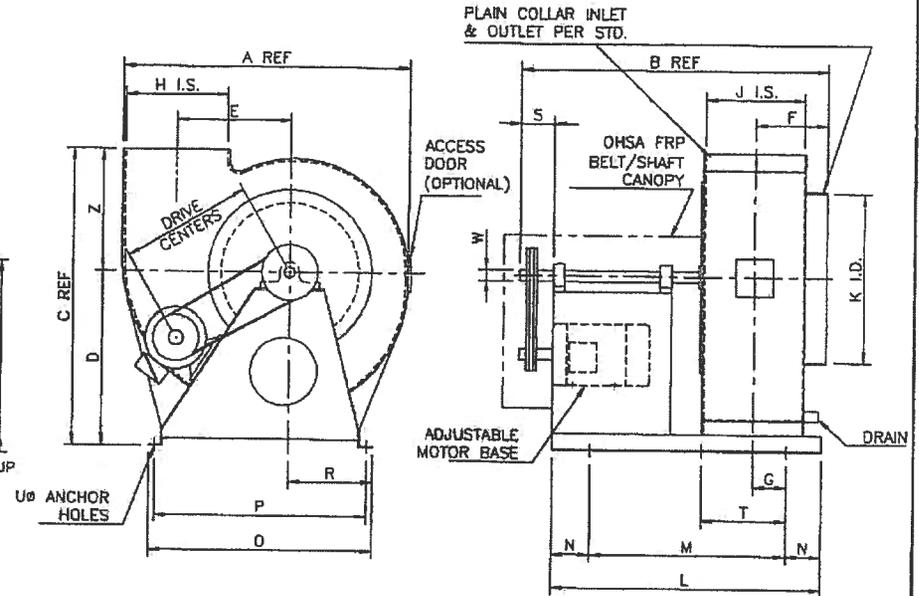
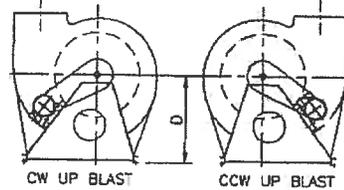
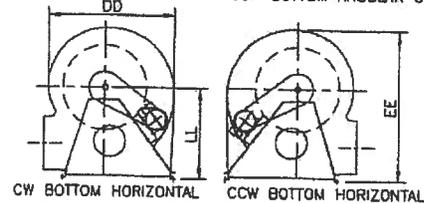
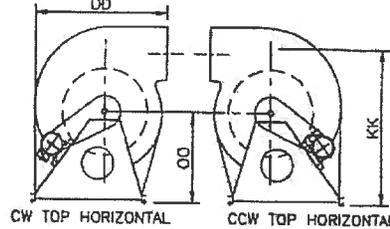
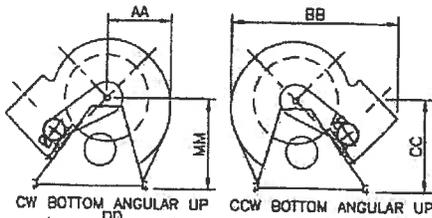
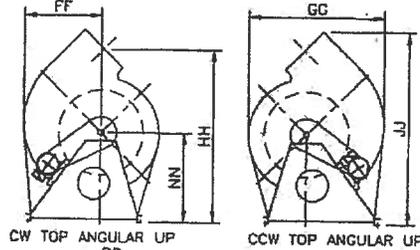
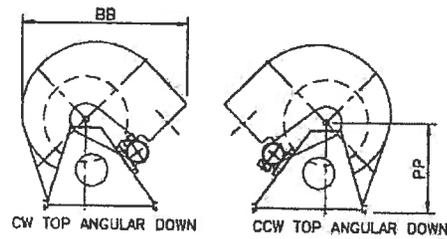
Volume CFM	OV FPM	8 RPM	"w.g. BHP	9 RPM	"w.g. BHP	10 RPM	"w.g. BHP	11 RPM	"w.g. BHP	12 RPM	"w.g. BHP	13 RPM	"w.g. BHP	14 RPM	"w.g. BHP	15 RPM	"w.g. BHP	16 RPM	"w.g. BHP
36000	2387	451	67.2	477	76.2	502	86.6												
38000	2520	459	70.5	478	79.8	502	89.4	527	99.2										
40000	2652	456	73.9	480	83.5	504	93.4	527	103.4	550	118.7	570	124.8						
42000	2785	458	77.5	488	87.0	505	97.5	528	107.8	551	118.4	572	129.2	594	140.2				
44000	2917	461	81.3	485	91.9	508	101.7	530	112.3	552	123.2	573	124.2	594	145.5	615	156.9		
46000	3050	464	85.1	488	95.5	511	105.1	533	117.0	554	128.1	575	129.4	595	150.9	615	162.6	635	174.5
48000	3182	467	89.1	491	99.9	513	110.7	535	121.8	557	133.2	577	134.8	597	156.5	616	168.5	636	180.7
50000	3315	471	93.2	494	104.3	516	115.5	538	126.9	559	138.4	579	140.8	599	162.8	618	174.8	637	187.0
52000	3448	474	97.5	497	108.9	519	120.4	541	132.1	562	143.9	582	145.9	601	168.8	620	180.8	639	193.5
54000	3580	477	101.8	501	113.5	523	125.4	544	137.4	564	148.6	585	151.9	604	174.4	623	187.2	641	200.2
56000	3712	481	106.0	504	118.3	526	130.6	547	142.9	567	153.4	587	158.1	607	180.8	625	193.8	643	207.0
58000	3845	484	110.9	507	123.0	530	135.9	551	148.5	571	159.4	590	164.8	609	187.4	628	200.7	646	214.0
60000	3978	488	115.8	511	128.4	533	141.2	554	154.3	574	164.4	593	170.7	612	194.2	631	207.7	649	221.4
62000	4111	492	120.7	515	133.7	536	146.8	558	160.2	578	170.7	597	177.3	615	201.1	633	215.0	651	229.0
64000	4243	497	125.9	519	139.1	540	152.6	561	166.2	581	176.1	600	184.0	619	208.1	637	222.8	654	236.7
66000	4376	502	131.4	523	144.8	544	158.5	564	172.4	584	182.6	604	190.9	623	215.8	640	229.8	657	244.5
68000	4509	506	137.1	527	150.8	548	164.6	568	178.8	588	189.3	607	207.9	626	222.7	644	237.6	661	252.6
70000	4641	511	142.9	532	156.8	552	170.9	572	185.4	591	200.1	610	215.1	629	230.2	647	245.4	664	260.8
72000	4774	516	148.9	537	163.2	557	177.4	576	192.2	595	207.2	614	222.4	633	237.8	651	253.4	668	269.1
74000	4907	522	155.1	542	169.7	561	184.3	580	199.8	599	214.6	618	230.0	636	245.7	654	261.6	672	277.7
76000	5039	527	161.4	547	176.4	566	191.5	585	206.5	603	222.1	621	237.8	639	253.8	657	270.0	674	286.8
78000	5172	532	167.8	552	183.3	571	198.8	590	214.2	608	229.8	626	245.9	643	262.1	661	278.6	678	295.2
80000	5304	537	174.5	557	190.4	576	206.2	594	222.1	612	237.9	630	254.1	647	270.7	664	287.4	681	304.8
45000	3050	655	188.7																
48000	3182	655	198.1	674	205.6														
50000	3315	655	199.5	674	212.4	692	225.4	710	238.8										
52000	3448	657	206.4	675	219.5	692	232.7	710	246.1	727	259.7	745	273.4						
54000	3580	659	218.8	676	228.7	694	240.2	711	253.5	728	267.7	745	281.7	761	296.8				
56000	3712	661	220.4	678	234.0	695	247.8	712	261.8	729	275.9	745	290.1	761	304.5	778	319.1	794	333.9
58000	3845	664	237.7	681	241.6	697	255.7	714	269.9	730	284.2	746	298.8	762	312.4	778	328.8	794	342.8
60000	3978	666	235.2	683	249.4	700	263.7	716	278.2	732	292.8	748	307.6	763	322.6	779	337.7	794	352.9
62000	4111	669	248.1	686	257.4	702	271.9	719	285.7	734	301.6	750	316.7	765	331.0	780	347.2	796	362.8
64000	4243	671	251.2	688	265.7	705	280.4	721	295.4	737	310.6	752	325.9	767	341.4	782	357.0	797	372.8
66000	4376	674	259.8	691	274.8	708	289.8	724	304.4	740	319.7	755	335.4	770	351.1	785	367.0	799	383.1
68000	4509	678	267.7	694	282.9	710	298.8	726	313.8	742	329.8	758	345.0	772	361.1	787	377.8	802	393.6
70000	4641	681	276.2	697	291.8	713	307.5	729	323.3	745	339.2	760	355.2	776	371.8	790	387.7	804	404.8
72000	4774	684	284.9	701	300.8	717	316.8	732	332.9	747	349.2	763	365.5	778	382.0	793	398.5	807	415.8
74000	4907	688	293.8	704	310.0	720	326.8	735	342.8	751	359.4	766	376.0	780	392.8	795	409.7	809	427.7
76000	5039	692	302.8	708	319.4	723	336.1	739	352.8	754	369.7	769	386.7	783	403.8	798	421.0	812	438.8
78000	5172	695	312.0	712	329.0	727	346.0	742	368.1	757	380.3	772	397.6	786	416.0	801	432.6	815	450.3
80000	5304	698	321.4	714	338.5	731	356.0	746	378.5	761	391.0	776	408.7	790	426.4	804	444.5	818	462.8

Performance shown is installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

No. 060306

FAN SIZE	INLET AREA	OUTLET AREA	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U	W	Z	AA	BB	CC	DD	EE	FF	GG
18	1.77	1.68	46 1/4	49 5/16	48 3/16	18 13/32	10 1/2	2 3/16	16 1/2	14 5/8	18 44	28	8 40	38	15 5	-	3/4	2 3/16	17	20 1/2	52 1/8	30	39 3/4	55 1/8	24 5/8	43 1/8				
20	2.18	2.07	51 1/4	51 1/2	50 3/16	20 15/32	11 1/2	3	18 5/16	16 1/4	20 46	30	8 40	38	15 5	-	3/4	2 3/16	19	22 3/4	57 7/8	35	44 1/4	57 1/8	27 3/8	47 3/4				
24	3.14	2.98	61 1/4	59 3/8	59 3/16	24 17/32	14	4 5/8	22	19 1/2	24 52	36	8 48	46	18 6	18	3/4	2 7/16	22	27 1/2	68 7/8	42 1/4	52 1/4	69 1/4	32 3/4	57 1/8				
30	4.91	4.65	76 3/8	68 3/8	72 44	30 11/16	16 1/2	7 1/8	27 1/2	24 3/8	30 61	45	8 56	53 1/2	21 6	22 1/2	3/4	2 7/16	28	34 1/4	86 1/8	50	65 5/8	83 1/2	40 7/8	71 1/8				
36	7.07	6.70	91 1/2	77 9/16	86 52	36 27/32	19	9 7/16	33	29 1/4	36 68	52	8 66	63 1/2	24 8	26 7/8	2 15/16	34	40 7/8	103 3/8	58	79	97 3/8	49	85 1/8					
42	9.62	9.12	106 1/2	83 9/16	100 62	42 31/32	22	12 7/16	38 1/2	34 1/8	42 74	58	8 74	71 1/2	27 8	29 1	3 7/16	38	47 3/4	119 1/4	66 1/2	90 3/8	113 7/8	57 1/4	99 1/8					
48	12.57	11.92	121 5/8	92 1/8	112 68	49 3/32	25	14 7/8	44	39	48 82	66	8 84	81 1/2	31 8	33 1	3 7/16	44	54 5/8	136 5/8	71 3/8	103 3/4	128	65 3/8	113 1/8					
54	15.90	15.08	136 5/8	97 5/8	124 74	55 7/32	28	17 3/8	49 1/2	43 7/8	54 87	71	8 92	89 1/2	34 8	35 1/2	1 3 15/16	50	61 3/8	154	76 3/8	117 1/4	144 1/4	73 1/2	127 1/4					

FAN SIZE	HH	JJ	KK	LL	MM	NN	OO	PP	DRIVE CENTERS	WEIGHT W/O MOTOR	DRAIN SIZE
18	56 1/16	62 1/4	58 1/4	36	31	31	31	31	24±2	500 LBS.	1
20	58 15/16	65 3/4	61 1/8	36	36	31	31	31	24±2	650 LBS.	1
24	69 13/16	76 1/8	73 1/16	44	44	37	37	37	28±2	1110 LBS.	1
30	85 1/2	95 5/8	88	52	52	44	44	44	28±2	1610 LBS.	1
36	100 1/8	112 1/8	103 7/8	60	60	50	50	50	35±2	1850 LBS.	1
42	113 1/4	127 1/4	118 3/4	70	70	56	56	48	35±2	2350 LBS.	1
48	128 13/16	144 3/4	133 5/8	78	75	62	62	54	35±2	3090 LBS.	1 1/2
54	142 7/16	160 1/4	144 1/2	88	80	68	64	60	50±2	3150 LBS.	1 1/2



- NOTES:
1. ALL TABLED DIMENSIONS ARE IN INCHES.
 2. ALL DISCHARGE POSITIONS & ROTATIONS ARE VIEWED FROM THE SHAFT END.
 3. MOTOR FRAME SIZES VARY IN LENGTH WITH DIFFERENT MOTOR MANUFACTURER. THE STANDARD FAN BASE DIMENSIONS ARE SUBJECT TO CHANGE BASED ON THE MOTOR "C" DIMENSIONS.
 4. DIMENSIONS NOT TO BE USED FOR CONSTRUCTION CERTIFIED PRINTS ARE AVAILABLE.
 5. CLASS IV CONSTRUCTION, DIRECT DRIVE & SPECIAL ARRANGEMENT FAN BASES ARE AVAILABLE. CERTIFIED DRAWINGS ARE AVAILABLE ON REQUEST.

CMH SERIES FANS

CEILCOTE AIR POLLUTION CONTROL

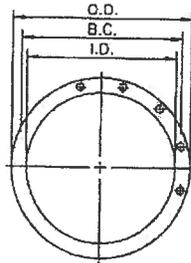
AIR-CURE DYNAMICS, INC.

DRAWN: CMD	CHK'D.:	REV. 0
DATE: 9-23-98	DATE:	ARRANGEMENT - 9

CAD File: AR9STD.DWG

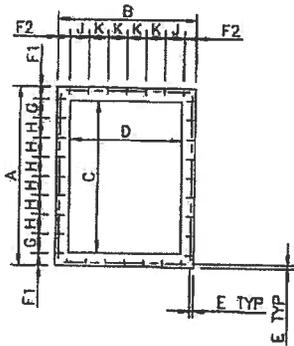
CUST. SUB.

FAN SIZE	I.D.	O.D.	B.C.	HOLES		THK
				QTY	DIA	
18	18	22 3/8	21	16	7/16	1/2
20	20	24 3/8	23	28	"	"
24	24	28 3/8	27	20	"	"
30	30	34 3/8	33	28	"	"
36	36	40 3/8	39	32	"	"
42	42	46 3/8	45	36	"	5/8
48	48	54 3/8	52	44	9/16	"
54	54	60 3/8	58	44	"	"



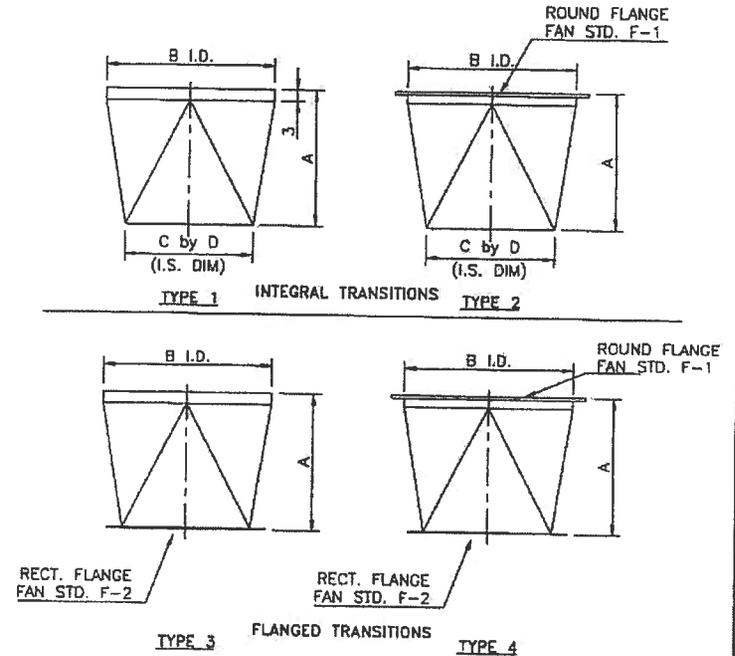
INLET FLANGE DETAIL

OUTLET FLANGE DETAIL



SIZE	A	B	C	D	E	F1	F2	G	H	J	K	THK.	HOLE	
													DIA.	QTY.
18	20 3/4	18 7/8	16 1/2	14 5/8	3/4	2 1/8	2 1/8	3 3/8	3 1/4	3 5/8	3 11/16	5/16	7/16	22
20	22 5/8	20 1/2	18 5/16	16 1/4	3/4	2 1/8	2 1/8	3 9/16	3 3/4	3 1/4	3 1/4	5/16	"	24
24	26 1/2	24	22	19 1/2	7/8	2 1/4	2 1/4	4 7/16	4 3/8	3 15/16	3 7/8	3/8	"	24
30	32	28 7/8	27 1/2	24 3/8	7/8	2 1/4	2 1/4	3 3/4	4	4 1/16	4 1/16	3/8	"	30
36	37 1/2	33 3/4	33	29 1/4	7/8	2 1/4	2 1/4	4 1/8	4 1/8	4	4 1/4	3/8	"	34
42	43	38 5/8	38 1/2	34 1/8	7/8	2 1/4	2 1/4	4 3/8	4 1/4	4 5/16	4 1/4	1/2	"	38
48	48 1/2	43 1/2	44	39	7/8	2 1/4	2 1/4	4	4	4 3/16	4 3/8	1/2	9/16	44
54	54 1/2	48 7/8	49 1/2	43 7/8	7/8	2 1/2	2 1/2	4 1/2	4 1/2	4 7/16	4 3/8	5/8	"	46

FAN SIZE	A	B I.D.	C	D
18	17	18	16 1/2	14 5/8
20	17	20	18 5/16	16 1/4
24	20	24	22	19 1/2
30	24	30	27 1/2	24 3/8
36	29	36	33	29 1/4
42	34	42	38 1/2	34 1/8
48	38	48	44	39
54	38	54	49 1/2	43 7/8



CMH SERIES FANS
CEILCOTE AIR POLLUTION CONTROL
 AIR-CURE DYNAMICS, INC.

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DATE: 9-23-98	DATE:		

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CUST. SUB.

PRODUCTS AND SERVICES OF CEILCOTE AIR POLLUTION CONTROL

- Air Pollution Control Systems
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- IWS® Systems
- Wet Scrubbers
- FRP Fans
- Tellerette® Tower Packing
- Mist Eliminators
- Microelectronics APC Systems
- Odor Abatement Systems

Strong product and system support is an integral part of Ceilcote Air Pollution Control's resource capabilities. We are broadly experienced in the design, engineering and installation of a wide range of air pollution control equipment and systems. We will undertake contracts ranging from consulting engineering to complete green field turnkey jobs.

Ceilcote Air Pollution Control has a worldwide network of qualified representatives ready to serve you. Answers to your air pollution control needs are only a phone call away. To find the name of your representative, contact the nearest Ceilcote Air Pollution Control office.

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