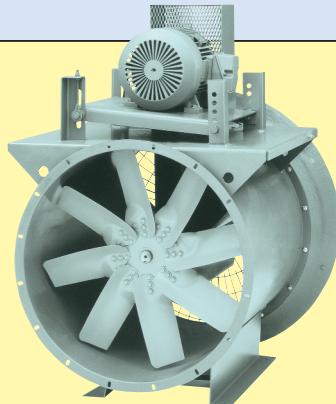


INDUSTRIAL DUCT FANS

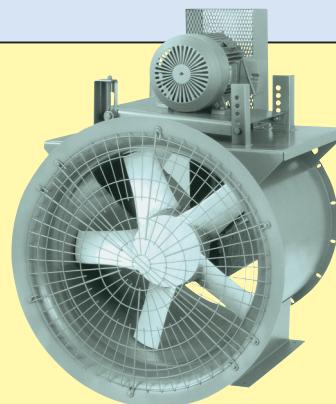


- Capacities to 42,000 CFM
- Static pressures to 2½" WG
- Temperatures to 375°F.



DUCT FANS

- Capacities to 60,000 CFM
- Static pressures to 2" WG



TUBEAXIAL FANS

- Capacities to 86,000 CFM
- Static pressures to 3" WG



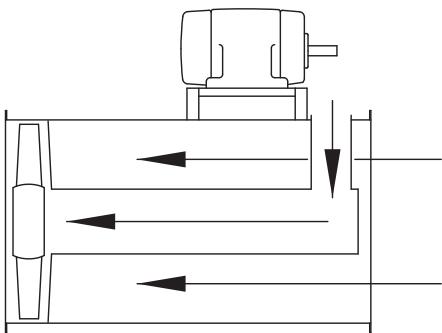
VANEAXIAL FIXED PITCH

- Capacities to 100,000 CFM
- Static pressures to 9" WG



THE NEW YORK BLOWER COMPANY
7660 Quincy Street
Willowbrook, IL 60527-5530

Visit us on the Web: <http://www.nyb.com>
Phone: (800) 208-7918 Email: nyb@nyb.com



DESIGN FEATURES

- **Capacities**—to 42,000 CFM.
- **Pressures**—to 2½" WG.
- **Temperatures** —to 375°F
- **Ten sizes**—12" through 48" wheel diameters.
- **Choice of mounting positions** – belt-drive in four mounting positions [see page 6].
- **Precision rolled tube** –for minimum tip clearance...maximum efficiency.
- **Wheel Designs** – available with steel and aluminum wheels to custom tailor the fan performance to application requirements.
- **Airflow Direction** – provides cool, clean ambient airflow over v-belt drive and fan bearings.



Arrangement 9-M with
motor, drive and belt
guard and inlet guard
(inspection door is
standard).

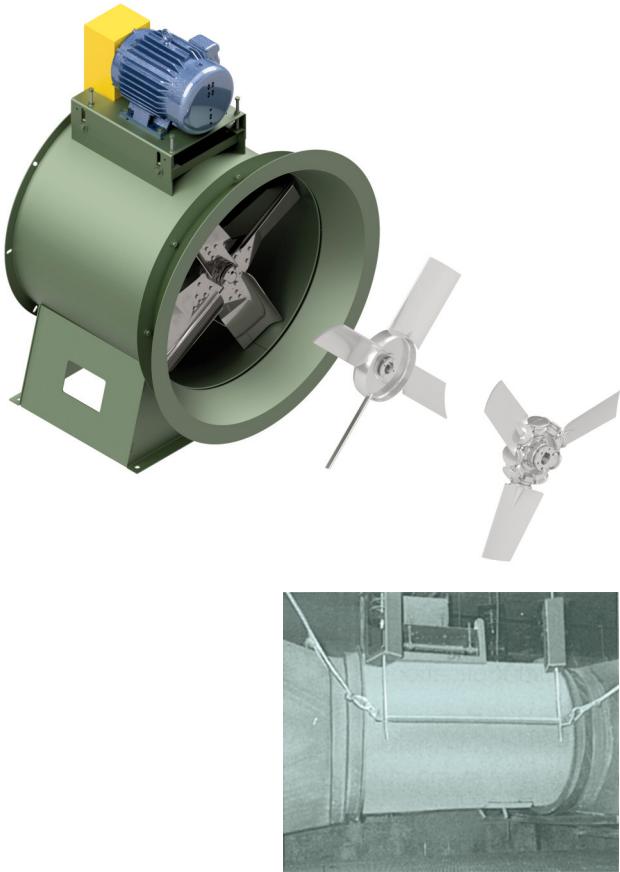
INDUSTRIAL DUCT FANS

Industrial Duct Fans are designed and constructed for low pressure ventilating and industrial exhaust applications requiring the compactness of an axial fan.

CONSTRUCTION FEATURES

- **Aerodynamic Wheel Design**—curved steel and aluminum blades assure efficient operation.
- **Heavy-gauge welded components**—provide structural strength, durability, and minimal leakage.
- **Bearings**—selected to provide long service ...Industrial grade pillow block bearing.
- **Industrial finish**—nyb green industrial grade coating.
- **Flanged connections**—integral to housing, all flanges standard with slotted holes for easy installation.
- **Lifting eyes**—located for balanced handling.
- **Lubrication**—extended lubrication lines with external fittings provided on all Industrial Duct Fans.
- **Adjustable motor mount**—positive screw adjustment for easy belt-tensioning.
- **Shafting**—straightened to close tolerance to minimize “run out” and ensure smooth operation.
- **Balance**—all wheels are precision-balanced prior to assembly. Fans with motors and drives mounted by **nyb** are checked at the specified running speed.
- **Shaft and bearing cover**—isolates bearings and drive from airstream, for reduced maintenance and longer life.
- **Standard Construction**—Airstreams to 200°F.
- **Inspection/Access Door** –Gasketed, flush bolted door provides access to inspect/clean fan wheel without the need to remove ductwork.

APPLICATION ADVANTAGES

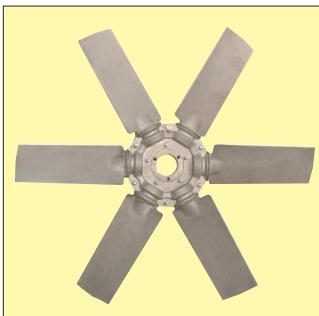


New York Blower's Industrial Duct Fans are designed for low-pressure ventilation and industrial-process applications. Uses include heat, smoke and fume removal; paint booth exhaust; process drying with ambient, preheated air; oven exhaust; comfort and process cooling and general ventilation. All applications can be handled in either supply or exhaust configurations. Numerous modifications and accessories make the Industrial Duct Fan suitable for a wide range of applications and systems.

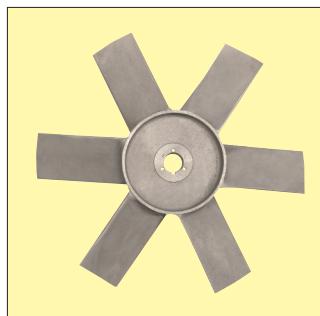
In applications where equipment space is at a premium, the compact flow-through design of the Industrial Duct Fan can reduce system space requirements by more than 50% over conventional centrifugal fans. The straight, in-line design eliminates the need for costly, space-consuming transitions, elbows, and inlet boxes.

Additional application advantages and installed cost savings are provided by the Industrial Duct Fan's four predesigned mounting arrangements [see page 6].

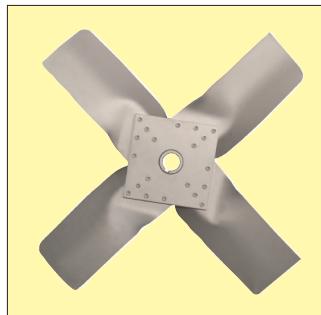
WHEELS DESIGNED TO MAXIMIZE PERFORMANCE



MPC - ALUM



OPC - ALUM



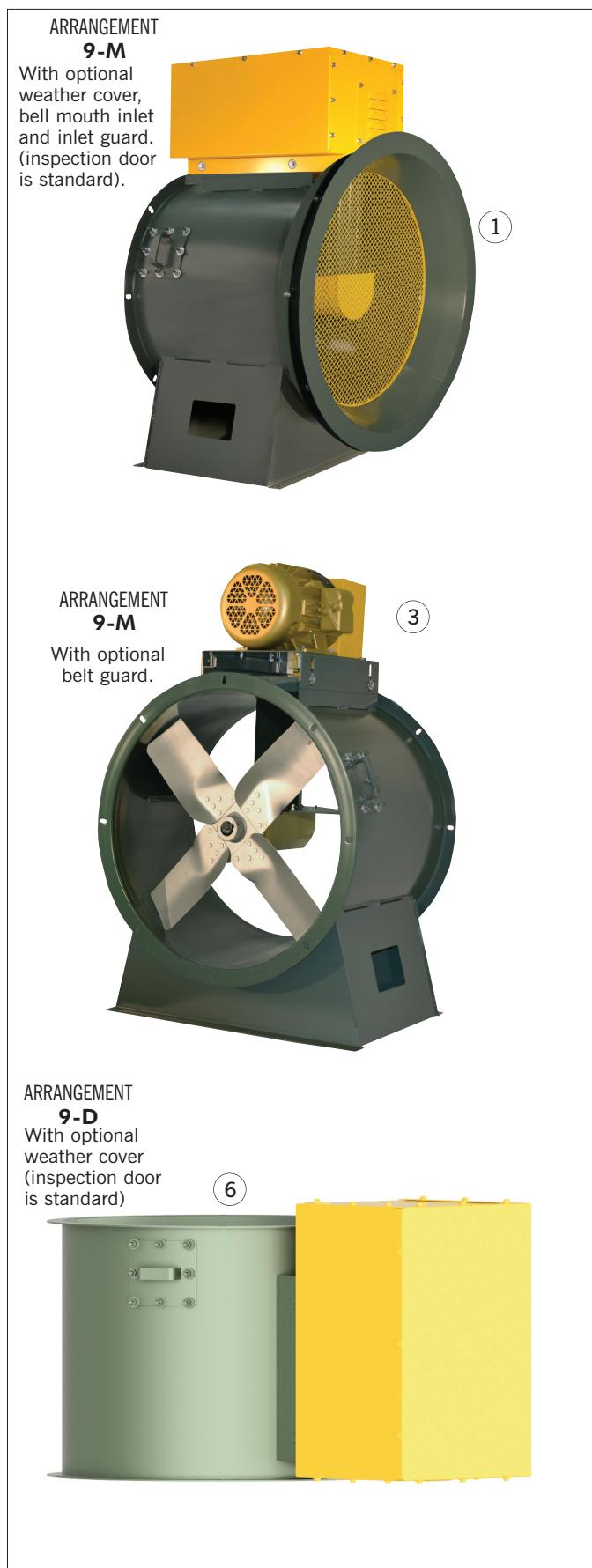
STF/STO - STL

New York Blower's Industrial Duct Fans offer aluminum and steel wheels in all sizes. Each wheel is designed to maximize fan performance by optimizing the shape, number of blades, blade pitch and hub diameter.

Three distinct wheel concepts are used to meet specific volume, pressure and temperature requirements across the entire line of ten sizes. Each wheel is designed to provide smooth airflow performance, minimizing the characteristic stall region typically exhibited in axial designs.

New York Blower's Industrial Duct Fans provide relatively large volumes of air at low static pressures. For higher pressure requirements, see the Tubeaxial or Vaneaxial Fan bulletins.

ACCESSORIES AND MODIFICATIONS



1. **INLET BELL WITH GUARD**—pictured on the left
Inlet bell minimizes losses associated with non-ducted inlet applications. Includes wire guard.
2. **VIBRATION ISOLATION**—see page 6
Rubber-in-shear or spring-type isolation mounts reduce the transmission of vibration to the mounting structure.
3. **SAFETY EQUIPMENT/BELT GUARDS/WEATHER COVER & INLET/OUTLET GUARDS**
Belt guards, inlet and/or outlet guards, and weather covers are available. Selection of appropriate safety accessories is the responsibility of the system designer familiar with the specific installation. (Weather cover not available for size 12 arrangement 9-S).
4. **COMPANION FLANGES**—not shown
Fit flush with fan inlet and outlet flanges, provided with matching hole pattern.
5. **DRAINS**—not shown
For horizontal mounted fans...drain located at the lowest point of the housing tube.
6. **FLUSH MOUNTED ACCESS/INSPECTION DOOR**—pictured on the left
Gasketed, flush bolted door provides access to inspect/clean fan wheel without the need to remove ductwork.
7. **HIGH TEMPERATURE CONSTRUCTION**—not shown
Includes an insulated belt well and bearing inner tube to accomodate temperatures from 201°F to 375°F.
8. **HIGH MOISTURE CONSTRUCTION**—not shown
Includes a Teflon shaft hole closure and a finned rotating collar between fan wheel and bearing tube to displace moisture. Maximum temperature 200°F.
9. **HIGH TEMPERATURE/MOISTURE CONSTRUCTION**—not shown
Includes an Teflon shaft hole closure; a finned rotating collar between fan wheel and bearing tube; an insulated belt well; and an insulated bearing tube. Maximum temperature 375°F.

Protective coatings and special alloys are available to combat corrosion problems.

HOUSINGS AND STRUCTURALS

Thin film coatings [5 to 10 mil thickness]—special paints and spray coatings are available under a variety of trade names. nyb works with experienced coating applicators who can apply coatings to meet a wide range of requirements.

WHEELS, HOUSINGS AND STRUCTURALS

Alternate material construction—Industrial Duct Fans can be constructed of aluminum or stainless steel and can be furnished with optional stainless steel or polypropylene wheels.

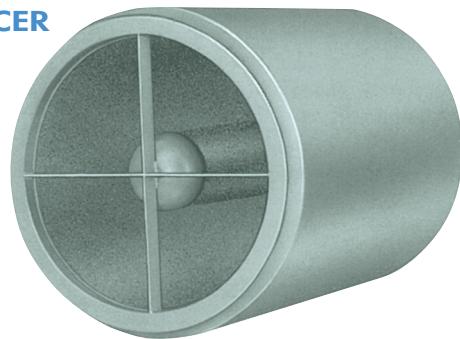
ACCESSORY PERFORMANCE

INLET BELL

Catalog ratings shown in this bulletin are for Industrial Duct Fans with free inlet and ducted outlet. When no inlet duct is used, entrance loss must be added to the static pressure calculated for the system. For bare inlets, that loss is equal to the fan velocity pressure. **Example:** 4200 FPM velocity = 1.1"WG [see Chart I at right]. Inlet bells render such loss negligible and are available at nominal cost.

CHART I VELOCITY PRESSURE	
Velocity [FPM]	VP
1000	.063
1400	.122
1800	.202
2200	.302
2600	.422
3000	.560
3400	.721
3800	.900
4200	1.100
4800	1.436
5000	1.560

SILENCER



Available for all sizes of Industrial Duct Fans with matching standard flanges for either inlet or outlet applications. Silencers are available in two sizes to better match system cost as well as sound attenuation parameters. All silencers utilize heavy-welded steel construction filled with high-density acoustical absorption material. For more detailed application information and attenuation performance, consult nyb.

SAFETY EQUIPMENT

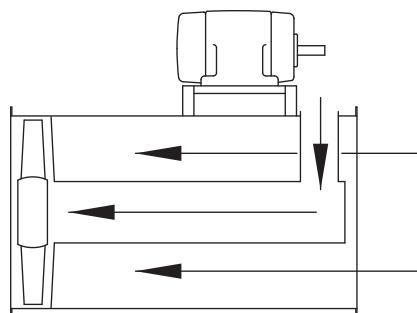
Safe operation of air-moving equipment is dependent on proper installation and maintenance. This includes selection and use of appropriate safety accessories for the specific installation. Such safety accessories are available from **nyb**. However, selection of the appropriate devices is the responsibility of the system designer who must be aware of the fan location, fan accessibility in the particular installation, and adjacent equipment. Neither **nyb** nor its sales representatives are in a position to make such a determination.

The system designer must consider providing guards for all exposed moving parts as well as protection from access to high velocity airstreams. Improper application, installation, maintenance, or safety guard selection can create danger to life and limb of personnel. Users and/or installers should read "Recommended Safety Practices for Air Moving Devices" as published by the Air Movement and Control Association, 30 West University Drive, Arlington Heights, Illinois 60004.

HEAT FAN AND HIGH MOISTURE ENGINEERING

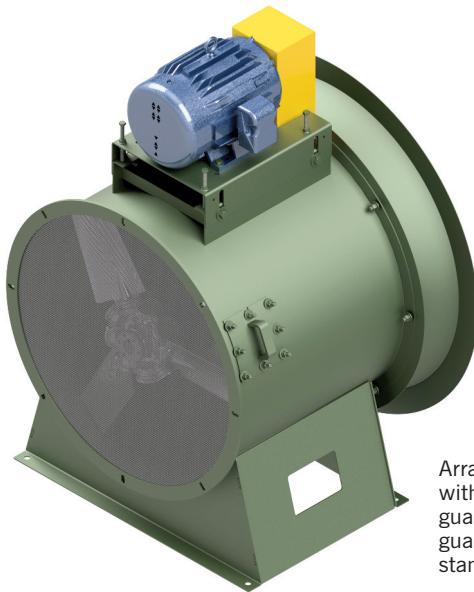
New York Blower Industrial Duct Fans, with heat-fan construction, are ideal for industrial oven and dryer exhaust systems where pressure requirements are minimal and compact, light-weight designs are advantageous. With heat-fan construction, Industrial Duct Fans are capable of handling airstream temperatures to 375°F in ambient environments up to 120°F.

For higher temperature applications, the Industrial Duct Fan, with heat-fan construction, induces a flow of cooler, ambient air through the belt well and inner tube, cooling the fan's internal components. Depending on temperature requirements, modifications include high-temperature fan wheel, special drive components, and modifications to provide internal ambient air cooling.

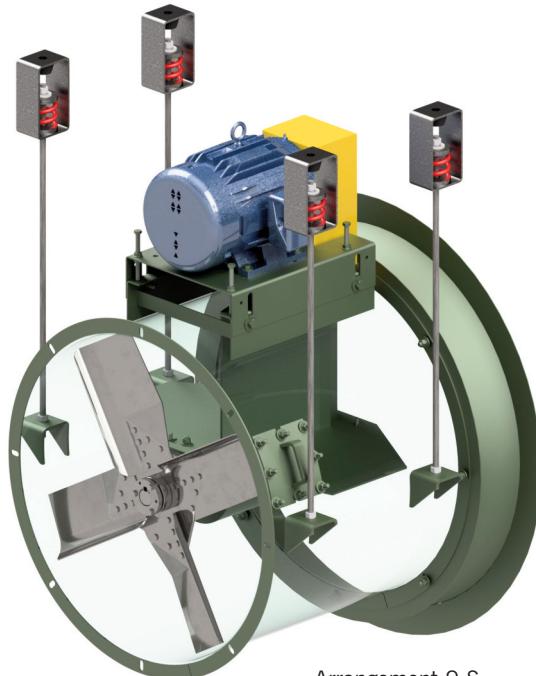


Fans handling hot airstreams must have sufficient airflow and be kept in operation until airstream temperatures cool below 120°F to prevent damage to the fan unit. The Industrial Duct Fan's ambient air cooling system is only effective while the fan is operating.

MOUNTING ARRANGEMENTS



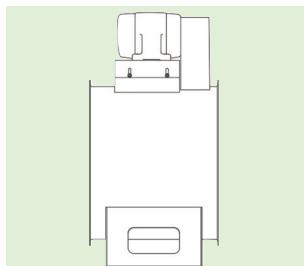
Arrangement 9-M
with motor, drive, belt
guard, inlet bell and outlet
guard (inspection door is
standard).



Arrangement 9-S
with optional
spring
isolation.

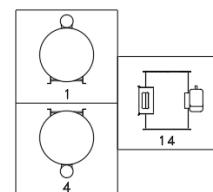
ARRANGEMENT

9-M WITH MOUNTING LEGS



Fabricated mounting legs facilitate fan mounting on the floor, ceiling, or in a vertical position on a wall. Flange connections are standard.

9-M Mounting Positions viewed from discharge end



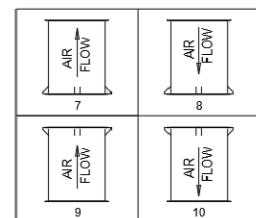
ARRANGEMENT

9-V FOR VERTICAL MOUNTING



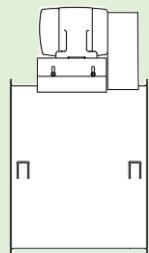
Fans are equipped with four mounting brackets suitable for floor, platform, or ceiling mounting. Motor is located on centerline between two of the four brackets. Standard construction includes flange connections, wheel retainer and shaft set collars.

9-V Mounting Positions



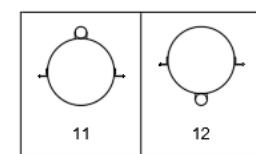
ARRANGEMENT

9-S FOR SUSPENDED MOUNTING



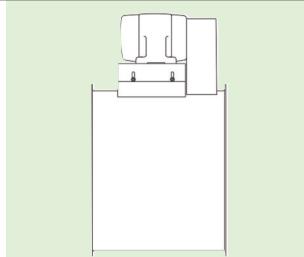
Fans for suspended mounting are equipped with side supports suitable for attachment to rods hung from the ceiling structure. Flange connections are standard.

9-S Mounting Positions



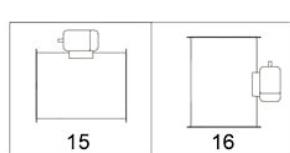
ARRANGEMENT

9-D FOR DUCT MOUNTING



Units feature flanges on inlet and discharge for mounting to the duct work.

9-D Mounting Positions



How to Use Capacity Tables

For a given fan size, CFM, and static pressure, capacity tables can be used to obtain outlet velocity, fan RPM, and BHP. If capacities are at conditions other than 70°F, sea level, or standard density [.075 lb./cu. ft.], correction factors must be applied to static pressure and BHP.

PROCEDURES	STEPS	EXAMPLE: A belt-drive fan with standard steel wheel is required for 9000 CFM at .75"WG at 100°F and 6000 feet above sea level.
If conditions other than standard are involved, correct static pressure for actual altitude and temperature using Chart IV.	1	Chart IV gives a 1.33 factor for 100°F and 6000 feet. Corrected SP is .75"WG x 1.33 = 1"WG at 70°F and sea level. Select fan from capacity tables for 9000 CFM at 1"WG.
Select size, RPM, and BHP of fan from capacity table.	2	A Size MPC-ALM 24 is selected for 9000 CFM at 1"WG at 2452 RPM and 3.12 BHP.
Check maximum safe speed of fan as shown in Charts II and III.	3	From Chart II, the maximum safe speed of a Size MPC-ALM 24 fan at 70°F is 3522 RPM. Using Chart III, the derate for the MPC-ALM wheel is 1.00. Fan is satisfactory for operation at 100°F.
Determine actual performance at operating conditions by correcting SP and BHP.	4	Actual performance: 9000 CFM at .75"WG (1.0 ÷ 1.33) at 2452 RPM at 2.35 BHP (3.12 ÷ 1.33) at 100°F and 6000 feet above sea level.

CHART II	Size	OPERATING SPEED			
		MPC Aluminum	OPC Aluminum	STF Steel	STO Steel
MAXIMUM OPERATING SPEEDS FOR STANDARD WHEELS BY WHEEL TYPE AT 70°F	12	4000	3500	3900	-
	15	4000	3500	3300	-
	18	4000	3500	3200	-
	24	3522	2100	2650	-
	27	2669	2000	2650	-
	30	2978	1800	2140	-
	34	2637	1800	1500	-
Maximum safe speeds apply only to wheels operated at or below stated temperature and free of material build-up, corrosion, or wear.	36	2103	1800	1500	1400
	42	2515	1800	1380	1300
	48	1909	1400	1190	1040

Operating Temperature	CHART III		
	MPC	OPC	STF/STO
70°F	1.0	1.0	1.0
100°F	1.0	1.0	0.87
200°F	1.0	0.98	0.83
300°F	1.0	-	0.82
375°F	0.86	-	0.81

MAXIMUM OPERATING SPEED INFORMATION

Maximum operating temperature for standard Arrangement 9 fans is 200°F. For temperatures above 200°F, as indicated by the tinted area in Chart IV, select heat-fan construction.

CHART IV CORRECTION FACTORS FOR TEMPERATURE AND ALTITUDE

Temperature °F	Altitude-feet above sea level												
	0	500	1000	1500	2000	3000	4000	5000	6000	7000	8000	9000	10000
-25	.82	.84	.85	.87	.89	.92	.95	.98	1.03	1.07	1.11	1.15	1.19
0	.87	.89	.91	.92	.94	.97	1.01	1.04	1.09	1.13	1.18	1.22	1.26
20	.91	.93	.95	.97	.98	1.02	1.05	1.09	1.14	1.18	1.23	1.27	1.32
40	.94	.96	.98	1.00	1.02	1.05	1.09	1.13	1.18	1.22	1.27	1.32	1.36
60	.98	1.00	1.02	1.04	1.06	1.10	1.14	1.18	1.23	1.27	1.32	1.37	1.42
70	1.00	1.02	1.04	1.06	1.08	1.12	1.16	1.20	1.25	1.30	1.35	1.40	1.45
80	1.02	1.04	1.06	1.08	1.10	1.14	1.18	1.22	1.28	1.33	1.38	1.43	1.48
100	1.06	1.08	1.10	1.12	1.15	1.19	1.23	1.27	1.33	1.38	1.43	1.48	1.54
120	1.09	1.11	1.13	1.16	1.18	1.22	1.26	1.31	1.36	1.42	1.47	1.53	1.58
160	1.17	1.19	1.22	1.24	1.26	1.31	1.36	1.40	1.46	1.52	1.58	1.64	1.70
200	1.25	1.28	1.30	1.33	1.35	1.40	1.45	1.50	1.56	1.63	1.69	1.75	1.81
300	1.43	1.46	1.49	1.52	1.55	1.61	1.67	1.74	1.79	1.86	1.93	2.00	2.07
350	1.53	1.56	1.59	1.62	1.65	1.72	1.78	1.85	1.91	1.99	2.06	2.14	2.21
375	1.58	1.61	1.64	1.67	1.70	1.78	1.84	1.91	1.97	2.06	2.13	2.21	2.28

BELT-DRIVE INDUSTRIAL DUCT FANS

Belt-drive Industrial Duct Fans are available in 10 Sizes ranging from 12 through 48 for aggressive airstreams and applications where temperatures may reach 375°F. Belt-drive arrangements include a shaft, bearings, and belt-well assembly that isolates bearings and drive components from airborne moisture and contaminants. In the event that system pressures or flow requirements change, Industrial Duct Fans offer inherent performance flexibility.



PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH STEEL WHEELS*

SIZE 12 Wheel Type STF Max Safe Speed 3900 RPM		Wheel diameter: 11 $\frac{3}{4}$ "								Inlet and outlet area: 0.79 sq. ft.									
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1919	2166	0.26	2244	0.29	2415	0.38	2578	0.46	2774	0.58	2994	0.73	3270	0.95	3534	1.20	3776	1.46
1700	2165	2435	0.36	2501	0.40	2653	0.49	2799	0.59	2945	0.69	3120	0.82	3311	0.99	3556	1.22	3776	1.46
1800	2292	2572	0.43	2636	0.47	2774	0.56	2914	0.66	3045	0.76	3200	0.89	3371	1.04	3446	1.11	3616	1.28
1900	2419	2708	0.50	2768	0.54	2894	0.63	3030	0.74	3156	0.84	3291	0.96	3446	1.11	3616	1.28	3791	1.48
2000	2546	2844	0.57	2900	0.62	3020	0.72	3150	0.83	3270	0.94	3391	1.05	3530	1.19	3680	1.35	3844	1.54
2200	2801	3120	0.75	3170	0.80	3274	0.91	3391	1.02	3508	1.15	3616	1.27	3729	1.40	3850	1.54		
2400	3056	3391	0.96	3442	1.02	3534	1.13	3636	1.25	3744	1.38	3850	1.52						
2600	3310	3666	1.22	3714	1.28	3800	1.40	3888	1.52										

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 15 Wheel Type STF Max Safe Speed 3300 RPM		Wheel diameter: 14 $\frac{3}{4}$ "								Inlet and outlet area: 1.23 sq. ft.									
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		11/16"SP		3/4"SP		7/8"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1900	1548	1631	0.20	1702	0.24	1858	0.32	2015	0.42	2195	0.53	2395	0.68	2512	0.78				
2100	1711	1786	0.26	1852	0.30	1989	0.39	2135	0.49	2280	0.60	2441	0.73	2530	0.80	2627	0.90	2834	1.12
2300	1874	1944	0.33	2004	0.38	2130	0.47	2260	0.58	2390	0.69	2526	0.82	2598	0.89	2673	0.96	2896	1.22
2500	2037	2106	0.42	2160	0.47	2270	0.56	2390	0.68	2510	0.80	2632	0.93	2693	0.99	2759	1.07	2976	1.34
2700	2200	2266	0.52	2315	0.57	2415	0.67	2526	0.79	2638	0.92	2748	1.05	2804	1.12	2859	1.19		
2900	2363	2426	0.64	2472	0.69	2567	0.80	2664	0.92	2768	1.05	2874	1.20	2925	1.27	2976	1.34		
3100	2526	2587	0.77	2632	0.83	2718	0.94	2808	1.06	2905	1.21	3000	1.35						
3300	2689	2753	0.93	2790	0.98	2870	1.10	2954	1.23										

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 18 Wheel Type STF Max Safe Speed 3200 RPM		Wheel diameter: 17 $\frac{3}{4}$ "								Inlet and outlet area: 1.77 sq. ft.									
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		1"SP			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2600	1471	1350	0.19	1425	0.23	1570	0.33	1762	0.46	1969	0.62	2170	0.81	2366	1.03				
2800	1584	1445	0.23	1510	0.27	1646	0.38	1808	0.51	1994	0.66	2186	0.84	2370	1.05				
3000	1698	1540	0.28	1602	0.32	1722	0.43	1863	0.55	2035	0.71	2210	0.89	2390	1.09	2733	1.59		
3300	1867	1680	0.35	1737	0.41	1848	0.52	1964	0.64	2104	0.80	2260	0.98	2424	1.17	2744	1.63		
3800	2150	1920	0.53	1969	0.58	2066	0.70	2164	0.84	2266	0.99	2384	1.16	2516	1.36				
4300	2433	2160	0.74	2204	0.81	2290	0.94	2375	1.08	2461	1.24	2552	1.41	2653	1.60				
5000	2829	2501	1.15	2536	1.22	2612	1.37	2684	1.52	2759	1.70								
5200	2943	2598	1.28	2632	1.36	2704	1.51												

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH STEEL WHEELS*

SIZE 24 Wheel Type STF Max Safe Speed 2650 RPM

Wheel diameter: 23 $\frac{3}{4}$ "

Inlet and outlet area: 3.14 sq.ft.

CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		1"SP		1 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	2546	962	0.55	1013	0.68	1099	0.93	1194	1.23	1310	1.61	1440	2.10	1611	3.00	1883	4.81	2046	6.07
10000	3183	1180	0.99	1220	1.15	1296	1.46	1365	1.77	1440	2.14	1520	2.54	1742	3.79	1944	5.30	2084	6.50
12000	3820	1400	1.63	1434	1.81	1500	2.19	1565	2.58	1622	2.95	1682	3.36	1828	4.33	1883	4.81	2046	6.07
13000	4138	1514	2.06	1545	2.25	1602	2.63	1662	3.04	1717	3.44	1777	3.91	1920	4.94	2024	5.94	2140	7.08
14000	4456	1626	2.54	1626	2.72	1708	3.15	1766	3.61	1818	4.03	1872	4.50	1969	5.16	2110	6.65	2210	7.78
15000	4775	1737	3.08	1762	3.28	1814	3.73	1868	4.22	1918	4.68	1969	5.16	2015	5.63	2295	8.34		
17000	5411	1960	4.39	1984	4.64	2030	5.14	2075	5.65	2124	6.22	2170	6.77	2215	7.31				
19000	6048	2185	6.07	2210	6.38	2250	6.91	2290	7.47										

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 27 Wheel Type STF Max Safe Speed 2650 RPM

Wheel diameter: 26 $\frac{5}{8}$ "

Inlet and outlet area: 3.98 sq. ft.

CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1258	816	0.23	872	0.30	978	0.46	1094	0.67	1285	1.08	1396	1.38	1545	1.89		
6000	1509	962	0.36	1008	0.44	1094	0.62	1185	0.83	1376	1.30	1465	1.60	1631	2.19	1777	2.87
7000	1761	1108	0.54	1148	0.63	1225	0.84	1300	1.05	1420	1.33	1490	1.59	1556	1.87		
8000	2012	1254	0.77	1290	0.88	1360	1.09	1420	1.33	1490	1.59	1556	1.87				
10000	2515	1550	1.44	1580	1.56	1636	1.83	1691	2.09	1742	2.39	1792	2.71	1848	3.02	1958	3.73
11000	2767	1697	1.87	1728	2.03	1777	2.29	1828	2.60	1883	2.93	1924	3.24	1969	3.59	2070	4.29
12000	3018	1848	2.41	1874	2.56	1924	2.88	1969	3.20	2015	3.52	2060	3.85	2100	4.22		
13000	3270	1998	3.04	2020	3.19	2070	3.55										

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 30 Wheel Type STF Max Safe Speed 2140 RPM

Wheel diameter: 29 $\frac{5}{8}$ "

Inlet and outlet area: 4.91 sq. ft.

CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9000	1833	1070	0.75	1196	1.17	1276	1.48	1365	1.85	1465	2.25	1580	2.77	1706	3.49				
9750	1986	1154	0.93	1270	1.38	1345	1.70	1420	2.06	1505	2.46	1602	2.94						
10500	2139	1236	1.14	1345	1.61	1416	1.96	1485	2.32	1554	2.70	1636	3.16	1728	1.69	1823	4.27		
11250	2292	1320	1.38	1425	1.90	1490	2.25	1554	2.63	1616	3.02	1686	3.46	1762	1.94	1848	4.51		
12750	2597	1485	1.94	1576	2.51	1636	2.91	1697	3.34	1752	3.75	1808	4.20	1863	4.65				
13500	2750	1570	2.28	1656	2.89	1712	3.30	1768	3.73	1823	4.18								
14250	2903	1651	2.64	1737	3.31	1792	3.76	1843	4.19										
15000	3056	1737	3.07	1818	3.76	2868	4.22												

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 34 Wheel Type STF Max Safe Speed 1500 RPM

Wheel diameter: 33 $\frac{5}{8}$ "

Inlet and outlet area: 6.31 sq. ft.

CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
9000	1427	752	0.56	792	0.69	867	0.99	978	1.45	1099	2.02	1230	2.83	1345	3.70			
10000	1586	826	0.72	867	0.89	932	1.20	1008	1.59	1124	2.18			1370	3.95	1456	4.69	
11000	1745	902	0.93	938	1.11	1002	1.46	1059	1.81	1144	2.33	1250	3.00					
12000	1903	978	1.18	1013	1.38	1070	1.74	1124	2.12	1185	2.57	1270	3.18					
14000	2220	1130	1.79	1159	2.01	1214	2.45	1265	2.92	1310	3.36	1356	3.82	1416	4.41			
15000	2379	1205	2.15	1234	2.40	1285	2.86	1334	3.36	1376	3.82	1420	4.32	1465	4.84	1500	5.23	
16000	2538	1285	2.61	1310	2.85	1360	3.36	1405	3.86	1445	4.35	1485	4.85					
17000	2696	1360	3.07	1385	3.35	1434	3.90	1476	4.41									

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH STEEL WHEELS*

SIZE 36 Wheel Type STF Max Safe Speed 1500 RPM								Wheel diameter: 35 ^{5/8} "		Inlet and outlet area: 7.07 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	2122	998	1.64	1079	2.31	1128	2.77	1174	3.23	1225	3.77	1290	4.48	1370	5.38	1450	6.28
15750	2228	1048	1.90	1124	2.59	1170	3.05	1214	3.53	1260	4.05	1314	4.69	1385	5.57	1460	6.50
16500	2334	1094	2.14	1165	2.84	1214	3.38	1256	3.87	1300	4.41	1345	4.98	1405	5.78	1470	6.66
17250	2440	1144	2.45	1210	3.16	1256	3.70	1300	4.25	1340	4.78	1380	5.32	1430	6.03	1490	6.92
18750	2653	1240	3.11	1300	3.86	1345	4.46	1385	5.04	1420	5.56	1460	6.19	1496	6.77		
19500	2759	1285	3.43	1345	4.25	1385	4.81	1425	5.42	1465	6.06	1500	6.65				
20250	2865	1334	3.84	1390	4.66	1430	5.26	1470	5.91								
21000	2971	1385	4.31	1436	5.11	1476	5.75										

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 36 Wheel Type STO Max Safe Speed 1400 RPM								Wheel diameter: 35 ^{5/8} "		Inlet and outlet area: 7.07 sq. ft.					
CFM	OV	1/16"SP		1/4"SP		1/2"SP		3/4"SP		1"SP		1 3/25"SP		1 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
17000	2405	968	2.61	1008	3.18	1070	4.17	1148	5.46	1250	7.13	1294	7.89		
17750	2511	1008	2.93	1048	3.54	1104	4.51	1176	5.81	1270	7.47	1314	8.28	1365	9.26
18250	2582	1038	3.21	1074	3.79	1130	4.80	1194	6.03	1285	7.73	1330	8.59	1374	9.45
19000	2688	1079	3.59	1114	4.20	1165	5.18	1225	6.43	1305	8.06	1350	8.97	1396	9.93
19750	2794	1119	3.98	1154	4.64	1205	5.69	1260	6.92	1330	8.48	1370	9.35		
20500	2900	1159	4.41	1194	5.11	1245	6.23	1294	7.40	1356	8.90	1394	9.80		
21250	3006	1205	4.99	1236	5.66	1280	6.68	1330	7.95	1385	9.39				
22000	3112	1245	5.47	1276	6.19	1320	7.28	1365	8.49						

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 42 Wheel Type STF Max Safe Speed 1380 RPM								Wheel diameter: 41 ^{5/8} "		Inlet and outlet area: 9.62 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16500	1715	786	1.34	862	2.01	907	2.47	958	3.04	1008	3.64	1064	4.35	1114	5.05		
18000	1871	852	1.69	927	2.46	968	2.94	1008	3.44	1053	4.05	1104	4.79	1154	5.55	1200	6.29
19500	2027	918	2.10	988	2.92	1028	3.44	1064	3.96	1104	4.56	1148	5.27	1194	6.05	1240	6.87
21000	2183	988	2.61	1053	3.49	1090	4.04	1124	4.58	1159	5.17	1200	5.90	1240	6.65	1280	7.44
24000	2495	1119	3.73	1180	4.78	1214	5.41	1245	6.01	1280	6.73	1310	7.39	1340	8.07	1374	8.87
25500	2650	1190	4.50	1245	5.55	1276	6.19	1310	6.92	1340	7.60	1370	8.32				
27000	2806	1256	5.26	1310	6.41	1340	7.09	1370	7.80								
28500	2962	1325	6.16	1374	7.32												

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 42 Wheel Type STO Max Safe Speed 1300 RPM								Wheel diameter: 41 ^{5/8} "		Inlet and outlet area: 9.62 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1871	812	2.24	852	2.91	878	3.36	912	3.96	984	5.25	1064	6.77	1148	8.51	1225	10.35
19000	1975	858	2.66	892	3.29	918	3.79	947	4.35	1013	5.65	1088	7.20	1165	8.90	1245	10.84
20000	2079	902	3.07	936	3.77	958	4.24	984	4.80	1044	6.10	1114	7.67	1185	9.35	1265	11.38
21000	2183	947	3.56	978	4.26	998	4.72	1024	5.33	1079	6.64	1244	8.23	1210	9.92	1280	11.80
23000	2391	1033	4.56	1064	5.40	1084	5.95	1104	6.51	1150	7.82	1205	9.40	1265	11.18		
24000	2495	1079	5.22	1104	5.94	1124	6.54	1144	7.15	1190	8.57	1240	10.13	1294	11.85		
25000	2598	1119	5.75	1148	6.65	1165	7.21	1185	7.86	1225	9.20	1274	10.85				
26000	2702	1165	6.50	1190	7.35	1210	8.05	1225	8.58	1265	10.02						

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH STEEL WHEELS*

SIZE 48		Wheel Type STF Max Safe Speed 1190 RPM				Wheel diameter: 47 ⁵ / ₁₆ "				Inlet and outlet area: 12.57 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	1592	675	1.53	700	1.78	796	2.97	847	3.70	898	4.47	953	5.38				
21500	1711	720	1.84	746	2.14	836	3.38	882	4.12	927	4.87	978	5.78	1028	6.75		
23000	1830	766	2.19	790	2.51	878	3.84	918	4.57	962	5.39	1004	6.21	1053	7.22	1099	8.25
24500	1950	812	2.60	836	2.95	922	4.39	958	5.11	998	5.94	1038	6.80	1079	7.72	1124	8.79
27500	2188	907	3.59	927	3.96	1008	5.58	1042	6.38	1074	7.19	1108	8.08	1144	9.04		
29000	2308	953	4.15	973	4.54	1048	6.18	1084	7.08	1114	7.90	1148	8.88	1180	9.82		
30500	2427	1002	4.82	1022	5.26	1094	6.98	1128	7.89	1159	8.80	1185	9.61				
32000	2546	1048	5.48	1068	5.97	1139	7.81	1170	8.70								

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

SIZE 48		Wheel Type STO Max Safe Speed 1040 RPM				Wheel diameter: 47 ⁵ / ₁₆ "				Inlet and outlet area: 12.57 sq. ft.							
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1432	546	1.22	564	1.44	595	1.84	635	2.39	675	2.98	756	4.30				
20000	1592	604	1.64	620	1.87	646	2.27	680	2.83	720	3.54	790	4.87	862	6.39		
22000	1751	660	2.11	675	2.36	700	2.82	730	3.41	761	4.04	830	5.56	892	7.04	962	8.90
24000	1910	720	2.73	735	3.04	756	3.49	781	4.06	806	4.66	872	6.32	927	7.81	988	9.59
28000	2228	836	4.24	847	4.53	867	5.10	887	5.70	907	6.32	958	7.98	1013	9.88		
30000	2387	896	5.22	907	5.56	922	6.05	942	6.72	962	7.42	1004	8.96	1			
32000	2546	953	6.24	962	6.55	982	7.28	998	7.89	1013							
34000	2706	1013	7.50	1018	7.70	1038	8.51										

*Wheels available on application with 304 SST or 316 SST blades at same capacity. Consult nyb.

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH MULTI-PIECE ALUMINUM WHEELS†

SIZE 12		Wheel Type MPC Max Safe Speed 6320 RPM				Wheel diameter: 11 ³ / ₄ "				Inlet and outlet area: 0.79 sq. ft.									
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	2292	2567	0.36	2653	0.40	2839	0.49	3025	0.58	3234	0.71	3497	0.89						
1900	2419	2698	0.41	2784	0.46	2956	0.56	3130	0.65	3320	0.77	3526	0.91	3830	1.17				
2000	2546	2834	0.48	2914	0.53	3074	0.63	3240	0.73	3417	0.84	3604	0.98	3830	1.17				
2100	2674	2965	0.54	3045	0.60	3196	0.71	3356	0.81	3516	0.92	3690	1.05	3878	1.22	4139	1.48		
2200	2801	3100	0.62	3174	0.68	3320	0.79	3468	0.90	3622	1.01	3782	1.14	3955	1.29	4139	1.48	4424	1.81
2300	2928	3236	0.70	3306	0.76	3446	0.89	3588	1.00	3734	1.11	3882	1.23	4042	1.38	4212	1.56	4424	1.81
2600	3310	3642	1.00	3704	1.07	3826	1.20	3950	1.34	4076	1.56	4206	1.59	4336	1.72	4336	1.88		
3000	3820	4182	1.51	4236	1.59	4342	1.59	4447	1.90										

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 15		Wheel Type MPC Max Safe Speed 5236 RPM				Wheel diameter: 14 ³ / ₄ "				Inlet and outlet area: 1.23 sq. ft.									
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		1"SP		1 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	1956	2090	0.31	2166	0.35	2315	0.44	2461	0.53	2612	0.64	2768	0.76	2914	0.89	3256	1.24		
2600	2119	2350	0.39	2320	0.43	2461	0.53	2596	0.62	2733	0.73	2876	0.85	3016	0.99	3280	1.27		
2800	2282	2415	0.48	2481	0.53	2612	0.63	2733	0.72	2859	0.84	2990	0.96	3125	1.10	3380	1.39	3642	1.73
3000	2445	2578	0.58	2538	0.63	2759	0.74	2880	0.85	2996	0.96	3114	1.08	3236	1.22	3482	1.52	3714	1.84
3400	2771	2910	0.84	2960	0.89	3070	1.01	3176	1.13	3280	1.25	3382	1.38	3486	1.52	3700	1.82		
3600	2934	3076	0.99	3125	1.05	3225	1.16	3326	1.29	3426	1.42	3522	1.55	3618	1.69				
3800	3097	3240	1.16	3285	1.21	3280	1.34	3477	1.47	3574	1.61	3666	1.74	3758	1.89				
4000	3260	3408	1.34	3448	1.40	3540	1.53	3632	1.67	3724	1.81	3811	1.95						

†Wheels available with polypropylene blades at same capacities. Consult nyb.

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH MULTI-PIECE ALUMINUM WHEELS†

SIZE 18 Wheel Type MPC Max Safe Speed 4519 RPM								Wheel diameter: 17 ³ / ₄ "				Inlet and outlet area: 1.77 sq. ft.					
CFM	OV	1/8"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 3/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3500	1981	1651	0.37	1746	0.46	1843	0.56	1944	0.67	2175	0.93	2420	1.24	2658	1.58		
4000	2263	1863	0.53	1944	0.62	2026	0.73	2115	0.85	2295	1.11	2501	1.42	2718	1.77	3136	2.58
4500	2546	2075	0.72	2146	0.82	2220	0.94	2295	1.07	2452	1.34	2618	1.65	2799	1.99	3185	2.80
5500	3112	2506	1.24	2567	1.38	2627	1.52	2684	1.65	2808	1.96	2934	2.28	3065	2.63	3351	3.43
6500	3678	2940	1.99	2994	2.15	3045	2.31	3094	2.47	3194	2.80	3300	3.16	3406	3.54		
7000	3961	3160	2.46	3210	2.64	3256	2.80	3302	2.97	3397	3.33	3488	3.69	3588	4.09	3627	4.46
7500	4244	3376	2.99	3426	3.19	3468	3.36	3512	3.54	3598	3.91	3686	4.30				
8000	4527	3594	3.59	3642	3.81	3684	4.01	3724	4.19								

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 24 Wheel Type MPC Max Safe Speed 3522 RPM								Wheel diameter: 23 ³ / ₄ "				Inlet and outlet area: 3.14 sq. ft.					
CFM	OV	1/8"SP		1/4"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP		2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1592	1200	0.34	1314	0.47	1520	0.76	1726	1.10	1924	1.50						
6000	1910	1396	0.53	1490	0.68	1671	0.99	1843	1.35	2015	1.75	2175	2.18				
8000	2546	1797	1.09	1878	1.30	2020	1.70	2160	2.12	2286	2.56	2415	3.04	2547	3.56	2799	4.68
9000	2865	1998	1.48	2075	1.72	2206	2.18	2335	2.65	2452	3.12	2567	3.62	2682	4.16	2914	5.33
11000	3501	2410	2.56	2476	2.85	2592	3.42	2698	3.99	2804	4.56	2905	5.13	3000	5.71	3185	6.94
12000	3820	2618	3.27	2678	2.58	2790	4.20	2890	4.83	2985	5.44	3080	6.06	3170	6.66	3346	7.97
14000	4456	3040	5.09	3085	5.40	3190	6.16	3280	6.89	3362	7.59	3446	8.32				
15000	4775	3250	6.20	3291	6.53	3391	7.35	3477	8.11								

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 27 Wheel Type MPC Max Safe Speed 2669 RPM								Wheel diameter: 26 ⁵ / ₈ "				Inlet and outlet area: 3.98 sq. ft.					
CFM	OV	1/16"SP		1/8"SP		1/4"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	755	695	0.08	796	0.12	988	0.23	1305	0.51	1620	1.00	1838	1.42				
4000	1006	867	0.14	947	0.19	1099	0.32	1376	0.63	1697	1.18	1894	1.61	2080	2.10	2250	2.61
5000	1258	1042	0.23	1110	0.30	1236	0.45	1476	0.78	1737	1.24	1909	1.69	2240	2.73	2390	3.29
7000	1761	1405	0.54	1460	0.64	1560	0.83										
9000	2264	1786	1.09	1823	1.21	1903	1.43	2055	1.94	2195	2.47	2326	3.01	2461	3.61	2596	4.26
10000	2515	1874	1.46	2009	1.59	2084	1.86	2220	2.39	2355	2.97	2472	3.56	2592	4.17		
11000	2767	2166	1.92	2195	2.05	2260	2.34	2395	2.94	2512	3.54	2632	4.20				
13000	3270	2547	3.09	2576	3.27	2627	3.60										

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 30 Wheel Type MPC Max Safe Speed 2978 RPM								Wheel diameter: 29 ⁵ / ₈ "				Inlet and outlet area: 4.91 sq. ft.					
CFM	OV	1/16"SP		1/8"SP		1"SP		1 1/4"SP		1 1/2"SP		1 3/4"SP		2"SP		2 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10500	2139	1356	1.08	1585	2.05	1823	3.35	1940	4.09	2055	4.87	2175	5.74	2286	6.61		
11500	2343	2480	1.40	1691	2.44	1914	3.82	2020	4.57	2126	5.38	2230	6.22	2335	7.12	2441	8.08
12500	2546	1602	1.76	1803	2.90	2004	4.32	2106	5.12	2206	5.96	2304	6.85	2400	7.76	2496	8.71
13500	2750	1726	2.19	1909	3.38	2104	4.91	2195	5.71	2290	6.59	2384	7.52	2472	8.45	2562	9.44
15500	3158	1974	3.25	2135	4.60	2310	6.28	2395	7.20	2472	8.08	2556	9.07				
16500	3361	2095	3.86	2250	5.32	2420	7.12	2496	8.03	2572	8.98						
17500	3565	2220	4.59	2366	6.13	2526	7.99	2602	8.96								
18500	3769	2346	5.41	2486	7.05												

†Wheels available with polypropylene blades at same capacities. Consult nyb.

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH MULTI-PIECE ALUMINUM WHEELS†

SIZE 34		Wheel Type MPC Max Safe Speed 2637 RPM				Wheel diameter: 33 ⁵ / ₈ "				Inlet and outlet area: 6.31 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		1/2"SP		3/4"SP		7/8"SP		1"SP		1 1/4"SP		1.37"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	2379	1038	1.86	1114	2.46	1220	3.35	1330	4.35	1390	4.92	1454	5.57	1602	7.38	1686 8.63	1717 9.21
16000	2538	1104	2.23	1176	2.88	1276	3.81	1374	4.82	1430	5.40	1485	6.00	1631	7.89		
17000	2696	1170	2.64	1236	3.32	1330	4.28	1425	5.37	1470	5.90	1525	6.55	1666	8.48	1686 8.63	1717 9.21
18000	2855	1236	3.11	1300	3.84	1390	4.86	1474	5.92	1520	6.52	1565	7.11	1717	9.35		
20000	3172	1370	4.21	1425	4.99	1505	6.11	1585	7.28	1622	7.87	1662	8.51	1746	9.87		
21000	3331	1436	4.84	1490	5.68	1565	6.83	1640	8.02	1676	8.63	1717	9.35				
22000	3489	1505	5.57	1554	6.41	1626	7.63	1697	8.84	1732	9.48						
23000	3648	1570	6.30	1616	7.16	1686	8.47										

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 36		Wheel Type MPC Max Safe Speed 2103 RPM				Wheel diameter: 35 ⁵ / ₈ "				Inlet and outlet area: 7.07 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		1/2"SP		5/8"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	1981	821	1.17	902	1.69	1008	2.48	1064	2.94	1119	3.42	1234	4.50	1345	5.64	1480 7.54	1510 8.23
15500	2193	902	1.54	978	2.12	1074	2.97	1124	3.45	1174	3.95	1274	5.03	1376	6.23		
17000	2405	984	1.98	1059	2.66	1144	3.55	1185	4.00	1230	4.52	1320	5.62	1414	6.87	1545 8.96	1545 8.96
18500	2617	1068	2.52	1134	3.23	1214	4.17	1254	4.69	1294	5.21	1376	6.35	1460	7.60		
21500	3042	1234	3.84	1290	4.67	1365	5.79	1396	6.30	1430	6.88	1500	8.11	1570	9.41		
23000	3254	1316	4.64	1370	5.55	1440	6.72	1474	7.34	1505	7.94	1565	9.12				
24500	3466	1400	5.57	1450	6.54	1516	7.77	1550	8.45	1580	9.09						
26000	3678	1485	6.64	1530	7.62	1596	9.01										

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 42		Wheel Type MPC Max Safe Speed 2615 RPM				Wheel diameter: 41 ⁵ / ₈ "				Inlet and outlet area: 9.62 sq. ft.							
CFM	OV	1/16"SP		3/8"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/4"SP		2 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1871	756	1.41	876	2.50	1013	4.08	1099	5.20	1276	7.82	1450	10.93	1530	12.57	1620 15.21	1636 16.20
20000	2079	836	1.89	947	3.10	1070	4.76	1150	5.98	1305	8.59	1465	11.70	1545	13.45		
22000	2287	916	2.47	1018	3.78	1128	5.50	1205	6.84	1345	9.53	1490	12.65	1565	14.42	1660 17.37	1660 17.37
24000	2495	993	3.13	1090	4.57	1190	6.34	1260	7.73	1394	10.65	1525	13.80	1591	15.50		
28000	2910	1154	4.88	1236	6.49	1325	8.48	1385	9.98	1505	13.27	1620	16.71	1671	18.32		
30000	3118	1234	5.95	1310	7.65	1400	9.89	1454	11.40	1565	14.78	1671	18.30				
32000	3326	1314	7.17	1385	8.95	1470	11.31	1520	12.84	1622	16.25						
34000	3534			1465	10.54	1545	13.01	1591	14.55	1686	18.04						

†Wheels available with polypropylene blades at same capacities. Consult nyb.

SIZE 48		Wheel Type MPC Max Safe Speed 1909 RPM				Wheel diameter: 47 ⁵ / ₁₆ "				Inlet and outlet area: 12.57 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
26000	2069	770	2.37	847	3.37	892	4.03	942	4.82	1033	6.45	1119	8.19	1205	10.11	1294	12.33
30000	2387	878	3.47	947	4.61	988	5.38	1033	6.26	1114	8.02	1194	9.97	1270	11.99	1345	14.15
32000	2546	936	4.20	998	5.35	1038	6.18	1079	7.08	1159	8.98	1234	10.97	1305	13.03	1374	15.17
34000	2706	993	5.01	1053	6.25	1088	7.06	1124	7.93	1200	9.89	1274	12.01	1345	14.24	1410	16.43
38000	3024	1104	6.83	1159	8.25	1194	9.21	1225	10.12	1290	12.13	1360	14.46	1425	16.81	1485	19.15
42000	3342	1214	9.01	1265	10.64	1300	11.76	1330	12.80	1385	14.83	1445	17.14				
44000	3501	1270	10.29	1320	12.06	1350	13.09	1380	14.20	1436	16.43	1494	18.85				
48000	3820	1385	13.34	1430	15.25	1460	16.47	1485	17.53								

†Wheels available with polypropylene blades at same capacities. Consult nyb.

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH CAST ALUMINUM WHEELS

SIZE 12 Wheel Type OPC Max Safe Speed 3500 RPM								Wheel diameter: 11 ³ / ₄ "				Inlet and outlet area: 0.79 sq. ft.							
CFM	OV	1/16"SP		1/8"SP		3/16"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		11/16"SP		3/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1528	1662	0.13	1777	0.14	1872	0.20	1984	0.24	2275	0.36	2622	0.55	2930	0.76	3070	0.88	3210	1.00
1400	1783	1903	0.19	2004	0.24	2095	0.28	2180	0.32	2375	0.42	2627	0.55	2950	0.79	3150	0.97	3254	1.06
1600	2037	2150	0.28	2240	0.33	2320	0.37	2400	0.42	2547	0.52	2728	0.63	2896	0.76	3060	0.89	3150	1.00
1800	2292	2400	0.38	2476	0.43	2552	0.49	2627	0.54	2759	0.65	2895	0.76	3105	0.93	3225	1.05	3296	1.12
2000	2546	2647	0.51	2718	0.57	2790	0.63	2859	0.69	2985	0.81	314	1.00	3322	1.12	3432	1.26	3371	1.20
2200	2801	2900	0.66	2965	0.73	3030	0.80	3094	0.86	3214	1.00	3322	1.12	3432	1.26	3486	1.32		
2400	3056	3154	0.85	3210	0.92	3270	0.99	3331	1.06	3442	1.20								
2600	3310	3406	1.06	3462	1.14														

SIZE 15 Wheel Type OPC Max Safe Speed 3500 RPM								Wheel diameter: 14 ³ / ₄ "				Inlet and outlet area: 1.23 sq. ft.							
CFM	OV	1/16"SP		1/8"SP		3/16"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1630	1394	0.18	1460	0.21	1600	0.30	1737	0.38	1894	0.49	2204	0.78	2320	0.91	2582	1.25	2682	1.40
2500	2037	1712	0.33	1768	0.37	1868	0.46	1984	0.57	2095	0.67	2492	1.13	2636	1.33	2724	1.47	2808	1.61
2900	2363	1969	0.50	2020	0.55	2106	0.64	2195	0.75	2295	0.87	2395	1.00	2547	1.20	2636	1.33		
3200	2608	2160	0.66	2206	0.71	2290	0.82	2370	0.93	2456	1.06	2547	1.20	2704	1.42	2788	1.57	2879	1.72
3500	2852	2355	0.85	2395	0.90	2476	1.02	2547	1.14	2622	1.27	2704	1.42	2945	1.83	3020	1.99	2950	1.87
3800	3097	2547	1.07	2587	1.13	2664	1.27	2733	1.39	2799	1.52	2870	1.67						
4100	3341	2744	1.34	2779	1.40	2854	1.55	2916	1.68	2980	1.82								
4400	3586	2940	1.64	2974	1.71														

SIZE 18 Wheel Type OPC Max Safe Speed 3500 RPM								Wheel diameter: 17 ³ / ₄ "				Inlet and outlet area: 1.77 sq. ft.							
CFM	OV	1/8"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 3/4"SP			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3500	1981	1651	0.37	1746	0.46	1843	0.56	1944	0.67	2175	0.93	2420	1.24	2658	1.58	3136	2.58		
4000	2263	1863	0.53	1944	0.62	2026	0.73	2115	0.85	2295	1.11	2501	1.42	2718	1.77	3185	2.80		
4500	2546	2075	0.72	2146	0.82	2220	0.94	2295	1.07	2452	1.34	2618	1.65	2799	1.99	3065	2.63	3351	3.43
5500	3112	2506	1.24	2567	1.38	2627	1.52	2684	1.65	2808	1.96	2934	2.28						
6500	3678	2940	1.99	2994	2.15	3045	2.31	3094	2.47	3194	2.80	3300	3.16	3406	3.54	3627	4.36		
7000	3961	3160	2.46	3210	2.64	3256	2.80	3302	2.97	3397	3.33	3488	3.69	3588	4.09				
7500	4244	3376	2.99	3426	3.19	3468	3.36	3512	3.54	3598	3.91	3686	4.30						
8000	4527	3594	3.59	3642	3.81	3684	4.01	3724	4.19										

SIZE 24 Wheel Type OPC Max Safe Speed 2100 RPM								Wheel diameter: 23 ³ / ₄ "				Inlet and outlet area: 3.14 sq. ft.							
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		1"SP		1 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	955	660	0.08	735	0.12	878	0.21	1022	0.32	1110	0.42	1220	0.55	1325	0.78	1500	1.03	1671	1.39
4000	1273	832	0.15	892	0.20	1002	0.30	1154	0.44	1245	0.57	1330	0.71	1416	1.00	1611	1.27	1757	1.66
5000	1592	1013	0.26	1064	0.32	1154	0.44	1394	0.77	1465	1.92	1540	1.20						
6000	1910	1200	0.42	1240	0.48	1320	0.63												
7000	2228	1385	0.63	1425	0.72	1490	0.87	1556	1.04	1620	1.21	1682	1.42	1746	1.58	1872	2.00	1994	2.42
8000	2546	1574	0.92	1606	1.01	1671	1.19	1726	1.37	1782	1.56	1838	1.67	1894	1.96	2004	2.40		
9000	2865	1762	1.29	1792	1.39	1848	1.58	1903	1.79	1954	2.01	2004	2.22	2055	2.45				
10000	3183	1949	1.73	1980	1.86	2030	2.06	2080	2.29										

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH CAST ALUMINUM WHEELS

SIZE 27 Wheel Type OPC Max Safe Speed 2000 RPM								Wheel diameter: 26 ^{5/8} "				Inlet and outlet area: 3.98 sq. ft.					
CFM	OV	1/16"SP		1/8"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1258	735	0.18	801	0.25	918	0.39	1033	0.56	1134	0.74	1385	1.34	1602	2.07		
6000	1509	862	0.29	916	0.37	1013	0.52	1114	0.70	1210	0.90			1671	2.37	1803	2.96
7000	1761	988	0.43	1033	0.51	1119	0.69	1205	0.88	1294	1.10	1454	1.56				
8000	2012	1119	0.62	1159	0.72	1236	0.91	1310	1.12	1385	1.34	1534	1.84				
10000	2515	1380	1.13	1414	1.27	1476	1.50	1540	1.76	1596	2.00	1717	2.56				
11000	2767	1514	1.49	1545	1.63	1600	1.89	1660	2.17	1712	2.43	1818	3.01				
12000	3018	1646	1.90	1671	2.04	1726	2.35	1777	2.63	1832	2.94	1929	3.55				
13000	3270	1782	2.41	1803	2.55	1852	2.87	1903	3.20	1949	3.50						

SIZE 30 Wheel Type OPC Max Safe Speed 1800 RPM								Wheel diameter: 29 ^{5/8} "				Inlet and outlet area: 4.91 sq. ft.					
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		7/8"SP		1"SP		1 3/25"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1630	892	0.46	1033	0.79	1128	1.03	1225	1.31	1414	1.92	1520	2.31				
9000	1833	993	0.63	1119	0.98	1200	1.24	1285	1.53	1450	2.16	1536	2.50				
10000	2037	1094	0.83	1210	1.23	1280	1.49	1354	1.78	1510	2.47	1580	2.80				
11000	2241	1196	1.08	1300	1.50	1370	1.81	1434	2.11	1576	2.81	1646	3.20				
13000	2648	1400	1.71	1485	2.19	1550	2.56	1611	2.93	1717	3.62	1777	4.03				
14000	2852	1505	2.12	1585	2.64	1640	3.00	1697	3.39								
15000	3056	1611	2.59	1682	3.12	1732	3.50	1788	3.93								
16000	3260	1712	3.10	1782	3.68												

SIZE 34 Wheel Type OPC Max Safe Speed 1800 RPM								Wheel diameter: 33 ^{5/8} "				Inlet and outlet area: 6.31 sq. ft.					
CFM	OV	1/16"SP		1/4"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11000	1745	962	0.82	1064	1.27	1130	1.58	1194	1.92	1325	2.69	1450	3.51	1565	4.38		
12000	1903	1042	1.03	1139	1.52	1200	1.87	1256	2.20	1376	3.00	1496	3.87	1611	4.81		
13000	2062	1124	1.29	1216	1.81	1270	2.18	1325	2.54	1434	3.35	1545	4.27	1651	5.20		
14000	2220	1205	1.58	1294	2.14	1345	2.54	1394	2.92	1496	3.75	1596	4.67	1697	5.66		
16000	2538	1370	2.30	1450	2.94	1496	3.37	1540	3.82	1626	4.69	1717	5.68				
17000	2696	1454	2.75	1525	3.37	1574	3.87	1616	4.35	1697	5.28	1782	6.27				
18000	2855	1536	3.23	1606	3.91	1651	4.41	1691	4.90	1768	5.90						
19000	3013	1620	3.79	1682	4.45	1728	4.99	1768	5.52								

SIZE 36 Wheel Type OPC Max Safe Speed 1800 RPM								Wheel diameter: 35 ^{5/8} "				Inlet and outlet area: 7.07 sq. ft.					
CFM	OV	1/4"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP		1 3/4"SP		2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1415	841	0.84	998	1.46	1128	2.10	1250	2.83	1370	3.67	1485	4.60				
11500	1627	836	1.08	1064	1.75	1190	2.47	1300	3.22	1405	4.04	1514	4.99	1616	5.99		
13000	1839	936	1.40	1134	2.09	1254	2.89	1360	3.69	1460	4.56	1554	5.47	1651	6.51		
14500	2051	1038	1.76	1214	2.51	1320	3.34	1425	4.24	1520	5.16	1611	6.13	1697	7.14		
17500	2476	1310	2.75	1390	3.58	1470	4.46	1560	5.48	1651	6.57	1732	7.62				
19000	2688	1405	3.33	1480	4.21	1556	5.18	1636	6.23	1717	7.33	1797	8.48				
20500	2900	1505	4.04	1576	4.99	1642	5.96	1717	7.09	1792	8.25						
22000	3112	1606	4.86	1671	5.84	1737	6.93	1797	7.97								

Performance certified is for 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).

PERFORMANCE FOR INDUSTRIAL DUCT FANS WITH CAST ALUMINUM WHEELS

SIZE 42		Wheel Type OPC Max Safe Speed 1800 RPM				Wheel diameter: 41 ⁵ / ₈ "				Inlet and outlet area: 9.62 sq. ft.							
CFM	OV	1/16"SP		3/8"SP		1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1871	806	1.43	938	2.59	984	3.05	1079	4.13	1174	5.36	1336	7.81	1505	10.82	1662	14.19
20000	2079	892	1.92	1013	3.20	1053	3.68	1139	4.80	1225	6.06	1385	8.78	1530	11.66	1680	15.05
22000	2287	973	2.46	1084	3.85	1128	4.45	1205	5.61	1280	6.85	1436	9.81	1570	12.76	1706	16.12
24000	2495	1059	3.16	1159	4.63	1200	5.27	1274	6.54	1345	7.87	1485	10.81	1622	14.13	1742	17.38
28000	2910	1230	4.91	1316	6.63	1350	7.31	1420	8.82	1480	10.23	1602	13.38	1726	16.97		
30000	3118	1316	5.99	1394	7.78	1430	8.61	1494	10.15	1554	11.71	1666	14.91	1777	18.41		
32000	3326	1405	7.31	1476	9.16	1505	9.92	1570	11.65	1626	13.26	1732	16.59				
34000	3534	1490	8.68	1556	10.62	1585	11.48	1646	13.30	1702	15.05						

SIZE 48		Wheel Type OPC Max Safe Speed 1400 RPM				Wheel diameter: 47 ⁵ / ₁₆ "				Inlet and outlet area: 12.57 sq. ft.							
CFM	OV	1/16"SP		1/4"SP		1/2"SP		3/4"SP		7/8"SP		1"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1432	586	0.91	680	1.60	801	2.70	907	3.90	953	4.49	1004	5.20	1099	6.67	1194	8.38
21000	1671	675	1.37	756	2.14	862	3.34	962	4.68	1008	5.37	1053	6.10	1134	7.54	1220	9.24
24000	1910	766	1.98	836	2.83	927	4.08	1022	5.60	1064	6.33	1108	7.14	1185	8.71	1256	10.31
27000	2149	856	2.74	918	3.66	1002	5.07	1084	6.61	1124	7.42	1165	18.30	1240	10.02	1310	11.78
33000	2626	1038	4.82	1088	5.91	1159	7.58	1225	9.26	1256	10.10	1290	11.05	1360	13.13		
36000	2865	1128	6.16	1174	7.33	1240	9.13	1300	10.89	1330	11.82	1360	12.77				
39000	3104	1220	7.77	1260	8.95	1320	10.85	1380	12.86								
42000	3342	1310	9.58	1350	10.94												

Performance certified is for 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).

FAN TESTING AND SUPPORT SERVICES

With the completion of the laboratory in 2015, New York Blower has significantly expanded its air and sound testing capabilities. The state of the art facility contains six airflow test chambers of various flow and pressure capabilities and two reverberant sound rooms. The facility will be used for research and development, training and hosting customers to experience testing of their fans before field installation. Some of the testing services offered are listed below. In addition to our lab, our field service technicians can provide assistance for preventative maintenance for fans and can repair, rebuild or replace any fan manufacturers' fans.

- Material Certification – **nyb** can provide material test reports on all materials and hardware. Additionally, **nyb** can provide in-house PMI (Positive Material Identification) testing on all non-Carbon Steel Alloys through the use of our x-ray fluorescence (XRF) analyzers.
- Wheel Balance – **nyb** balances all wheels to a minimum of an ISO G6.3 dynamic balance. In addition, **nyb** offers a tighter balance to G2.5 and on some wheels a G1.0 complete with a certified balance report.
- Weld Documentation – **nyb** can provide a range of weld documentation including weld maps, weld procedure specification (WPS), and welder qualification records with continuity reports.
- Weld Procedures – **nyb** offers welding in accordance with AWS D1.1 and ASME BPVC Section IX.
- Chemical Passivation – a chemical dip or liquid is applied to SST surfaces to eliminate any traces of carbon steel.

- Mechanical Run Tests – **nyb** offers a mechanical run test where the fan is run until bearing temperatures stabilize and then vibration readings are recorded. Bearing temperatures are recorded at 10 minute intervals during bearing temperature stabilization. Time intervals can range from 1 – 4 hours.
- Shaft Run Out Verification – All standard shafts are straightened to .002" TIR. In addition, **nyb** can provide interference fit shafting and documentation of the shaft run out.
- Barcol Hardness Test – **nyb** offers a Barcol hardness test on our fiberglass reinforced plastic (FRP) products. The Barcol hardness test characterizes the indentation hardness of materials through the depth of penetration of an indentor, loaded on a material sample and compared to the penetration in a reference material.
- Field Services - We offer a full-service Field Service Department for fan troubleshooting. **nyb** can provide state of the art equipment for in-field alignment, balancing, and analysis. Our field service personnel have years of field training combined with specialized schooling in the latest techniques and can assist our customers with ours or any competitor's fan. **nyb** also offers an extensive Field Service Department for fan startup and troubleshooting. Our technicians have the flexibility to repair or rebuild any fan manufacturer's equipment. Our trained personnel can field measure a fan, or we can arrange to have a unit sent to our shop for duplication.

MATERIAL SPECIFICATIONS

Dimensions in inches. Weights in pounds. WR² in lb.-ft.².

Size	Wheel Type	Optional Wheel* Material	Wheel Speed (RPM)	No. of Blades	Wheel Weight	Wheel WR ²	Bushing Type	Shaft Diameter	Bearings	App. bare fan weight		Housing gauge
										9M	9-S, 9-V, 9-D	
12	MPC-ALM	POLYPROPYLENE	4000	3	2.0	0.1	—	1	A	89	68	10
12	OPC-ALM	—	3500	6	5.3	0.4	H	1	A	93	72	10
12	STF-STL	304 / 316 SST	3900	4	3.0	0.7	—	1	A	90	69	10
15	MPC-ALM	POLYPROPYLENE	4000	3	2.0	0.1	—	1	A	103	79	10
15	OPC-ALM	—	3500	6	5.8	0.6	H	1	A	107	83	10
15	STF-STL	304 / 316 SST	3300	4	4.9	1.8	—	1	A	106	82	10
18	MPC-ALM	POLYPROPYLENE	4000	6	4.0	0.4	—	1	A	122	95	10
18	OPC-ALM	—	3500	6	6.3	1.0	H	1	A	124	97	10
18	STF-STL	304 / 316 SST	3200	4	5.8	3.2	—	1	A	124	97	10
24	MPC-ALM	POLYPROPYLENE	3522	3	6.3	0.9	P1	1 3/16	A	166	132	10
24	OPC-ALM	—	2100	4	9.8	3.2	H	1 3/16	A	169	135	10
24	STF-STL	304 / 316 SST	2650	4	12.4	11.1	H	1 3/16	A	172	138	10
27	MPC-ALM	POLYPROPYLENE	2669	3	7.7	1.7	P1	1 7/16	A	188	153	10
27	OPC-ALM	—	2000	4	10.3	3.4	H	1 7/16	A	191	156	10
27	STF-STL	304 / 316 SST	2650	4	15.1	17.0	P1	1 7/16	A	195	160	10
30	MPC-ALM	POLYPROPYLENE	2978	6	10.3	3.0	P1	1 7/16	A	212	171	10
30	OPC-ALM	—	1800	4	10.8	3.7	H	1 7/16	A	212	171	10
30	STF-STL	304 / 316 SST	2140	4	18.0	25.4	P1	1 7/16	A	219	178	10
34	MPC-ALM	POLYPROPYLENE	2637	6	11.3	4.8	P1	1 7/16	A	281	230	10
34	OPC-ALM	—	1800	6	19.3	8.7	P1	1 7/16	A	289	238	10
34	STF-STL	304 / 316 SST	1500	4	21.8	40.2	P1	1 7/16	A	291	240	10
36	MPC-ALM	POLYPROPYLENE	2103	6	13.3	5.4	P1	1 7/16	A	323	266	10
36	OPC-ALM	—	1800	6	21.3	10.3	P1	1 7/16	A	331	274	10
36	STF-STL	304 / 316 SST	1500	4	23.8	49.6	P1	1 7/16	A	333	276	10
36	STO-STL	304 / 316 SST	1400	8	39.8	84.8	P1	1 7/16	A	349	292	10
42	MPC-ALM	POLYPROPYLENE	2615	5	30.0	17.0	SK	1 11/16	A	456	391	10
42	OPC-ALM	—	1800	6	25.3	22.8	P1	1 11/16	A	451	386	10
42	STF-STL	304 / 316 SST	1380	4	36.5	99.3	Q1	1 11/16	A	463	398	10
42	STO-STL	304 / 316 SST	1300	8	58.0	163.9	Q1	1 11/16	A	484	419	10
48	MPC-ALM	POLYPROPYLENE	1909	3	31.0	21.9	SK	1 15/16	A	547	467	10
48	OPC-ALM	—	1400	6	43.5	34.6	Q1	1 15/16	A	559	479	10
48	STF-STL	304 / 316 SST	1190	4	42.0	149.6	Q1	1 15/16	A	558	478	10
48	STO-STL	304 / 316 SST	1040	8	63.0	231.2	Q1	1 15/16	A	579	499	10

Bearing type: A–D-Lok (DLAH) Pillow Block Ball Bearings. Wheel weight includes bushing. Bare fan weight includes wheel, housing, shaft, bearings, motor platform and bearing cover. Maximum wheel speeds and bore type may differ with optional wheels.

nyb reserves the right to substitute bearings of equal quality.

*Consult nyb for price and availability.

INLET BELL DIMENSIONS	Size	Y	O.D.										
				12	15	18	24	27	30	34	36	42	48
			O.D.	2 1/8	2 5/8	3 1/8	4 1/8	4 5/8	5 1/4	5 7/8	6 1/4	7 1/4	8 1/4
				16 1/4	20 1/4	24 1/4	32 3/8	36 3/8	40 1/2	45 7/8	48 5/8	56 5/8	64 3/8

Tolerance: $\pm 1/8"$. See Chart 1 on page 5 for change in velocity pressure.

FAN SELECTION AND DRAWINGS

In order to help make fan selection easier, New York Blower has an online tool at www.nyb.com. Fan-to-Size Online allows users to select fans by product category, application or by entering operating conditions. Once the fan is selected, the user has the option to view the curve, print the results or save the selection for future use. In addition, they can create a drawing package for the selected fan using Drawings on Demand. Custom fans and modifications are also available for specialized applications. For help with selection, contact your local sales representative.

DIMENSIONS

Dimensions should not be used for construction unless certified. See page 6 for available mounting positions.
Note motor size capability on page 18. Tolerance: $\pm 1/8"$.

MOTOR SIZE CAPABILITY

Size	Arrangement 9	
	Maximum C-[N-W]	Maximum frame size
12	11 3/4	145T
15	12 1/4	145T
18	13 3/8	184T
24	16 3/4	215T
27	16 3/4	215T
30	16 3/4	215T
34	17	215T
36	20	215T
42	20	256T
48	20	256T

Arrangement 9 maximums are with or without weather cover.

FAN FLANGE DIMENSIONS

Size	Flange gauge	Fan ID	Bolting circle			Flange OD	Flange Slots*	
			Min.	Center	Max.		No.	Size†
12	1/4"	12	13 1/16	13 1/4	13 7/16	14 1/4	8	7/16 x 5/8
15	1/4"	15	16 1/16	16 1/4	16 7/16	17 1/4	8	7/16 x 5/8
18	1/4"	18	19 1/16	19 1/4	19 7/16	20 1/4	8	7/16 x 5/8
24	10	24	25 9/16	25 3/4	25 15/16	27 1/8	8	7/16 x 5/8
27	10	27	28 9/16	28 3/4	28 15/16	30 1/8	8	7/16 x 5/8
30	10	30	31 9/16	31 3/4	31 15/16	33 1/8	8	7/16 x 5/8
34	10	34	35 9/16	35 3/4	35 15/16	37 1/8	8	7/16 x 5/8
36	10	36	37 11/16	37 7/8	38 1/16	39 1/4	8	7/16 x 5/8
42	1/4"	42	43 7/16	43 5/8	43 13/16	45	8	7/16 x 5/8
48	1/4"	47 3/4	49 7/16	49 5/8	49 13/16	51	8	7/16 x 5/8

*Slots spaced equally, straddling centerline. Tolerance: $\pm 1/8"$

WHEEL DETAILS

Dimensions in inches. Weights in pounds. WR² in lb.-ft.²

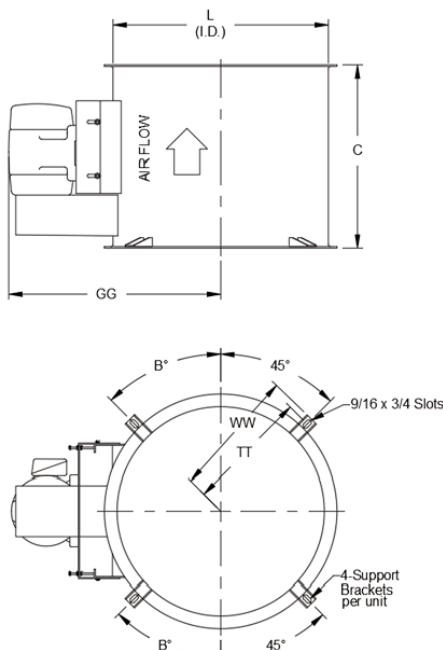
Size	MPC					OPC					STF and STO					
	Number of Blades	Wheel Weight	Wheel WR ²	Bushing Type	Shaft Diameter	Number of Blades	Wheel Weight	Wheel WR ²	Bushing Type	Shaft Diameter	Type	Number of Blades	Wheel Weight	Wheel WR ²	Bushing Type	Shaft Diameter
12	3	2.0	0.1	—	1	6	5.3	0.4	H	1	STF	4	3.0	0.7	—	1
15	3	2.0	0.1	—	1	6	5.8	0.6	H	1	STF	4	4.9	1.8	—	1
18	6	4.0	0.4	—	1	6	6.3	1.0	H	1	STF	4	5.8	3.2	—	1
24	3	6.3	0.9	P1	1 3/16	4	9.8	3.2	H	1 3/16	STF	4	12.4	11.1	H	1 3/16
27	3	7.7	1.7	P1	17/16	4	10.3	3.4	H	17/16	STF	4	15.1	17.0	P1	17/16
30	6	10.3	3.0	P1	17/16	4	10.8	3.7	H	17/16	STF	4	18.0	25.4	P1	17/16
34	6	11.3	4.8	P1	17/16	6	19.3	8.7	P1	17/16	STF	4	21.8	40.2	P1	17/16
36	6	13.3	5.4	P1	17/16	6	21.3	10.3	P1	17/16	STF	4	23.8	49.6	P1	17/16
36	—	—	—	—	—	—	—	—	—	—	STO	8	39.8	84.8	P1	17/16
42	5	30.0	17.0	SK	1 11/16	6	25.3	22.8	P1	1 11/16	STF	4	36.5	99.3	Q1	1 11/16
42	—	—	—	—	—	—	—	—	—	—	STO	8	58.0	163.9	Q1	1 11/16
48	3	31.0	21.9	SK	1 5/16	6	43.5	34.6	Q1	1 15/16	STF	4	42.0	149.6	Q1	1 5/16
48	—	—	—	—	—	—	—	—	—	—	STO	8	63.0	231.2	Q1	1 5/16

*Wheel weight includes bushing.

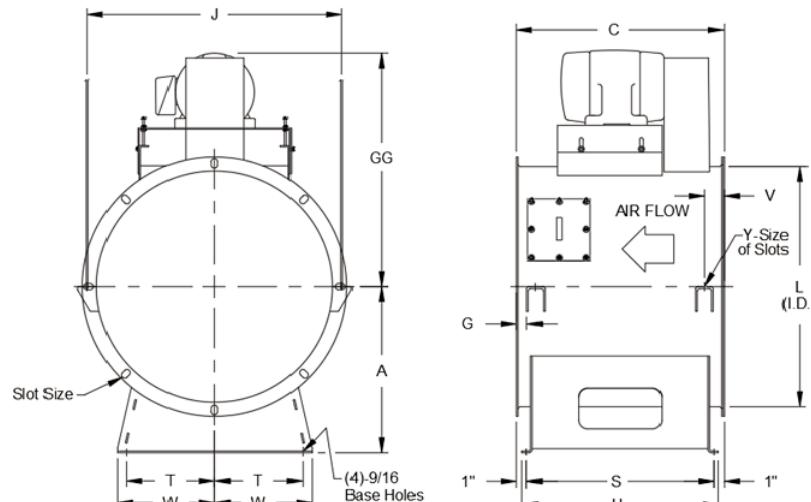
DIMENSIONS

Dimensions should not be used for construction unless certified. See page 6 for available mounting positions.
Note motor size capability on page 18. Tolerance: $\pm 1/8"$.

ARRANGEMENT 9-V



ARRANGEMENTS 9-M, 9-S, AND 9-D



DIMENSIONS [INCHES]

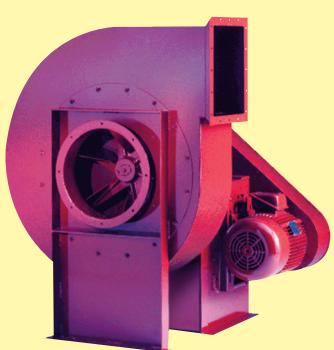
Size	9-D, 9-M, 9-S, 9-V			9-M Only				9-V Only			9-S Only				
	C	L	GG [Max] [Approx]	A	S	T	U	W	B°	TT	WW	G	J	V	Y
12	20	12	19 5/8	13	18	7 1/8	19 1/2	8	25	7 5/8	8 5/8	1	14 1/4*	2	5/8 x 7/8
15	20	15	21 5/8	14 1/2	18	8 5/8	19 1/2	9 1/2	35	9	10	1	17 1/4	2	5/8 x 7/8
18	20	18	24 5/8	16	18	10 1/8	19 1/2	11	45	10 7/16	11 7/16	1	20 1/4	2 1/2	5/8 x 7/8
24	21	24	29 1/8	19	19	13 1/8	20 1/2	14	45	14 15/16	15 15/16	1	27 1/4	2 1/2	7/8 x 1-1/8
27	22	27	30 7/8	20	20	14 1/8	21 1/2	15	45	16 7/16	17 7/16	1	30 1/4	2 1/2	7/8 x 1-1/8
30	22	30	32 5/8	22	20	16 1/8	21 1/2	17	45	18 1/16	19 1/16	1	33 1/4	2 1/2	7/8 x 1-1/8
34	26	34	34 3/8	24	24	18 1/8	25 1/2	19	45	20 1/16	21 1/16	1	37 1/4	2 1/2	7/8 x 1-1/8
36	28	36	37 1/2	25 1/2	26	19 1/8	27 1/2	20	45	21 3/16	22 3/16	1	39 1/4	2 1/2	7/8 x 1-1/8
42	29	42	40 7/8	28	27	22 1/8	28 1/2	23	45	23 13/16	24 13/16	1	45 1/4	2 1/2	7/8 x 1-1/8
48	31	47 3/4	44	31 1/2	29	25 1/8	30 1/2	26	45	26 3/4	27 3/4	2	51	3 1/2	7/8 x 1-1/8

*Weather cover not available for size 12 arr-9s only.

The New York Blower Company has a policy of continual product improvement and reserves the right to change designs and specifications without notice.

COMPLETE SELECTION OF AIR-MOVING EQUIPMENT

The New York Blower Company offers thousands of different types, models, and sizes of air-moving equipment. Contact your nyb representative for assistance in identifying the best fan for your application.



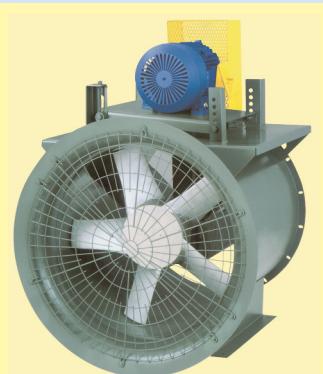
DUST/MATERIAL HANDLING

Wide range of duty available with unique fan lines capable of handling light dust to heavy material. Typical applications include dust-collection and high-pressure process along with material-conveying.



AIR-HANDLING [CENTRIFUGAL]

Designed for clean to moderately dirty gas streams. Commercial and industrial HVAC, process cooling, light material-conveying, heat removal, and dryer exhaust are just a few of the numerous sample applications



AIR-HANDLING [AXIAL]

For the ideal handling of clean to moderately dirty airstreams. Commercial and industrial HVAC, drying and cooling systems, fume extraction, and process-heat removal are typical applications.



FIBERGLASS REINFORCED PLASTIC [FRP]

Choice of performance and duty for corrosive gas streams. Applications include chemical process, wastewater treatment, laboratory hood exhaust, and tank aeration.

CUSTOM PRODUCTS

Designed for unique applications. Variety of configurations, temperatures, flows, and pressures. Wide range of modifications and accessories are available to meet the most demanding specifications.



Leading the industry forward since 1889



ROOF VENTILATORS

Including both hooded and upblast ventilators, propeller fans, and centrifugal roof exhaustors. These units are ideal for industrial, commercial, and institutional applications.



HEATING PRODUCTS

Industrial-duty steam unit heaters with steam heating coils are available for facility heating and process-heat transfer.



PROCESS/FAN COMPONENTS

Plug fans, plenum fans, wheels, inlet cones, and housings for a wide variety of OEM applications. Process/fan components are used in air-handling units, ovens, dryers, freezer tunnels, and filtration systems.