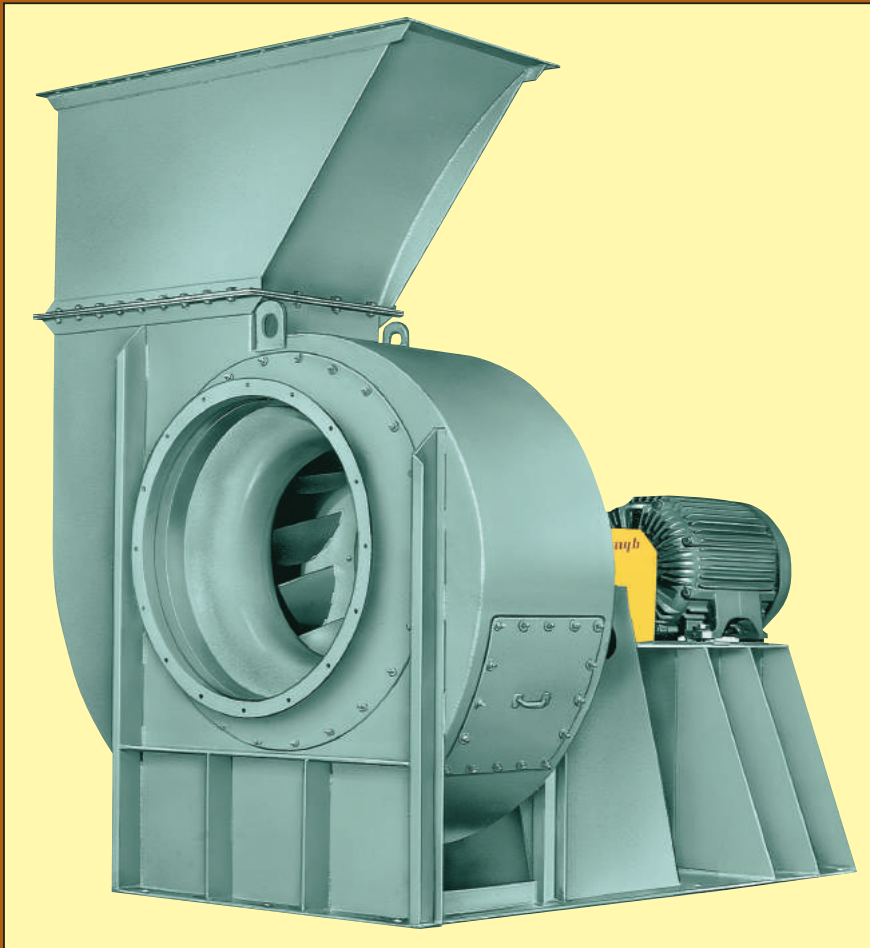
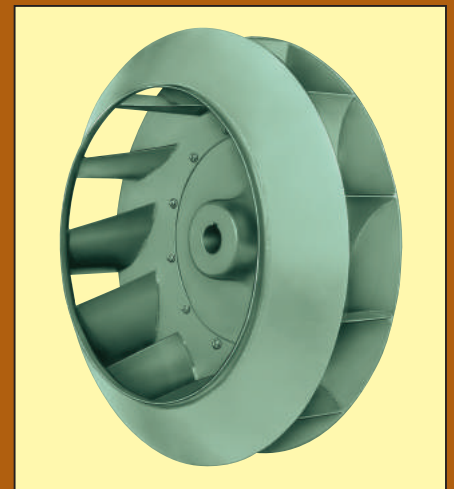


RTS FANS



- Capacities to 250,000 CFM
- Static pressures to 36"WG
- Temperatures to 750°F.

...standard Radial-Tip Fans
for industrial process air
and induced-draft service

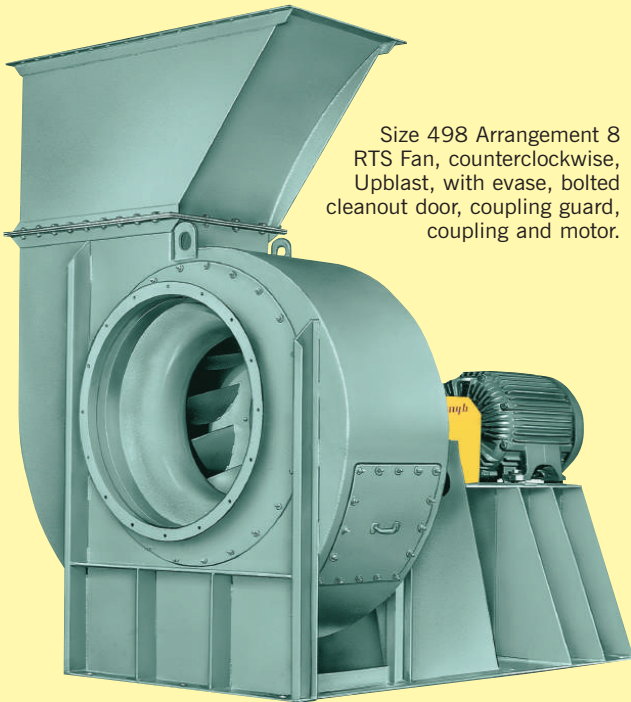


THE NEW YORK BLOWER COMPANY
7660 Quincy Street
Willowbrook, IL 60527-5530

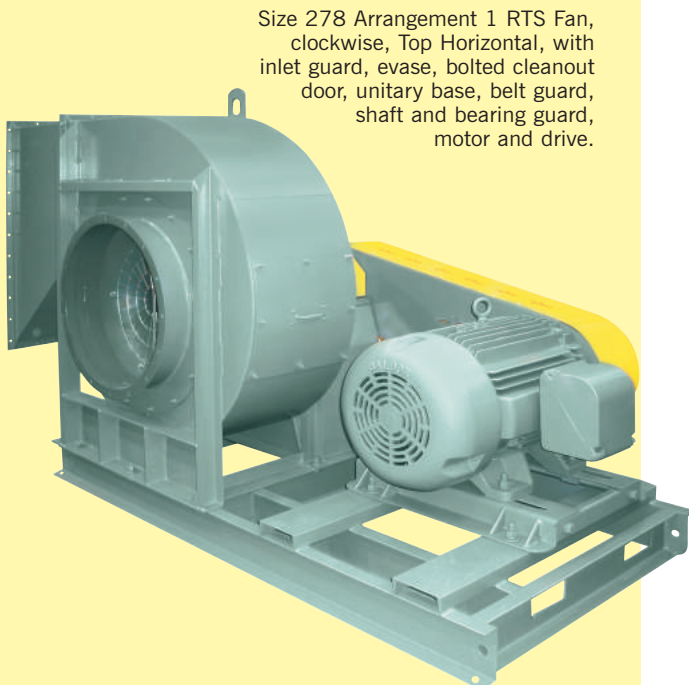
Visit us on the Web: <http://www.nyb.com>
Phone: (800) 208-7918 Email: nyb@nyb.com

RTS FANS

Standard RTS Fans with Radial-tip wheels for industrial process air and induced draft service.



Size 498 Arrangement 8
RTS Fan, counterclockwise,
Upblast, with evase, bolted
cleanout door, coupling guard,
coupling and motor.



Size 278 Arrangement 1 RTS Fan,
clockwise, Top Horizontal, with
inlet guard, evase, bolted cleanout
door, unitary base, belt guard,
shaft and bearing guard,
motor and drive.

DESIGN FEATURES

- Radial-tip wheel for dependable operation in particulate-laden airstreams.
- Wheel sizes from 27" to 89" blade diameters.
- Capacities to 250,000 CFM.
- Pressures to 36" WG.
- Temperatures to 750°F.
- Choice of direct-drive or belt-drive arrangements.
- Integral-base construction eliminates the need for field erection of independent bearing pedestals and sole plates...complete factory-assembled units up to Size 668 are test run and balanced prior to shipment.
- Available in clockwise and counterclockwise rotations in any of seven standard discharge positions.

CONSTRUCTION FEATURES

Flanged inlet and outlet-standard—on all sizes...furnished with bolt holes for ease of installation.

Lifting eyes-standard—on all sizes for ease of handling.

Shafting—high quality, close tolerance, turned, ground, and polished.

Shaft seal—ceramic-felt shaft seals standard on all fans...multiple seal elements compressed between metal backing plate and retainer.

Precision balancing—all RTS wheels are statically and dynamically balanced before final assembly...after final assembly all fans are given a final balance check on a rigid test bed at the specified running speed.

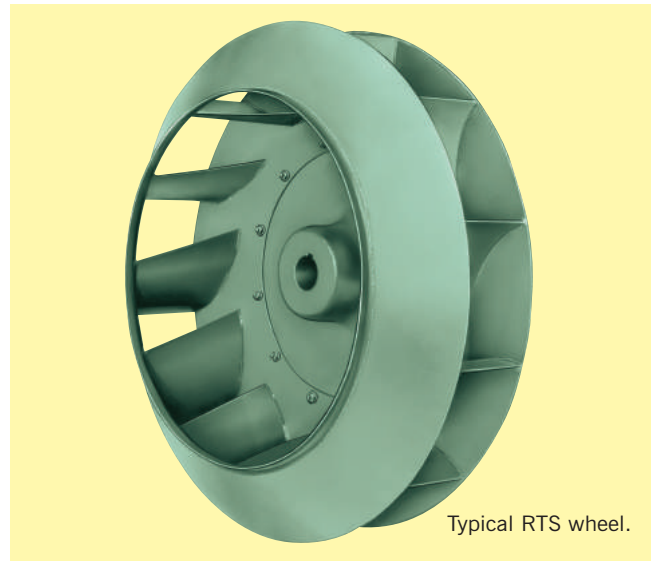
Heavy-duty spherical roller bearings—selected for long life through applicable speed range.

Standard two-coat paint system—two coats of medium green industrial enamel...301°F.-750°F. Heat Fans are coated with high-temperature paint.

RADIAL-TIP WHEELS

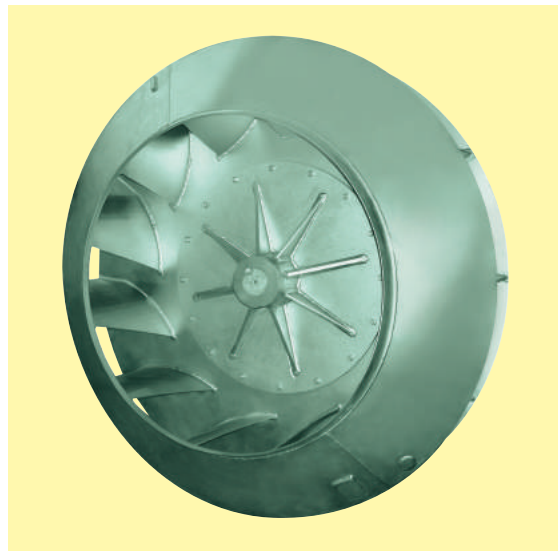
Radial-tip wheels—rugged, all-welded wheels capable of handling a variety of airstream compositions ranging from the relatively clean baghouse exhaust applications to recirculation of gases laden with dust, dirt, or particulate matter...various methods of abrasion-resistant construction are available...see below for details.

The performance characteristics of RTS Fans generally provide slower operating speeds than backwardly inclined fans. Air-handling efficiencies are generally higher than common radial fans, and have lower noise levels. Often, the overall fan size is physically smaller than radial fans when compared for a given capacity... see pages 8 to 9 for specific performance information.



Typical RTS wheel.

ABRASION-RESISTANT CONSTRUCTION



The following modifications are available to minimize wear caused by abrasion or erosion from airborne contaminants. The specific selection must be based on the experience of the user or specifier.

- Blades wheel blades fabricated of alloy steel with 321 minimum Brinell hardness.
- Blade liners partial liners continuously welded to blade wearing surface.
- Housing housing fabricated entirely of alloy steel with 321 minimum Brinell hardness.
- Scroll housing scroll fabricated entirely of alloy steel with 321 minimum Brinell hardness.
- Scroll liners removable liners bolted to housing interior...split housing required.
- Metallized inlet cone . . molten metal spray applied to the wearing surface.

Consult **nyb** for other abrasion-resistant construction options.

SAFETY EQUIPMENT

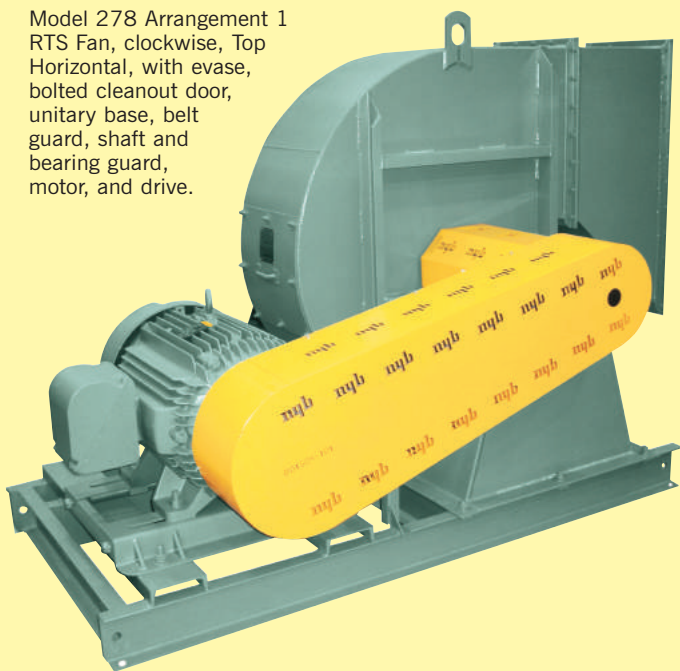
Belt guards, inlet and outlet guards, shaft and bearing guards, and coupling guards are available from The New York Blower Company. Contact your **nyb** representative for further information.

NOTE: Safe operation of air-moving equipment is dependent on proper installation and maintenance including selection and use of appropriate safety accessories for the specific installation. 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

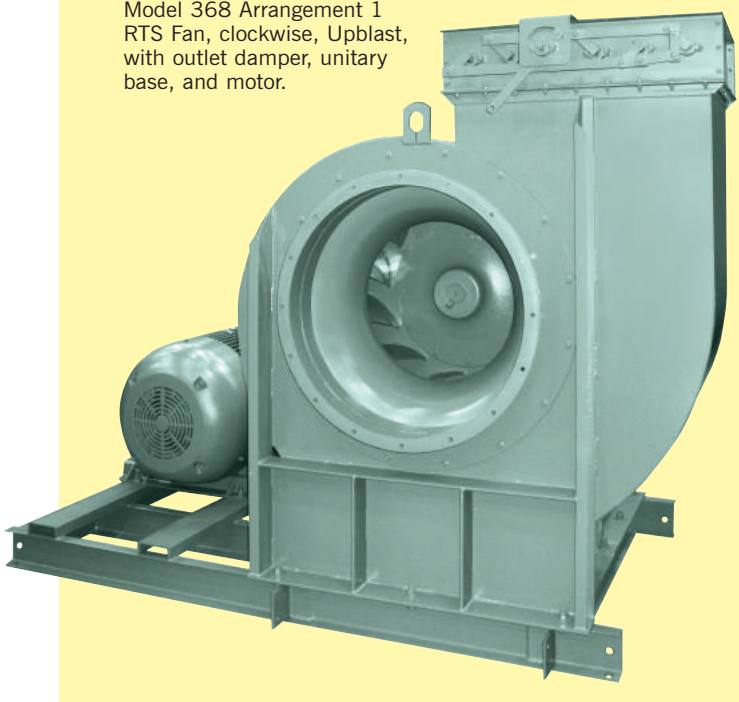
danger to life and limb of personnel. Users and/or installers should read "Recommended Safety Practices For Air Moving Devices" as published by the Air Movement and Control Association International, 30 West University Drive, Arlington Heights, Illinois 60004, which is included with the packing slips for all shipments from **nyb** and available on request.

ACCESSORIES

Model 278 Arrangement 1
RTS Fan, clockwise, Top
Horizontal, with evase,
bolted cleanout door,
unitary base, belt
guard, shaft and
bearing guard,
motor, and drive.



Model 368 Arrangement 1
RTS Fan, clockwise, Upblast,
with outlet damper, unitary
base, and motor.



- **COMPANION FLANGES**

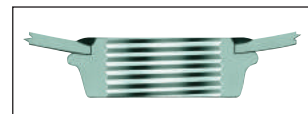
Designed to fit flush with fan inlet and outlet flanges, provided with a matching hole pattern.

- **EVASE**

Aerodynamically designed evase provides attached flow for maximum static pressure regain and reduced outlet velocities.

- **DRAIN**

Welded tank flange [FPT], 1½" located at the lowest point in the housing scroll.



- **CLEANOUT DOOR**

Two types of gasketed door available...**bolted**: closely spaced studs keep door securely sealed...**raised bolted**: allows for insulation when desired, door raised 2" from the fan housing.

- **INLET BOX**

Minimizes entry losses normally associated with 90° turns at or near fan inlet...also available with parallel-blade damper for efficient volume control.

- **SHAFT SEALS**

Ceramic-felt shaft seals consist of compressed ceramic felt elements standard on Arrangements 1 and 8. Lubricated lip seals [Buna-N, Teflon®, and Viton®] and gas-purgeable mechanical seals are also available. Consult your **nyb** representative for availability.

[Teflon is a registered trademark of DuPont]
[Viton is a registered trademark of DuPont Dow Elastomers.]

- **INLET DAMPERS**

External vane construction provides prespun air effect to control fan performance efficiently...not available for use with inlet box...maximum temperature: 750°F.

- **VIBRATION ISOLATION**

Rubber-in-shear or spring-type isolation mounted to rugged structural unitary base reduces the transmission of vibration to the mounting structure.

- **UNITARY BASE**

Arrangement 1 fan, motor, and guards can be mounted and shipped on a rugged, structural-steel base. Factory-assembled and run-tested prior to shipment.

- **OTHER ACCESSORIES**

Also available from **nyb** are drive components such as motors, couplings, and v-belt drives as well as a variety of preventive-maintenance products including vibration detectors, bearing-temperature detectors, and zero-speed switches.

- **OUTLET DAMPERS**

Heavy-gauge parallel-blade or opposed-blade outlet dampers are available for volume control. Two standard temperature ranges: 300°F. and 800°F.

MODIFICATIONS

- **COATINGS**

Cost-effective protective coatings under a variety of trade names are available to increase the fan's resistance to adverse, corrosive environments.

- **INSULATION STUDS**

2-inch long weld-studs located on 12-inch centers on all surfaces of housing exterior...recommended for use with field-installed insulation...studs are normally mild steel; stainless steel available on request.

- **HEAT-FAN CONSTRUCTION**

Standard Arrangement 1 and 8 RTS Fans are designed to handle airstreams to 300°F.

RTS Fans handling 301°F. to 750°F. airstreams are furnished with shaft cooler and shaft cooler guard, and all surfaces are coated with high-temperature paint.

NOTE: Contact **nyb** when the intended service involves a temperature rate change exceeding 20°F. per minute.

- **NARROW-WIDTH AND SPECIAL DIAMETER CONSTRUCTION**

Wheel and housing widths and wheel diameter can be adjusted to meet volume and pressure requirements at most efficient operating point.

- **SPLIT-HOUSING CONSTRUCTION**

Provides for wheel and shaft removal...split portion can be removed without disturbing the inlet or outlet connections. This modification is standard on Sizes 738 – 898.

- **SPARK-RESISTANT CONSTRUCTION [SRC]**

Intended to minimize the potential for any two or more fan components to generate sparks within the airstream by rubbing or striking during operation.

The following types are available:

AMCA A [AIRSTREAM] SRC

To include all airstream parts constructed of a spark-resistant alloy...maximum temperature: 200°F.

AMCA B [WHEEL] SRC

To include the fan wheel constructed of a spark-resistant alloy and a buffer plate around the housing shaft-hole opening...maximum temperature: 200°F.

AMCA C [BUFFER] SRC

To include a spark-resistant alloy buffer affixed to the housing interior adjacent to the wheel back-plate, a spark-resistant alloy inlet cone, and a buffer plate around the housing shaft-hole opening...maximum temperature: 650°F.

ALL TYPES SRC

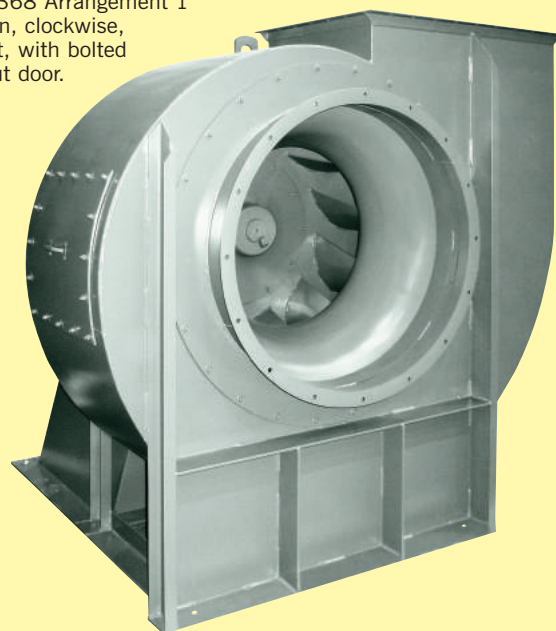
Fan is to be so constructed such that no bearings, drive components, or electrical apparatus are located in the airstream...the user must electrically ground all fan and system components.

Refer to Engineering Letter 15 for the full meaning and limits of spark-resistant construction.



Model 608 Arrangement 1
RTS Fan, counterclockwise,
Upblast, with raised
bolted cleanout door,
split housing, unitary
base, belt guard,
motor, and drive.

Model 368 Arrangement 1
RTS Fan, clockwise,
Upblast, with bolted
cleanout door.



- **SPECIAL ALLOYS**

RTS Fans are available with various grades of stainless steel for corrosive, non-abrasive airstream contaminants. Wheels can be furnished in 304 SST, 316 SST, 347 SST, or Alloy 2205. Consult **nyb** if other materials are required.

- **TECHNICAL SUPPORT**

nyb has developed numerous engineering and application support tools for system designers and operators. For further information, contact your local **nyb** sales representative or visit our web site at www.nyb.com.

RTS FANS

SPEED CAPABILITIES

Maximum safe operating speeds are shown in Chart I for RTS Fans with the standard high-strength steel wheel and the standard shaft and bearings as listed. Substitution of alternate wheel alloys, or modifications to the standard shaft and bearing selection, may alter the maximum safe speed.

Chart II provides safe speed correction factors for various temperatures and the common alternate wheel alloys. These factors apply to the wheel safe speeds listed in Chart I.

Example: A Size 368 RTS Fan with a 347 SST wheel operating at a maximum airstream temperature of 600°F will have a maximum safe operating speed of 1964 RPM [2455 x .80].

DENSITY CORRECTIONS

CALCULATING FANS AT TEMPERATURES OTHER THAN 70°F

When a fan handles air at 70°F, it is operating at .075 pounds per cubic foot. When a fan handles other than standard air, a density correction factor must be considered. Static pressure and brake horsepower vary inversely as the absolute temperature. For convenience, Chart III gives factors for correcting pressure and brake horsepower.

EXAMPLE

1. Require 15,000 CFM at 12"SP at 300°F at sea level.
2. Chart III indicates 1.43 factor for 300°F
3. Select the fan for 17.2"SP [12" x 1.43] at 70°F.
4. Divide 70°F brake horsepower by 1.43 to determine BHP at conditions.

CALCULATING FANS AT ALTITUDES OTHER THAN SEA LEVEL [29.92 in. Hg]

If speed, capacity, and temperature are kept constant, static pressure and horsepower will vary directly as the density of the air. The method for correcting the altitude is the same as for temperature except using the factors in Chart IV.

CHART I MAXIMUM OPERATING SPEEDS RTS FAN WHEELS, SHAFTS, AND BEARINGS

Size	Wheels	Arrangement 1 shaft and bearings			Arrangement 8 shaft and bearings		
	Maximum safe speed	Maximum safe speed	Shaft dia.	Bearing type*	Maximum safe speed	Shaft dia.	Bearing type*
278	3325	3325	27/16	P-LB6839	3075	23/16	P-B22435
308	2995	2995	27/16	P-LB6839	2800	27/16	P-B22439
338	2725	2725	21 1/16	P-LB6843	2640	27/16	P-B22439
368	2455	2455	2 15/16	P-LB6847	2250	2 11/16	P-B22443
408	2200	2200	37/16	P-LB6855	2200	2 15/16	P-B22447
448	1990	1990	37/16	P-LB6855	1990	2 15/16	P-B22447
498	1810	1810	3 15/16	P-LB6863	1810	37/16	P-B22455
548	1630	1630	3 15/16	P-LB6863	1630	37/16	P-B22455
608	1470	1470	47/16	P-LB6871	1470	3 15/16	P-B22463
668	1340	1340	4 15/16	P-LB6879	1340	3 15/16	P-B22463
738	1210	NA	NA	NA	1210	47/16	P-B22571
808	1100	NA	NA	NA	1100	4 15/16	SAF22600
898	990	NA	NA	NA	990	4 15/16	SAF22600

NA – Not available. *nyb reserves the right to substitute bearings of equal rating. Link-Belt bearings are shown for reference.

NOTE: Higher safe speeds and static pressures are available with narrow-width construction; consult nyb.

CHART II TEMPERATURE CORRECTION FACTORS FOR MAXIMUM OPERATING SPEEDS

Airstream temp. [°F]	Materials of construction				
	Standard steel wheel	Aluminum	Stainless 304	Stainless 316	Stainless 347
-50°	1.00	1.00	0.82	0.78	0.88
70°	1.00	1.00	0.82	0.78	0.88
200°	1.00	0.97	0.73	0.75	0.84
300°	1.00	—	0.68	0.72	0.81
400°	1.00	—	0.64	0.70	0.80
500°	0.97	—	0.62	0.68	0.80
600°	0.93	—	0.60	0.66	0.80
700°	0.89	—	0.58	0.64	0.79
750°	0.87	—	0.57	0.64	0.79

CHART III TEMPERATURE CORRECTIONS

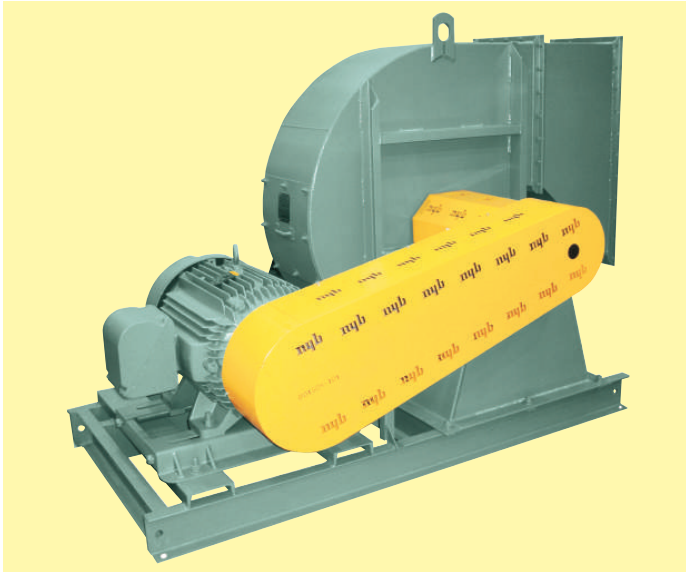
Temp. °F.	Factor
0	.87
20	.91
40	.94
60	.98
70	1.00
80	1.02
100	1.06
120	1.09
140	1.13
160	1.17
180	1.21
200	1.25
300	1.43
400	1.62
500	1.81
600	2.00
750	2.28

CHART IV ALTITUDE [ft.] CORRECTIONS

Alt.	Factor
0	1.00
500	1.02
1000	1.04
1500	1.06
2000	1.08
2500	1.10
3000	1.12
3500	1.14
4000	1.16
4500	1.18
5000	1.20
5500	1.23
6000	1.25
7000	1.30
8000	1.35
9000	1.40
10000	1.45

NOTE: If correction factor for both temperature and altitude is required, multiply factors from Charts III and IV together: 3000' and 600°F. 1.12 x 2.00 = 2.24 [combined factor].

FAN SELECTION



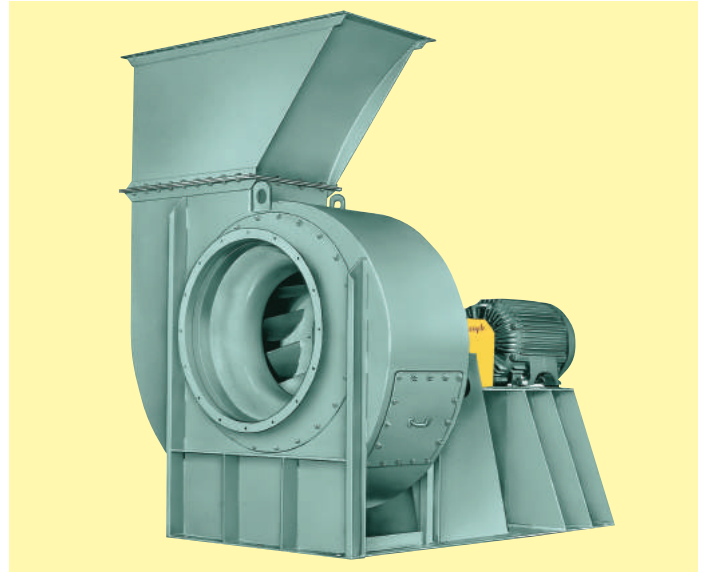
BELT-DRIVE FANS

The use of belt-drive arrangements provides flexibility in fan performance by changing sheaves and belts to modify fan speed.

The high speeds and horsepower requirements of RTS Fans require proper drive selection to minimize shaft stress and maximize belt and bearing life. To ensure satisfactory motor performance, 1800 RPM motors 250 HP and above require motor-vendor approval of drive selection.

Arrangement 1 fans are available in 27" to 66" wheel diameters.

Maximum temperatures: Standard fan - 300°F., Heat fan - 750°F.



DIRECT-DRIVE FANS

It is often more cost-effective to use direct-drive fans due to reduced bearing loads and maintenance. However, a major objection to direct-drive arrangements in the past was the inability to adjust fan speed if system requirements changed. With the advent of variable frequency drives [VFD] the speed and therefore performance of direct-drive fans can now be adjusted to meet varying process requirements.

Arrangement 8 fans are available in 27" to 89" wheel diameters.

USING CAPACITY TABLES

The capacities shown in the tables on pages 8-9 are based on belt-drive selections. For a required performance, the tables provide a means of determining fan size, outlet velocity, speed, and brake horsepower. Performance shown includes the effects of the evase discharge. For capacities without evase, and for direct-drive fan performance (including sizes 738 to 898), use **nyb** Electronic Catalog software [see description below]. To obtain a copy contact your New York Blower sales representative or **nyb** at www.nyb.com.

1. Ratings are based on standard 70°F. air at a density of .075 pounds per cubic foot. See page 6 for density correction factors.
2. Performance shown is for RTS Fans with evase discharges, with outlet ducts, and with or without inlet ducts.
3. For a given selection, check the required fan speed at the maximum operating temperature against the maximum safe speeds shown in Chart I on page 6.



ELECTRONIC CATALOG

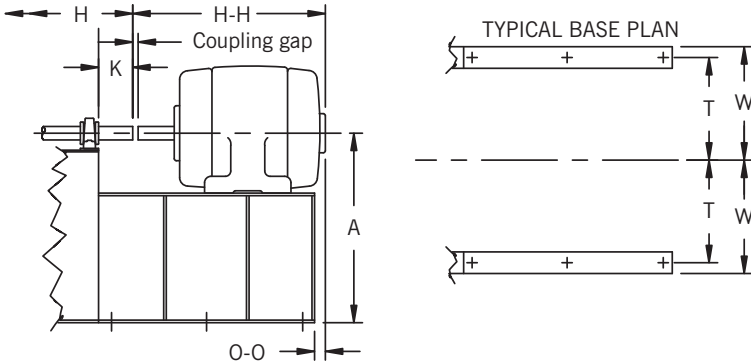
Fan-selection program corrects for altitude, temperature, rarefaction, adjusts maximum safe speed for wheel width, and generates performance curves. Also includes complete product literature, guide specifications, installation and maintenance literature, Engineering Letters, web-site launch, and a listing of New York Blower sales representatives.

DIMENSIONS [INCHES] Not to be used for construction unless certified.

ARRANGEMENT 8 MOTOR PEDESTAL DIMENSIONS

These approximate dimensions can be used to estimate the overall size of Arrangement 8 fans. Add the appropriate dimensions below to the fan dimensions on page 10.

Note: coupling gap is based on the FALK STEELFLEX coupling sizes shown. As the gap will vary with other coupling sizes or types, so will the Arrangement 8 motor pedestal dimensions. Specific motor and coupling data is required to determine exact dimensions.



DIMENSIONS [INCHES] ARRANGEMENT 8 ONLY

Motor frame size	Coupling		O-O*		H-H*			
					Open		TE	
	Size	Gap	Min.	Max.	Min.	Max.	Min.	Max.
213T -215T	50T	1/8	13/8	5 1/2	15 7/8	17 3/8	17 7/8	20
254T -256T	60T	1/8	1	5 7/8	20 5/8	22 1/2	22 1/2	25 1/2
284T -286T	70T	1/8	1 1/2	6 3/8	23 1/2	25 1/8	25 3/8	28 3/8
284TS-286TS	70T	1/8	1 1/2	6 1/2	22 1/8	23 3/4	24 1/8	27 1/8
324T -326T	80T	1/8	1	6 3/4	26 1/8	27 3/4	28 1/4	31 7/8
324TS-326TS	80T	1/8	1	6 3/4	24 5/8	26 1/8	26 3/4	30 3/8
364T -365T	90T	1/8	1 1/8	7	28 1/4	29 7/8	32 1/2	34 1/8
364TS-365TS	90T	1/8	1 5/8	7	26 5/8	27 5/8	30 3/8	32
404T -405T	90T	1/8	2 3/8	8 3/4	32 5/8	34 1/4	37 3/8	39
404TS-405TS	90T	1/8	2 3/8	8 3/4	29 5/8	31 1/4	34 3/8	36
444T -445T	100T	3/16	1 5/8	9 3/8	37 3/8	40	42	45 1/8
444TS-445TS	100T	3/16	2 1/8	9 3/8	34 1/8	36 1/4	38 3/8	41 3/8

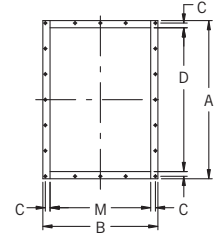
*H-H and O-O based on several major motor manufacturers—consult **nyb** for exact dimensions. Dimensions not to be used for construction unless certified.

FAN SPECIFICATIONS ARRANGEMENT 8 ONLY

Size	Wheel diameter [inches]	Wheel circumference [feet]	Capacity outlet area with evase [sq. ft.]
738	73	19.1	33.8
808	80 3/4	21.1	41.3
898	89	23.3	50.7

FLANGED OUTLET

1. Mounted flush with edge of housing outlet.
2. Furnished as standard with holes on 4" centers from centerlines.



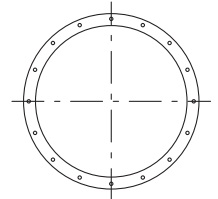
DIMENSIONS [INCHES]

Size	A		B†	C	D		M†	Standard holes			
	Fan	Evase			Fan	Evase		Sides	†Top	†Bottom	Size
							Fan	Evase			
278	27 3/8	43 1/2	19 3/8	3/4	24 7/8	41	16 7/8	7	11	3	7/16
308	30 3/8	48 1/2	21 1/2	7/8	27 3/8	45 1/2	18 1/2	7	11	5	7/16
338	33 1/4	53	23 3/8	7/8	30 1/4	50	20 3/8	9	13	5	7/16
368	36 1/2	58 1/4	25 5/8	7/8	33 1/2	55 1/4	22 5/8	9	15	5	7/16
408	39 7/8	63 7/8	27 7/8	7/8	36 7/8	60 7/8	24 7/8	9	15	5	7/16
448	44 3/4	71 1/4	31 1/2	1 1/8	40 3/4	67 1/4	27 1/2	11	17	7	9/16
498	48 7/8	78	34 3/8	1 1/8	44 7/8	74	30 3/8	11	19	7	9/16
548	53 5/8	85 7/8	37 1/2	1 1/8	49 5/8	81 7/8	33 1/2	13	21	7	9/16
608	58 5/8	94 1/2	40 7/8	1 1/8	54 5/8	90 1/2	36 7/8	15	23	9	9/16
668	64 3/8	103 1/2	44 3/4	1 1/8	60 3/8	99 1/2	40 3/4	15	25	9	9/16
738	70 7/8	114	49	1 1/8	66 7/8	110	45	17	29	11	9/16
808	77 1/2	126	53 1/2	1 1/8	73 1/2	122	49 1/2	19	31	11	9/16
898	85 1/4	139	58 3/4	1 1/8	81 1/4	135	54 3/4	21	35	13	9/16

†Dimensions will vary with narrow-width construction. Tolerance: ± 1/8"

FLANGED INLET

Furnished as standard with holes on vertical centerline.

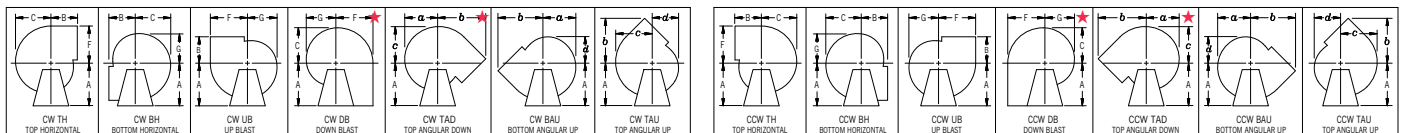


DIMENSIONS [INCHES]

Size	Inside diameter	Bolt circle	Outside diameter	Standard holes	
				Number	Diameter
278	24 3/8	26 1/8	27 3/8	16	9/16
308	26 7/8	29 1/8	30 7/8	16	9/16
338	29 1/2	31 3/4	33 1/2	16	9/16
368	32 7/8	35 1/8	36 7/8	16	9/16
408	36 1/8	38 3/8	40 1/8	16	9/16
448	40 1/8	42 3/8	44 1/8	16	9/16
498	43 7/8	46 1/8	47 7/8	24	9/16
548	48 7/8	51 1/8	52 7/8	24	9/16
608	53 7/8	56 1/8	57 7/8	24	9/16
668	59 3/8	61 5/8	63 3/8	24	9/16
738	66 1/8	68 3/8	70 1/8	32	9/16
808	72 5/8	74 7/8	76 5/8	32	9/16
898	80 5/8	82 7/8	84 5/8	32	9/16

Tolerance: ± 1/8"

FAN DISCHARGES – VIEWED FROM DRIVE SIDE

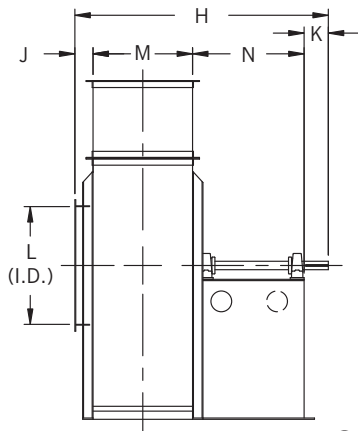


Clockwise—angular discharges at 45°

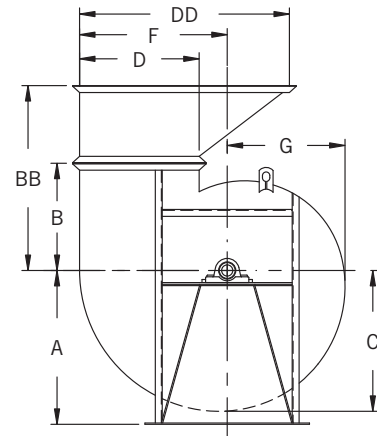
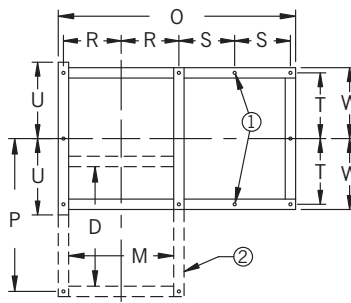
Counterclockwise—angular discharges at 45°

★ Down Blast and Top Angular Down discharge positions must be evaluated for clearance of accessories such as unitary base, outlet damper, evase, etc. Consult **nyb** with specific details.

DIMENSIONS [INCHES] Not to be used for construction unless certified.



① Omitted on Sizes 278 through 338.



② Base bars form flanged outlet on Down Blast.

M, D, and DD are outside housing dimensions. J is from housing side over inlet. L is inside diameter.

ARRANGEMENTS 1 AND 8

Size	A							B				BB		C	D	DD	F	G	H†		J
	TH	TAD	BH	BAU	UB	TAU	DB	*	TAD	*	TAD	Arr. 1							Arr. 8		
278	25 3/4	25 3/4	31 1/4	31 1/4	27 1/2	27 1/2	25 3/4	20 1/2	30 3/4	40 1/4	50 1/2	25	24 7/8	41	28 3/4	21 1/8	47 7/8	47 7/8	5		
308	27 1/4	27 1/4	34 1/2	34 1/2	30 1/4	30 1/4	26 1/4	22 1/2	33 1/4	44 3/8	55 1/8	27 3/4	27 3/8	45 1/2	32	23 1/2	52	51 1/2	5		
338	29 1/2	29 1/2	38 1/2	38 1/2	33 1/4	33 1/4	26 1/2	24 1/2	36	48 3/8	60 1/8	30 1/2	30 1/4	50	35 1/8	25 7/8	57 3/8	56 3/8	6		
368	32 3/4	32 3/4	42 1/4	42 1/4	35 1/2	35 1/2	29	29	40 3/4	55 3/8	67 3/8	33 3/4	33 1/2	55 1/4	38 7/8	28 5/8	63 1/8	61 5/8	6		
408	36	36	46 1/4	46 1/4	40	40	31	31	44	60 3/8	73 3/8	37 1/4	36 7/8	60 7/8	42 7/8	31 1/2	68 7/8	67 7/8	6		
448	39	39	50 3/4	50 3/4	44	44	33 1/2	33 1/2	47 3/4	66	80 1/4	41 1/8	40 3/4	67 1/4	47 1/4	34 7/8	75	73 1/2	6		
498	42	42	55 1/2	55 1/2	48 1/4	48 1/4	36	36	52	71 3/4	87 3/4	45 1/2	44 7/8	74	52 1/8	38 1/4	81 3/8	79 3/8	6		
548	46	46	61 1/2	61 1/2	53 1/4	53 1/4	40	40	56 3/4	79 3/8	96 3/8	50 1/4	49 5/8	81 7/8	57 5/8	42 3/8	90	87 1/2	7		
608	51	51	67 3/4	67 3/4	58 1/2	58 1/2	43	43	62 1/2	86 3/4	106 1/4	55 3/8	54 5/8	90 1/2	63 3/4	46 7/8	98 7/8	96 7/8	7		
668	55	55	74	74	64 1/4	64 1/4	47	47	68	95 1/8	116 1/8	60 3/4	60 3/8	99 1/2	70 1/8	51 1/2	107 1/4	104 3/4	7		
738	64	60	81 1/2	78 1/2	75 3/4	71	51 1/2	51 1/2	74 1/2	104 3/4	127 3/4	67 1/4	66 7/8	110	77 1/2	57	NA	114	7		
808	70	65 1/2	89 3/4	86 1/4	82 7/8	77 5/8	57 1/2	57 1/2	65 1/2	116 3/8	124 3/8	74 3/8	73 1/2	122	85 3/4	63	NA	125 1/2	7		
898	76 1/2	71 1/4	98 1/2	94 3/8	90 1/2	84 5/8	67	67	71	131 7/8	135 7/8	82	81 1/4	135	94 1/2	69 1/2	NA	137 3/4	7		

NA – Not available. * For TH, BH, UB, BAU and TAU discharges. For DB discharge, use A dimension for B.

Size	K		L	M†	N	O†		P	R†	S	T	U	W	a	b		c	d	Arr. 1 Base holes
	Arr. 1	Arr. 8				Arr. 1	Arr. 8								BAU/TAU	TAD			
278	6	6	24 3/8	16 7/8	20	42 1/2	39 7/8	30 1/4	10	19 5/8	15 3/8	18 1/2	16 7/8	23 1/8	34 3/4	42	26 7/8	19 3/8	8-3/4"
308	6 1/2	6	26 7/8	18 1/2	22	46 1/8	43 1/2	33 1/2	10 7/8	21 5/8	17 3/8	20 1/4	18 7/8	25 5/8	38 1/2	45 1/4	29 7/8	21 1/2	8-3/4"
338	7	6	29 1/2	20 3/8	24	52	48 3/8	37 1/8	12 1/4	23 5/8	19	22 1/4	21	28 1/4	42 1/8	50 1/4	32 7/8	23 1/2	8-3/4"
368	7 1/2	6	32 7/8	22 5/8	27	57 1/4	53 5/8	40 7/8	13 3/8	25 1/8	20 1/2	24 1/4	22 1/2	31 1/8	48	56 3/8	36 3/8	26	10-1"
408	8	7	36 1/8	24 7/8	30	62 1/2	58 7/8	44 7/8	14 1/2	27 1/4	21 1/4	26	23 1/4	34 1/8	52 1/4	61 1/2	40	28 3/4	10-1"
448	8 1/2	7	40 1/8	27 1/2	33	68 1/8	64 1/2	49 1/4	15 3/4	29 1/4	23	28 1/2	25	37 7/8	57 1/8	67 1/8	44 1/4	31 5/8	10-1"
498	9	7	43 7/8	30 3/8	36	74	70 3/8	54 1/8	17 1/4	31 1/4	24	31	26	41 3/4	62 3/8	73 3/8	48 3/8	34 7/8	10-1"
548	9 1/2	7	48 7/8	33 1/2	40	83 1/8	78 1/2	60 1/8	19 1/4	34 1/4	27	33 3/4	29 1/2	46 1/4	69	80 7/8	53 7/8	38 1/2	10-1"
608	10	8	53 7/8	36 7/8	45	91 1/2	86 7/8	66 1/4	21	37 1/4	29	37 1/4	31 1/2	51	75 1/2	89 3/8	59 1/2	42 5/8	10-1"
668	10 1/2	8	59 3/8	40 3/4	49	99 3/8	94 3/4	72 5/8	22 7/8	40 3/4	31	40 1/2	33 1/2	56 1/8	82 3/4	97 5/8	65 1/2	46 7/8	10-1"
738	NA	8	66 1/2	45	54	NA	104	80	25	26 7/8	33	44 1/2	35 1/2	62 1/8	91 1/4	107 1/2	72 3/8	51 7/8	NA
808	NA	9	72 5/8	49 1/2	60	NA	114 1/2	88 1/4	25 1/4	29 3/4	40	50 7/8	42 1/2	68 5/8	101 1/4	106 7/8	80	57 3/8	NA
898	NA	9	80 5/8	54 3/4	67	NA	126 3/4	97	27 1/2	33 1/4	45	55 1/4	47 1/2	75 3/4	114 1/4	117	88 1/4	63 1/8	NA

NA – Not available. † Dimensions will vary with narrow-width construction.

Tolerance: ± 1/8"

MATERIAL SPECIFICATIONS DIMENSIONS [INCHES]

Size†	Housing		Base bars	Base angles	Inlet flange angles	Outlet flange angles	Bearing pedestal	Wheel			Bare fan weight [lbs.] Arr. 1‡	
	Side and scroll	Side channels						ASTM A572-50 (INX-50) or ASTM A572-60 (INX-60)		Weight [lbs.]*		WR² [lbs.-ft.]*
								Blades	Backplate			
278	1/4	3"-4.1#	3 x 3/8	3 x 2 x 3/16	1 1/2 x 1 1/2 x 3/16	1 1/4 x 1 1/4 x 3/16	3/8	1/4	1/4	125	80	1100
308	1/4	3"-4.1#	3 x 3/8	3 x 2 x 3/16	2 x 2 x 3/16	1 1/2 x 1 1/2 x 3/16	3/8	1/4	1/4	165	123	1365
338	1/4	4"-5.4#	4 x 1/2	4 x 3 x 1/4	2 x 2 x 3/16	1 1/2 x 1 1/2 x 3/16	3/8	1/4	1/4	190	176	1670
368	1/4	4"-5.4#	4 x 1/2	4 x 3 x 1/4	2 x 2 x 3/16	1 1/2 x 1 1/2 x 3/16	3/8	1/4	1/4	265	275	2110
408	1/4	4"-5.4#	4 x 1/2	4 x 3 x 1/4	2 x 2 x 3/16	1 1/2 x 1 1/2 x 3/16	3/8	1/4	1/4	305	397	2435
448	1/4	4"-5.4#	4 x 1/2	4 x 3 x 1/4	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	1/4	355	591	2990
498	1/4	4"-5.4#	4 x 1/2	4 x 3 x 1/4	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	1/4	410	856	3430
548	1/4	5"-6.7#	5 x 5/8	5 x 3 1/2 x 5/16	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	3/8	695	1600	4560
608	1/4	5"-6.7#	5 x 5/8	5 x 3 1/2 x 5/16	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	3/8	795	2339	5375
668	1/4	5"-6.7#	5 x 5/8	5 x 3 1/2 x 5/16	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	3/8	975	3494	6520
738	1/4	5"-6.7#	5 x 5/8	5 x 3 1/2 x 5/16	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	3/8	1135	5125	NA
808	1/4	5"-6.7#	5 x 5/8	5 x 3 1/2 x 5/16	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	3/8	1665	8737	NA
898	1/4	5"-6.7#	5 x 5/8	5 x 3 1/2 x 5/16	2 x 2 x 3/16	2 x 2 x 3/16	3/8	1/4	3/8	1920	12591	NA

NA – Not available.

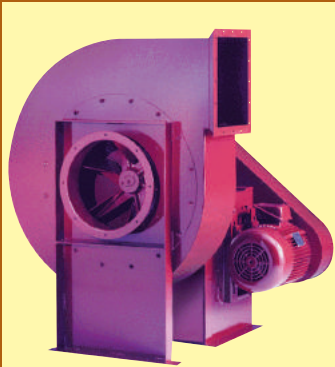
* Wheel weight and WR² will decrease on narrow-width fans . . . Consult **nyb**.

† Refer to Chart 1, Page 6, for standard shaft size and bearing type.

‡ Arrangement 8 bare fan weights are available on application. Motor selection will influence design of motor pedestal.

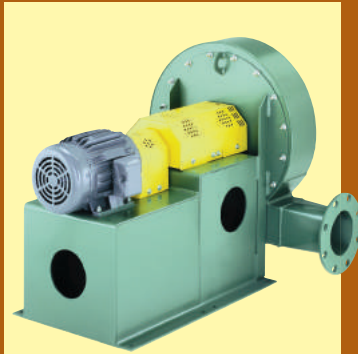
COMPLETE SELECTION OF AIR-MOVING EQUIPMENT

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.



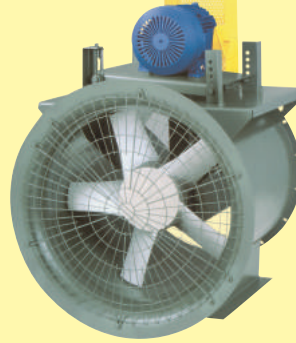
DUST/MATERIAL HANDLING

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.

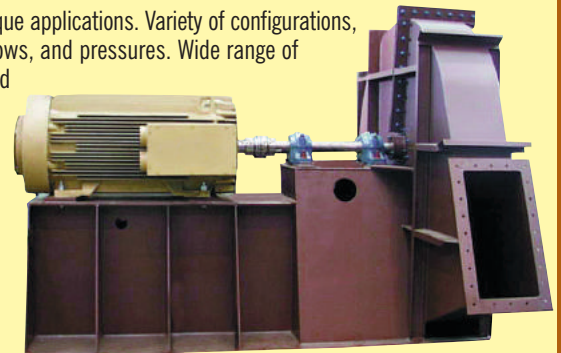


FIBERGLASS REINFORCED PLASTIC [FRP]

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 exhausters. 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.