

TYPE HP PRESSURE BLOWERS

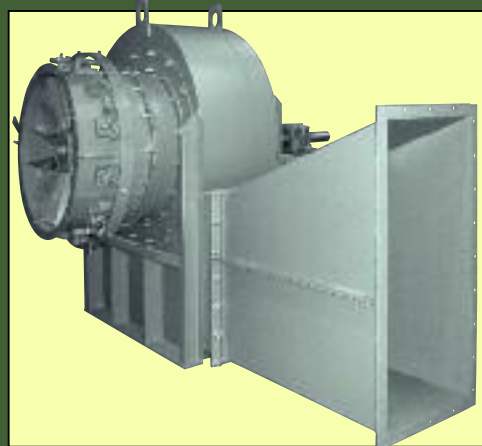


- Static pressures to 128" WG
- Capacities to 20,000 CFM
- Temperatures to 600°F.



PRESSURE BLOWERS

- Static pressures to 58" WG
- Capacities to 5,200 CFM



HP BC FANS

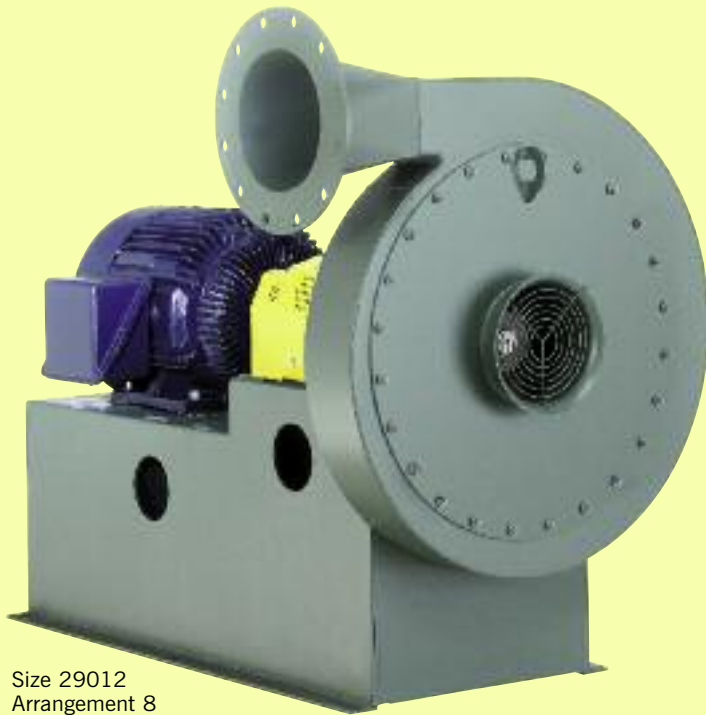
- Static pressures to 40" WG
- Capacities to 170,000 CFM



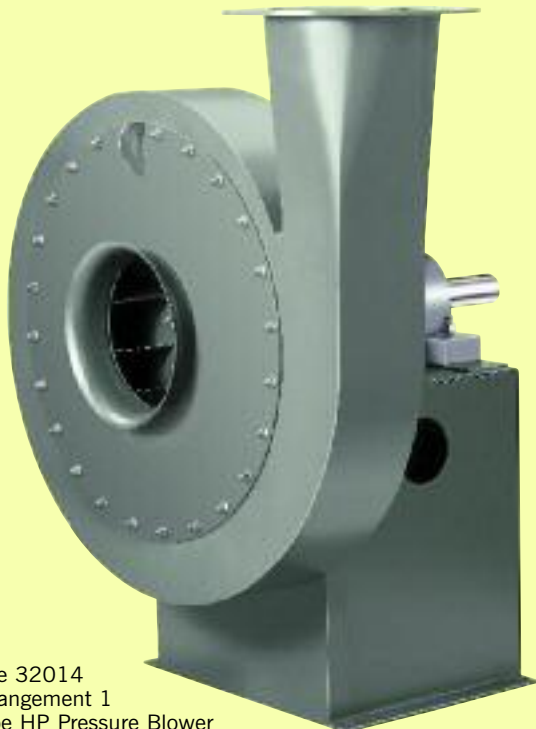
THE NEW YORK BLOWER COMPANY
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Willowbrook, IL 60527-5530

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

TYPE HP PRESSURE BLOWERS



Size 29012
Arrangement 8
Type HP Pressure Blower
with venturi inlet and guard, shaft and bearing guard,
coupling guard and motor.



Size 32014
Arrangement 1
Type HP Pressure Blower
with venturi inlet.

DESIGN FEATURES

- Pressures to 128"WG.
- Capacities to 20,000 CFM.
- Stable performance . . . the pressure curve remains stable from wide-open to closed-off . . . fan instability, or pulsation, is eliminated even when "turn-down" approaches zero flow.
- Variable wheel diameters and a choice of seven outlet sizes enable efficient fan selection across a wide range of volumes and pressures.
- Efficiency . . . advanced wheel and aerodynamic housing design combine for air-handling efficiency superior to conventional radial-wheel designs.
- Choice of arrangements . . . direct-drive and belt-drive.

CONSTRUCTION FEATURES

- Wheel construction: available as standard in either welded, high-strength steel alloy or riveted, high-strength aluminum alloy. Also available in welded Alloy 2205 stainless steel.
- All-welded steel housings . . . heavy-gauge housings are designed to prevent "flexing" at high pressures.
- Taper-lock hub or Interference shaft-to-hub fit for concentric wheel-to-shaft mounting.
- Flanges . . . continuously welded flanges match ANSI Class 125/150 hole pattern.
- Bearings . . . utilize adapter-mount concentric locking collars for optimum shaft-to-bearing fit to ensure long bearing life and reduced vibration.
- Balance . . . all wheels are precision-balanced prior to assembly . . . fans with motors and drives mounted by **nyb** are final-balanced at the specified running speed.
- Shafting . . . straightened to close tolerance to minimize "run-out" and ensure smooth operation.
- Inlet configuration . . . a choice of three inlet types allows units to be tailored to specific application requirements.
- Lifting eyes . . . standard on all units for ease of handling and installation.
- Industrial finish . . . medium-green enamel.



ELECTRONIC CATALOG

Fan-selection program corrects for altitude, temperature, rarefaction, and generates performance curves. Also includes complete product literature, guide specifications, installation and maintenance literature, and Engineering Letters.

DESIGN ADVANTAGES

WHEEL OPTIONS

STEEL

Blades, frontplate, and backplate are constructed of high-strength 950X/960X alloy for Sizes 270–320, and 980X alloy for Sizes 330–380. All-welded construction with cast-iron hub bolted to the backplate. Taper-bore bushing is used to secure wheel to shaft on Sizes 270–350, and interference wheel-to-shaft fit is standard on Sizes 360–380.

ALUMINUM

Blades, frontplate, and backplate are constructed of high-strength 6061-T6 aluminum alloy with aluminum hub. Wheel blades are riveted to frontplate and backplate. Taper-bore bushing is used to secure wheel to shaft.

ALLOY 2205

Constructed of high-strength, austenitic-ferritic stainless steel containing 40–50% ferrite in an annealed condition. The high chromium, molybdenum, and nitrogen content provides corrosion-resistance superior to 316L or 317L stainless in most environments [ASTM A240/ASME SA-240]. Wheels utilize all-welded construction with 316L stainless-steel hub bolted to the backplate and interference wheel-to-shaft fit.

APPLICATIONS

New York Blower's Type HP Pressure Blowers are designed for high-pressure, industrial-process applications. All applications can be handled in either induced-draft or forced-draft configurations. Numerous modifications and accessories make the Type HP Pressure Blower suitable for a wide range of systems.

Uses include:

- Combustion air
- Glass-blowing
- Injection-type conveyors
- Furnace blowers
- Cooling systems
- System exhaust
- Air knives
- Thermal oxidation
- Chemical process
- Moisture blow-off
- Drying applications
- Fluidizing systems

ARRANGEMENTS-TYPE HP PRESSURE BLOWERS

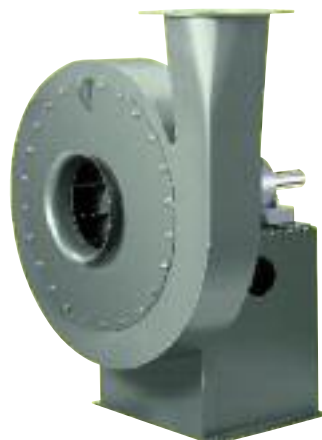
ARRANGEMENT 4



A compact direct-drive unit with a minimum number of moving parts for ease of maintenance. Wheel is mounted directly on motor shaft.

Maximum airstream temperature:
180°F.

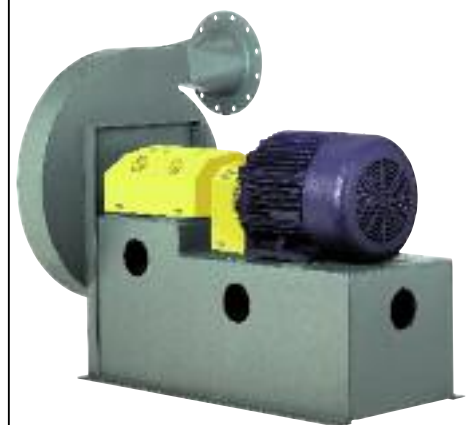
ARRANGEMENT 1



Recommended for applications requiring a specific speed or future adjustment. Wheel is mounted on shaft which, in turn, is mounted in heavy-duty bearings.

Maximum airstream temperature:
180°F.–aluminum wheel.
300°F.–steel wheel.
600°F.–with heat-fan construction.

ARRANGEMENT 8



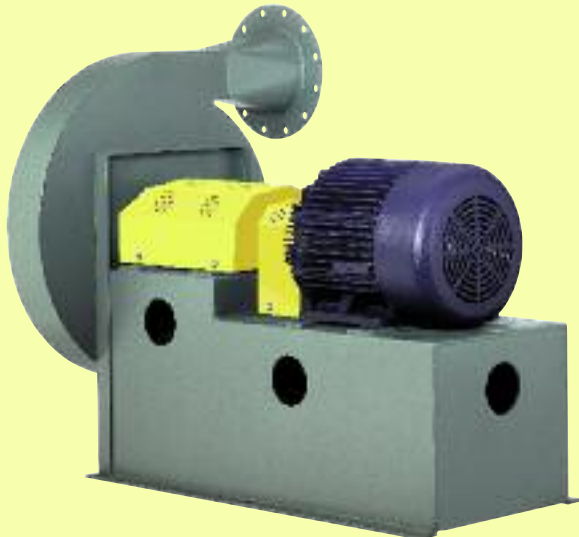
Direct-drive arrangement similar to Arrangement 1 but with integral motor pedestal . . . fan shaft is connected to the motor shaft with a flexible coupling.

Maximum airstream temperature:
180°F.–aluminum wheel.
300°F.–steel wheel.
600°F.–with heat-fan construction.

ACCESSORIES



Size 28012
Arrangement 4 Type HP
Pressure Blower, with
optional flanged inlet, inlet guard,
drain with plug, motor,
and cleanout door.



Size 29012 Arrangement 8 Type HP Pressure Blower,
with shaft and bearing guard, coupling, coupling guard,
and motor.

- **COMPANION FLANGES**

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

- **DRAINS**

Tank flange is welded to the lowest point of the housing scroll . . . female pipe thread . . . includes plug.

- **INLET FILTER**

Filters use oil-wetted or dry element. High-efficiency filter is flange-mounted. Furnished standard with outboard support bracket and available with or without protective hood.

- **SILENCERS**

Available to match standard inlet or outlet flange sizes. Heavy-welded construction filled with high-density, acoustical absorption material. Flange connection is furnished for mounting to blower, and any of the three standard inlet connections are available for opposite end. Refer to Catalog Sheet CS-853, and separate Engineering Supplement for more details.

- **OUTLET DAMPERS**

Available as either an integral outlet design for fixed damper control or a separate wafer design for variable-flow applications. Wafer damper is available with optional actuator and positioner.

- **GASKETING**

Full-face gasketing is used between the inlet plate and housing side sheet as standard construction. Special gasketing is available to handle a wide range of applications.

- **COATINGS**

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

- **OTHER ACCESSORIES**

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

SAFETY EQUIPMENT

Safety accessories are available from **nyb**, but selection of the appropriate devices is the responsibility of the system-designer who is familiar with the particular installation, or application, and can provide for guards for all exposed moving parts as well as protection from access to high-velocity airstreams. Neither **nyb** nor its sales representatives is in a position to make such a determination. Users and/or installers should read "Recommended Safety Practices for Air Moving Devices" as published by the Air Movement and Control Association, Arlington Heights, Illinois.

MODIFICATIONS

- **SHAFT SEALS**

Arrangement 1 and 8 fans come standard with shaft seals consisting of ceramic-felt elements compressed between metal bracing plate and retainer. Arrangement 4 fans utilize a single Teflon® element as standard construction. Optional lubricated lip seals [Buna, Viton® and Teflon] and gas-purgeable, double carbon ring shaft seals are also available.

[Teflon and Viton are registered trademarks of DuPont and DuPont Dow Elastomers, respectively.]

- **ACCESS DOOR**

Gasketed, flush bolted door opens to provide access to wheel.

- **HEAT-FAN CONSTRUCTION**

Available on Arrangements 1 and 8 steel wheel Type HP Pressure Blowers up to 600°F. Modifications include high-temperature paint, shaft cooler, and shaft-cooler guard.

- **SPECIAL ALLOY CONSTRUCTION**

Airstream components can be constructed of a wide range of alternate alloys for corrosive applications.

- **CLADDING FOR SOUND ATTENUATION**

Consists of 2" acoustical mineral-wool insulation wrapped over the blower housing and covered with a welded steel jacket. To be most advantageous with blower acoustical cladding, all inlet and outlet ductwork should also be wrapped and acoustically cladded.

- **UNITARY BASE**

Arrangement 1 fan, motor, and guards can be mounted and shipped on a rugged, structural-steel base.

- **VIBRATION ISOLATION**

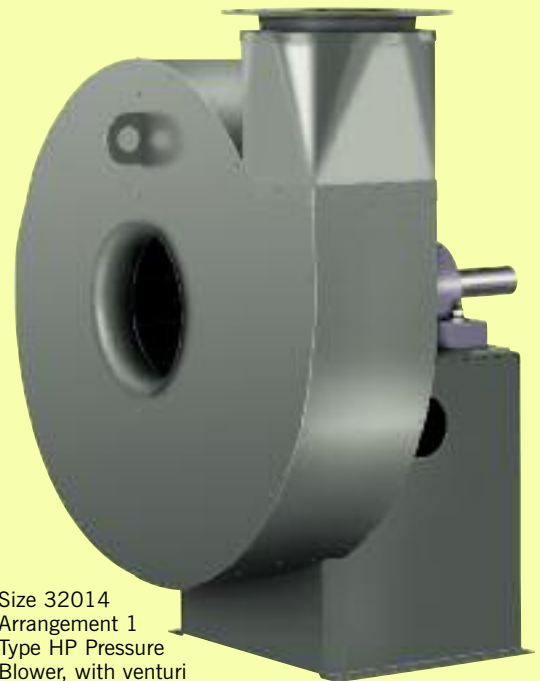
Rubber-in-shear or spring-type isolation mounted to rugged structural unitary base reduces the transmission of vibration to the mounting structure.

- **TECHNICAL SUPPORT**

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



Gas-purgeable double carbon ring shaft seal.



Size 32014
Arrangement 1
Type HP Pressure
Blower, with venturi
inlet and cladding.

LOW LEAKAGE CONSTRUCTION

Arrangements 1 and 8 Type HP Pressure Blowers are available in the following pre-engineered low leakage packages:

TYPE 2

Full-face gasketing.
Double-element lip seal [Buna and Viton].
Soap-bubble test [housing only].
Continuous welding of all housing exterior seams.

TYPE 3

Full-face gasketing.
Double-element lip seal [Buna and Viton].
Soap-bubble test [fan assembly].
Continuous welding of all housing interior and exterior seams.

TYPE 4

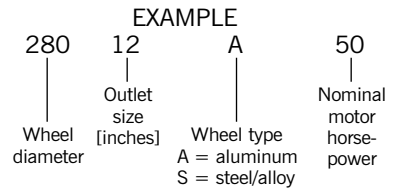
Full-face gasketing.
Purgeable, double-element carbon ring shaft seal.
Soap-bubble test [fan assembly].
Kerosene/chalk test.
Continuous welding of all housing interior and exterior seams.

USING PERFORMANCE TABLES

The performance tables in this bulletin are designed to provide performance ranges for groups of wheel diameters with common outlet sizes, based on direct drive operation at 3550 RPM. Through interpolation, a specific fan size can be selected for a given operating point at standard operating conditions. For example, to achieve 4000 CFM at 65" SP, the proper fan selection would be either Size 28510A, or Size 29010S, depending on desired wheel type. For more specific and accurate fan selection, refer to the fan-selection program in the **nyb** Electronic Catalog.

SIZING NOMENCLATURE

8-digit model number designates the wheel diameter, outlet size, wheel type, and nominal motor horsepower.



Note: The last two digits showing motor horsepower are not required for Arrangement 1 Type HP Pressure Blowers.

MAXIMUM SAFE SPEED

Chart I details maximum safe speeds at 70°F. When alloy construction is specified or when temperatures are involved, multiply the appropriate wheel safe speed shown in Chart I by the factor shown in Chart II. The unit safe speed at temperature is the lesser of the unit safe speed at 70°F. [Chart I] and the wheel safe speed calculated at operating temperature and with the appropriate wheel material.

CHART I

MAXIMUM SAFE SPEEDS AT 70°F.†

Size	Outlet Size	Wheel	Structure	
			Arr. 4/8	Arr. 1
270 - 290	04, 06, 08, 10, 12	3600	3600	3600
300 - 320	06, 08, 10, 12, 14	3600	3600	3600
				3200*
330 - 350	08, 10, 12, 14	3600	3600	3200*
360 - 380	10, 12, 14, 16	3600	3600	3200*

* 300 - 320 with 12 and 14 outlet and 330 - 380 with all outlet sizes are limited due to low bearing life at higher speeds.

† Maximum safe speeds apply only to wheels operated at or below the stated temperatures and free of material build-up, corrosion, or wear.

CHART II

TEMPERATURE CORRECTION FACTORS FOR WHEEL SAFE SPEEDS

Sizes 270-320 HPPB				Sizes 330-350 HPPB				Sizes 360-380 HPPB			
Temp. °F.	INX 60	Aluminum	Alloy 2205	Temp. °F.	INX 80	Aluminum	Alloy 2205	Temp. °F.	INX 80	Aluminum	Alloy 2205
70	1.0	1.0	1.0	70	1.0	1.0	1.0	70	1.0	1.0	0.97
200	1.0	1.0	1.0	200	1.0	1.0	0.97	200	1.0	1.0	0.91
300	1.0	—	1.0	300	1.0	—	0.93	300	1.0	—	0.88
400	1.0	—	1.0	400	1.0	—	0.89	400	1.0	—	0.84
500	1.0	—	0.97	500	1.0	—	0.86	500	1.0	—	0.81
600	1.0	—	0.94	600	1.0	—	0.84	600	0.98	—	0.79

PERFORMANCE

Performance is based on actual cubic feet per minute [ACFM] at the blower inlet at standard density [.075 lbs./ft.³] and static pressure at the blower outlet. Static pressure capabilities are shown in inches water gauge [“WG].

Air density corrections are necessary for proper selection when air density varies from the standard .075 lbs./ft.³ at 70°F. at sea level. This also occurs when negative static pressure exists [rarefaction] on the inlet side of the fan. Multiply the required static pressure at conditions by the appropriate factors in Charts III, IV, and V to obtain corrected pressure for blower selection. Pressure and BHP will be reduced at conditions by the inverse of these factors. Multiply one factor by the other if temperature, altitude, and rarefaction are non-standard. For example: If the installation is located at an altitude of 4000 feet, the gas temperature is 300°F., and the inlet pressure is -40“WG, the correction factor is 1.84 [1.16 x 1.43 x 1.11].

CHART III 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
6000	1.25
7000	1.30
8000	1.35
9000	1.40
10000	1.45

CHART IV 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

CHART V RAREFACTION CORRECTIONS

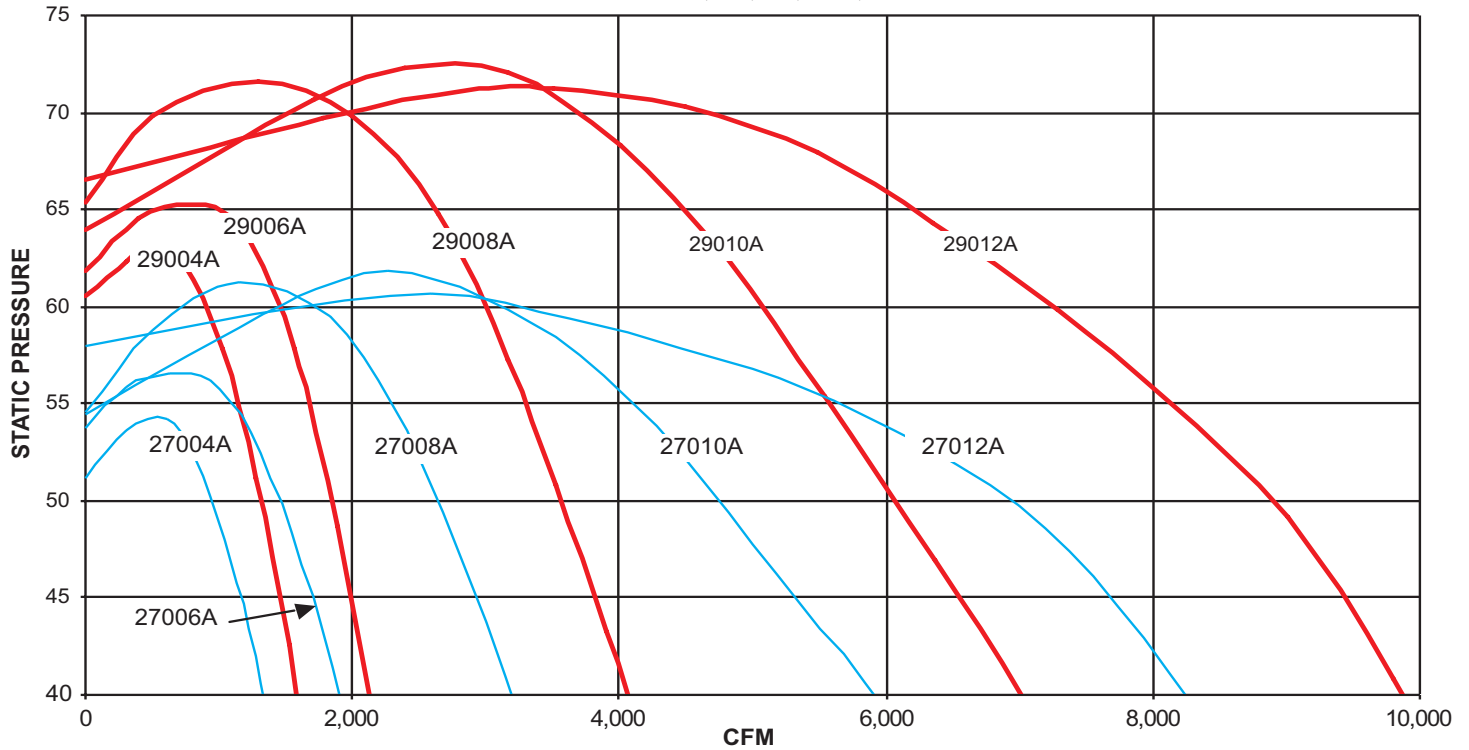
Neg. inlet pressure “WG	Factor
15	1.04
20	1.05
25	1.07
30	1.08
35	1.09
40	1.11
45	1.12
50	1.14
55	1.16
60	1.17
65	1.19
70	1.21
75	1.23
85	1.26

ALUMINUM WHEEL PERFORMANCE AT 3550 RPM

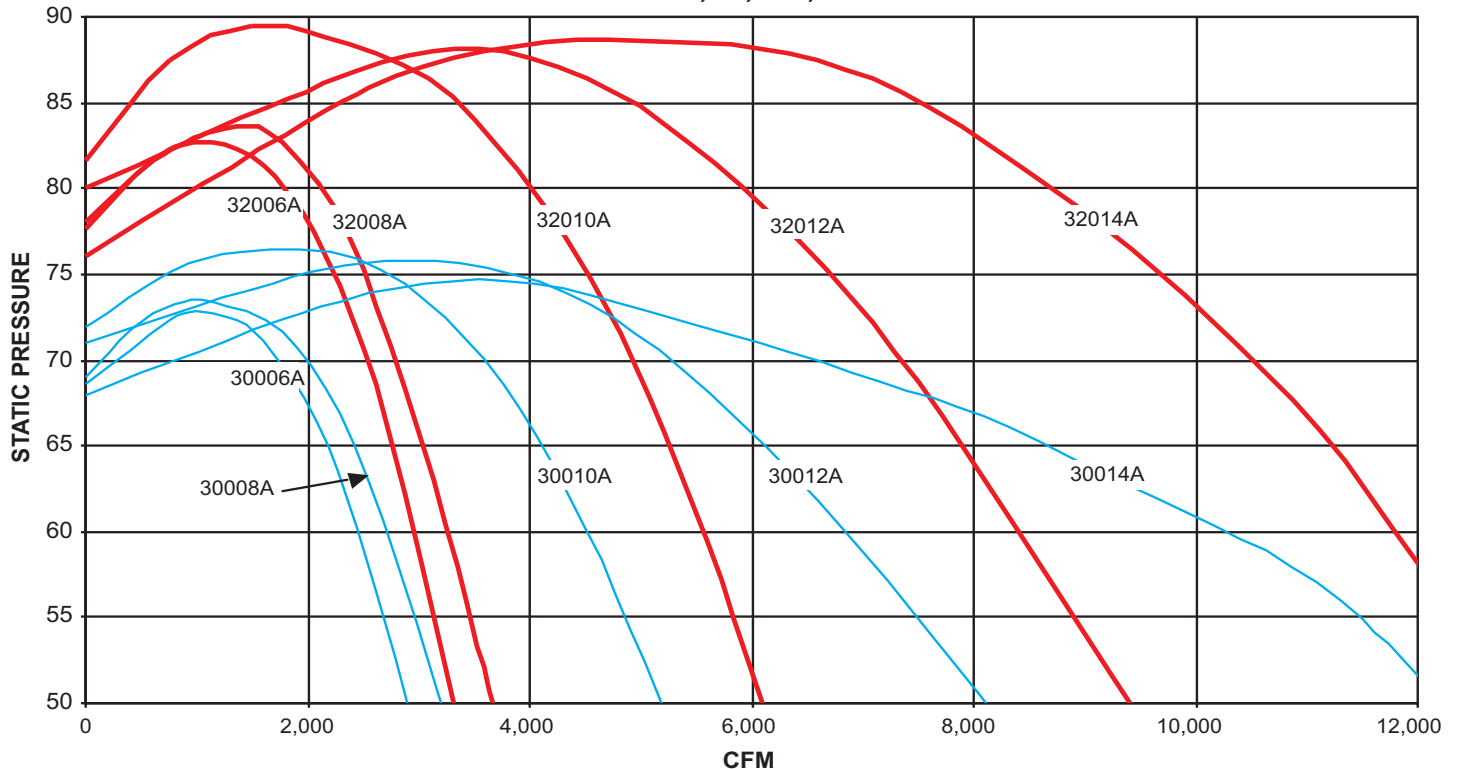
TYPE HP
PRESSURE
BLOWERS

The HP Pressure Blower product line offers multiple options for applications requiring relatively low flow at high static pressures. The performance curves shown on pages 7 through 10 indicate the range of operation at 3550 RPM for a variety of fan wheel diameters and outlet sizes. The blue lines are for the smallest wheels and the red lines are for the largest wheels in a given size range, for each outlet diameter. For specific points of operation and greater detail, refer to The New York Blower Company's Electronic Catalog. Refer to Chart I on page 6 for maximum safe wheel speeds.

270-290 Aluminum 4", 6", 8", 10", & 12" Outlets



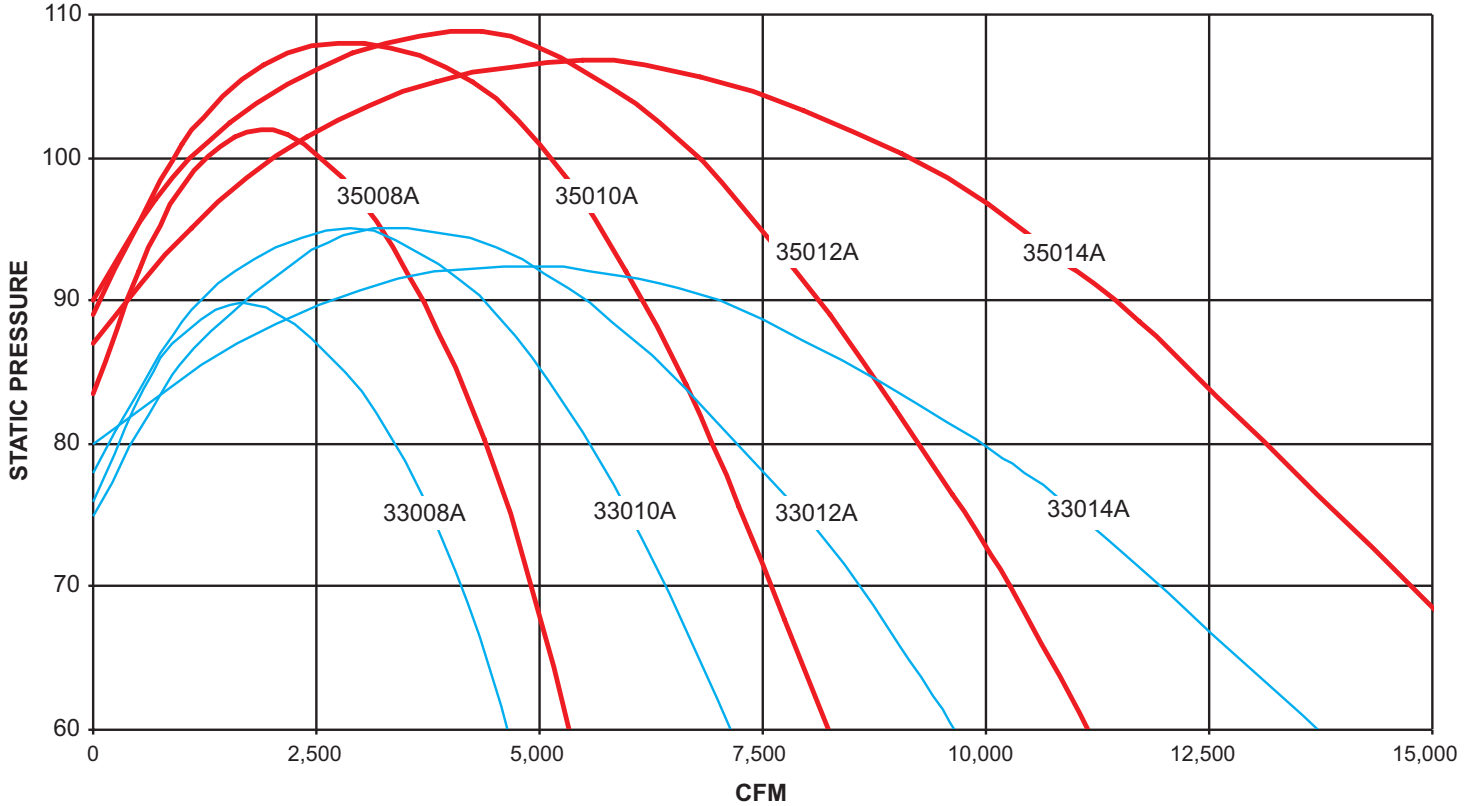
300-320 Aluminum 6", 8", 10", 12" & 14" Outlets



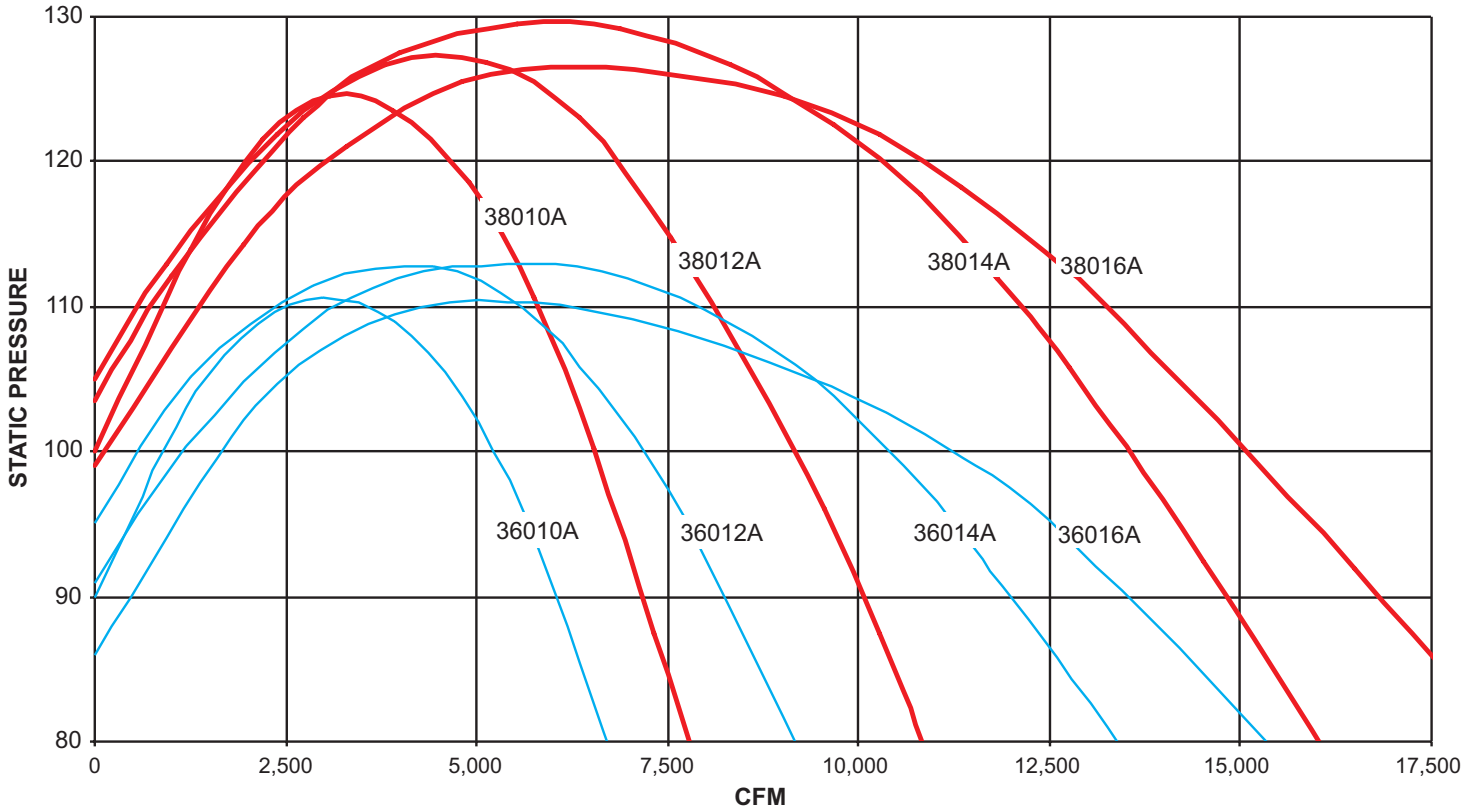
ALUMINUM WHEEL PERFORMANCE AT 3550 RPM

TYPE HP
PRESSURE
BLOWERS

330-350 Aluminum 8", 10", 12", & 14" Outlets



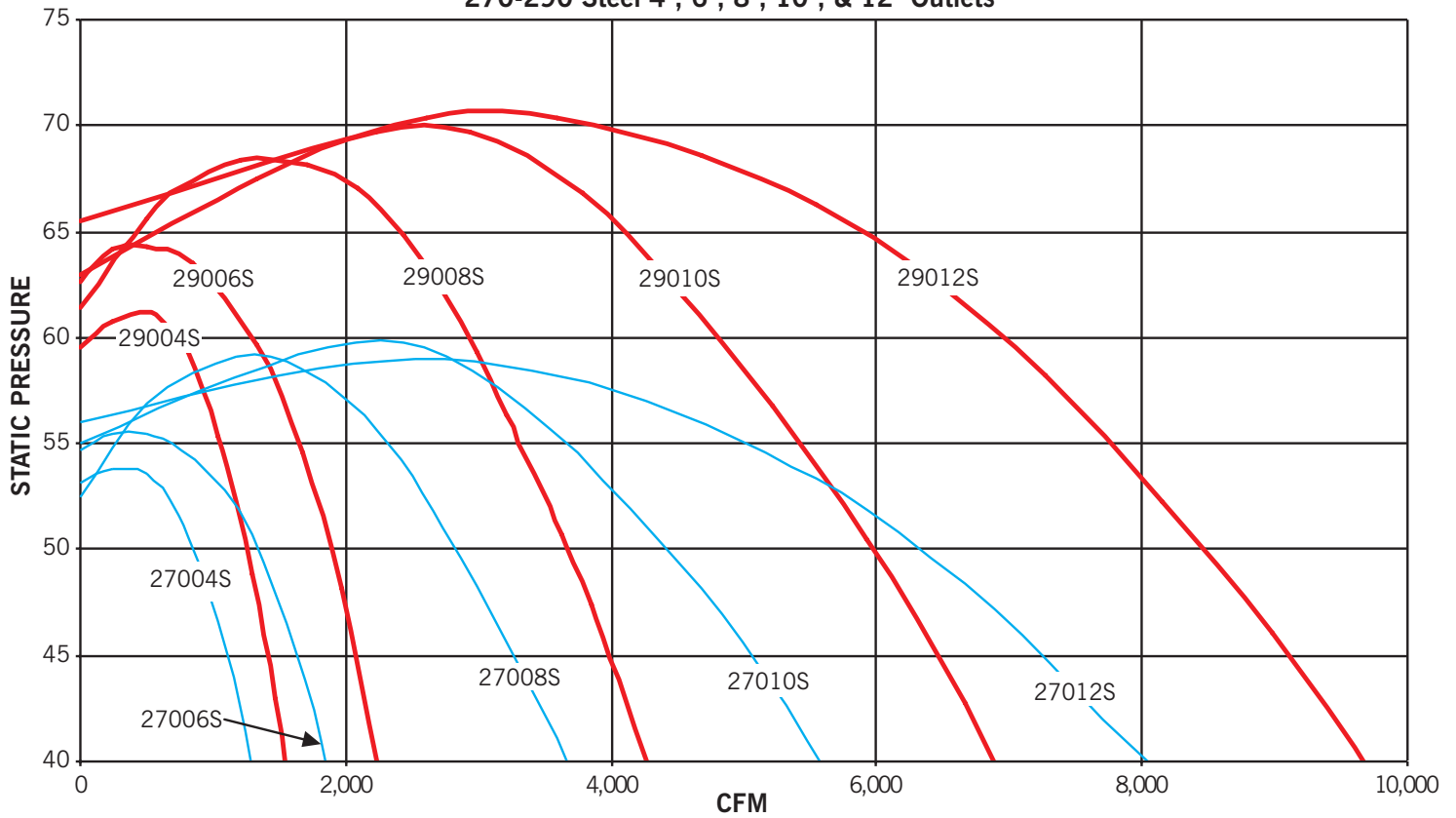
360-380 Aluminum 10", 12", 14", & 16" Outlets



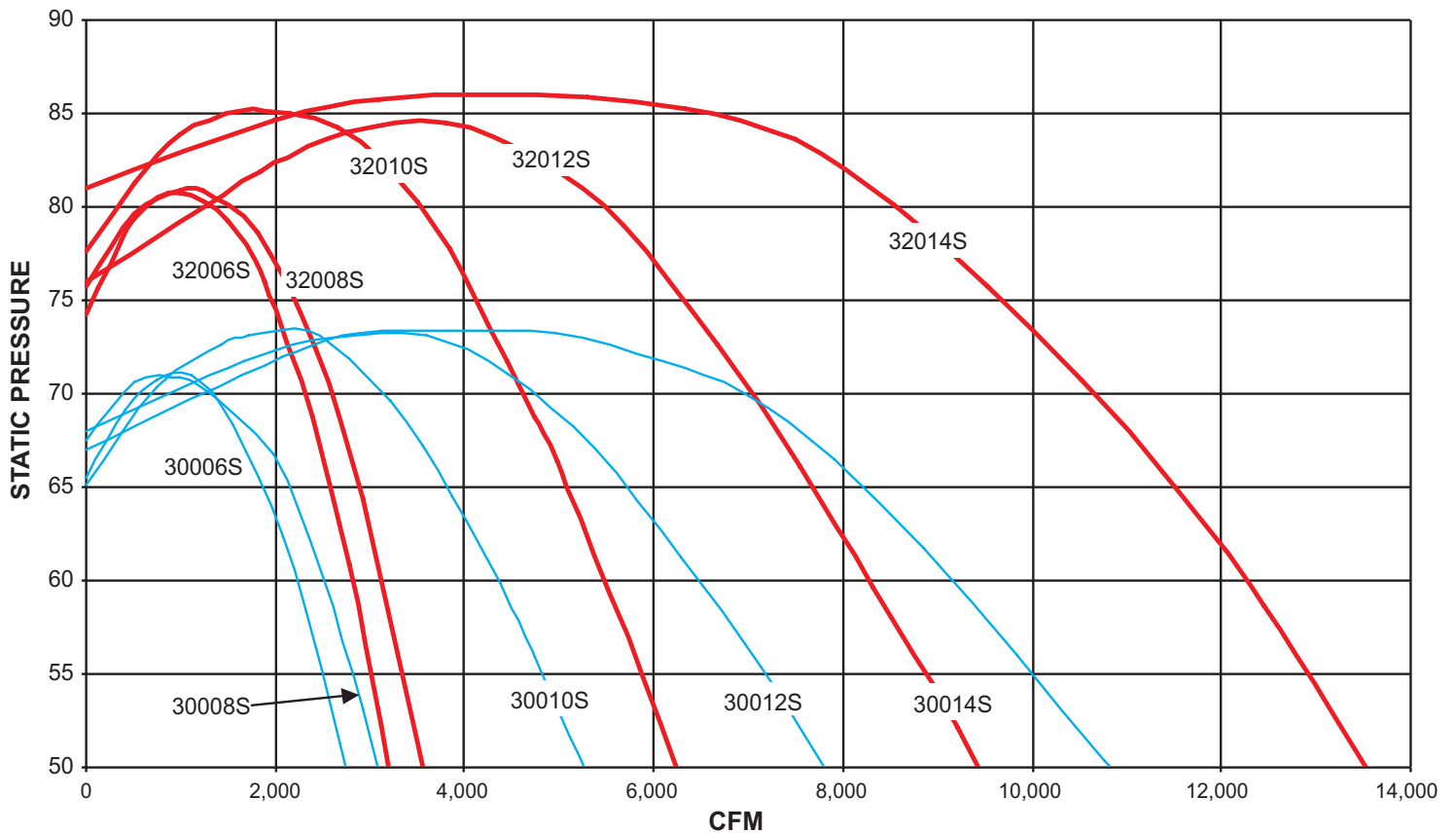
STEEL WHEEL PERFORMANCE AT 3550 RPM

TYPE HP
PRESSURE
BLOWERS

270-290 Steel 4", 6", 8", 10", & 12" Outlets



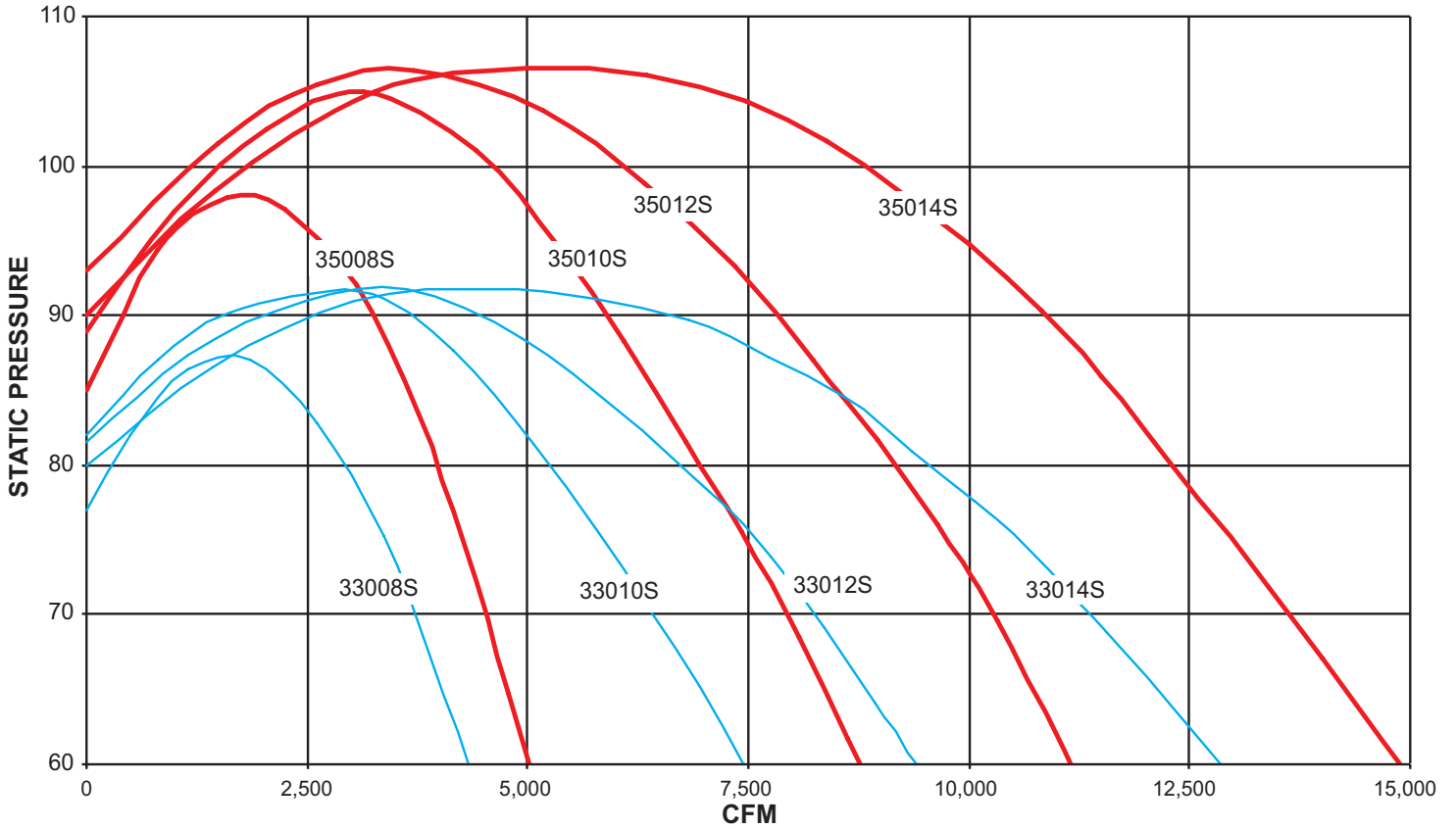
300-320 Steel 6", 8", 10", 12", & 14" Outlets



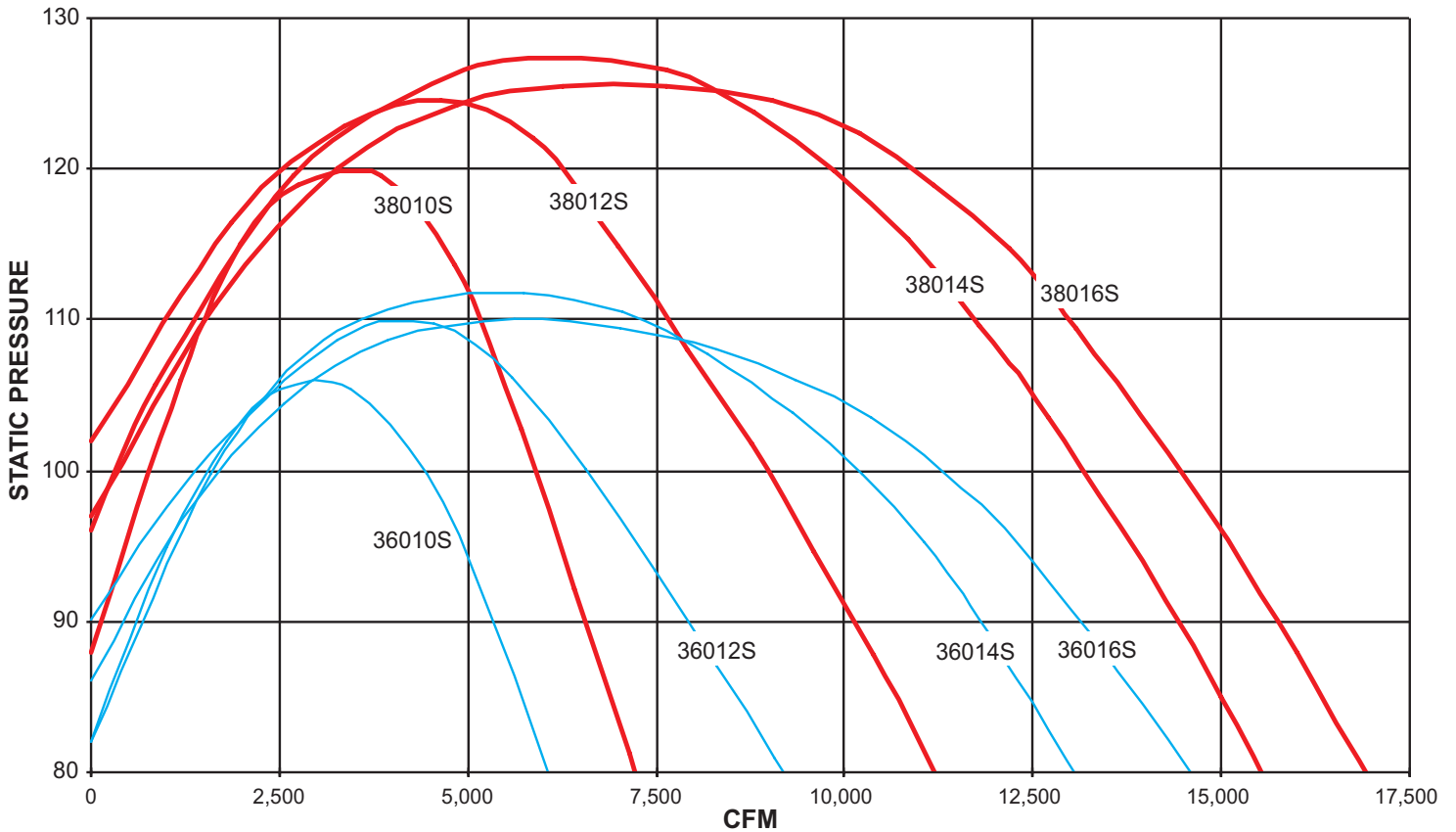
STEEL WHEEL PERFORMANCE AT 3550 RPM

TYPE HP
PRESSURE
BLOWERS

330-350 Steel 8", 10", 12", & 14" Outlets



360-380 Steel 10", 12", 14", & 16" Outlets



WHEEL SPECIFICATIONS

Size	Steel		Alloy 2205		Aluminum		Size	Steel		Alloy 2205		Aluminum	
	Wheel weight†	WR ²	Wheel weight†	WR ²	Wheel weight†	WR ²		Wheel weight†	WR ²	Wheel weight†	WR ²	Wheel weight†	WR ²
27004	69	39	70	38	42	22	32006	113	79	115	78	77	42
27006	69	39	70	38	42	22	32008	113	79	115	78	77	42
27008	71	40	72	40	44	23	32010	115	81	117	80	79	45
27010	95	47	96	46	68	26	32012	119	85	120	84	81	47
27012	97	49	98	48	70	27	32014	123	91	124	89	83	51
27504	71	41	72	41	43	23	33008	126	94	122	92	79	50
27506	71	41	72	41	43	23	33010	127	98	123	96	80	52
27508	73	43	74	43	45	25	33012	126	99	122	97	79	53
27510	97	50	98	49	69	27	33014	131	107	127	104	81	57
27512	100	53	101	52	71	29	33508	128	99	124	97	80	53
28004	73	44	74	44	44	25	33510	130	103	126	101	81	55
28006	73	44	74	44	44	25	33512	129	105	125	103	81	56
28008	75	46	76	46	46	27	33514	134	113	130	110	82	59
28010	99	53	100	52	71	29	34008	131	105	127	102	81	55
28012	102	56	103	55	72	31	34010	133	109	129	107	83	57
28504	75	47	76	47	45	26	34012	132	111	128	108	82	59
28506	75	47	76	47	45	26	34014	138	119	134	116	84	63
28508	77	49	78	49	48	29	34508	134	110	130	108	83	58
28510	101	56	103	55	72	31	34510	136	115	132	113	84	60
28512	105	59	106	58	73	33	34512	135	117	131	114	83	61
29004	77	51	78	50	46	28	34514	141	125	137	123	86	66
29006	77	51	78	50	46	28	35008	137	116	133	114	84	61
29008	79	53	81	52	49	30	35010	139	121	135	119	84	63
29010	104	60	105	59	73	33	35012	138	123	134	120	85	65
29012	107	63	108	62	75	35	35014	144	132	140	129	87	69
30006	104	63	105	62	72	33	36010	150	129	150	126	101	75
30008	104	63	105	62	72	33	36012	153	134	153	131	102	77
30010	105	65	107	63	74	35	36014	171	153	171	150	120	91
30012	108	68	110	67	75	37	36016	176	155	177	152	123	93
30014	112	72	113	71	77	40	36510	153	136	153	133	102	78
30506	106	66	108	65	73	35	36512	156	141	156	138	104	81
30508	106	66	108	65	73	35	36514	174	160	175	157	122	95
30510	108	68	109	67	75	38	36516	180	162	180	159	125	97
30512	111	72	112	71	77	40	37010	156	143	156	140	104	82
30514	114	76	116	75	78	43	37012	159	148	159	145	105	85
31006	108	70	110	69	75	37	37014	178	168	178	164	124	99
31008	108	70	110	69	75	37	37016	183	170	183	167	127	101
31010	110	72	112	71	77	40	37510	159	150	159	147	105	86
31012	113	76	115	75	78	42	37512	162	156	162	153	107	89
31014	117	81	119	80	80	45	37514	181	176	181	172	125	104
31506	111	75	112	73	76	40	37516	187	178	187	175	129	106
31508	111	75	112	73	76	40	38010	165	161	165	158	107	90
31510	113	77	114	76	78	42	38012	165	167	165	164	109	93
31512	116	81	118	79	79	44	38014	184	184	184	180	127	108
31514	120	86	121	84	81	48	38016	190	187	190	183	130	110

† Includes bushing weight on steel and aluminum wheels. Alloy 2205 wheels are interference fit to the shaft.
 [NOTE: Sizes 360-380, Arr. 1 and 8, are not furnished with bushings; interference fit is standard.]

SHAFT AND BEARING DETAILS				
Size	Arrangement 1		Arrangement 8	
	Shaft diameter †	Bearings*	Shaft diameter †	Bearings*
270 - 290	27/16	P-U3K39	27/16	P-U3K39
300 - 320	215/16	P-U3K47	215/16	P-U3K47
330 - 350	37/16	P-U3K55	37/16	P-U3K55
360 - 380	37/16	P-U3K55	37/16	P-U3K55

† See tables on pages 12 and 13 for shaft turndown at drive end on Arrangement 8 fans.

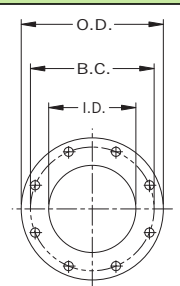
* nyb reserves the right to substitute bearings of equal rating.

FLANGE DIMENSIONS [INCHES]				
Size	I.D.	O.D.	B.C.	Holes ‡ No., size
4	4	9	7 1/2	8 - 3/4
6	6	11	9 1/2	8 - 7/8
8	8	13 1/2	11 3/4	8 - 7/8
10	10	16	14 1/4	12 - 1
12	12	19	17	12 - 1
14	14	21	18 3/4	12 - 1 1/8
16	16	23 1/2	21 1/4	16 - 1 1/8

‡ Holes straddle centerline.

ANSI Class 125/150 hole pattern.

Flange thickness: 3/8



DIMENSIONS

Not to be used for construction unless certified. Arrangement 1, 4, and 8 bare fan weight does not include wheel or motor. For wheel weights, see page 11. Weights in pounds.

Tolerance: ± 1/8"

Size	Outlet size	Motor frame	Arrangement 4					Arrangement 8							
			A	H	N	R	Bare fan weight	A	H	N	R	Shaft diameter, drive end	Bare fan weight		
270-290	4/6	254T - 256T	34	34 3/8	26 1/4	3 1/2	555	31 1/4	58 5/8	50 1/2	3 1/2	1 11/16	1005		
		284TS - 286TS	34 3/4		26 1/4				60 5/8	52 1/2		1 11/16	1010		
		324TS - 326TS	35 3/4		26 1/4				64 1/8	56		1 15/16	1020		
	8	254T - 256T	34	35 3/8	26 1/4	4	565		59 5/8	50 1/2	4	1 11/16	1015		
		284TS - 286TS	34 3/4		26 1/4				61 5/8	52 1/2		1 11/16	1020		
		324TS - 326TS	35 3/4		26 1/4				65 1/8	56		1 15/16	1030		
		364TS - 365TS	34 1/2		34				67 1/8	58		2 3/16	1170		
		404TS - 405TS	35 1/2		34				72 1/8	63		2 3/16	1195		
		444TS - 445TS	34 1/2		43 1/8				46	73 1/4		63	2 3/16	1230	
	10	254T - 256T	34	36 1/2	26 1/4	4 1/2	600		60 3/4	50 1/2	4 1/2	1 11/16	1045		
		284TS - 286TS	34 3/4		26 1/4				62 3/4	52 1/2		1 11/16	1050		
		324TS - 326TS	35 3/4		26 1/4				66 1/4	56		1 15/16	1065		
		364TS - 365TS	34 1/2		34				68 1/4	58		2 3/16	1205		
		404TS - 405TS	35 1/2		34				73 1/4	63		2 3/16	1230		
		444TS - 445TS	34 1/2		56 1/4				46	—		—	—		
	12	254T - 256T	34	38 1/2	26 1/4	5 1/2	628		62 3/4	50 1/2	5 1/2	1 11/16	1080		
		284TS - 286TS	34 3/4		26 1/4				64 3/4	52 1/2		1 11/16	1085		
		324TS - 326TS	35 3/4		26 1/4				68 1/4	56		1 15/16	1095		
		364TS - 365TS	34 1/2		34				70 1/4	58		2 3/16	1235		
		404TS - 405TS	35 1/2		34				75 1/4	63		2 3/16	1260		
		444TS - 445TS	34 1/2		58 1/4				46	—		—	—		
	300-320	6/8	254T - 256T	34	34 1/2	26 1/4	3 1/2		610	34 1/2	60 3/4	52 1/2	3 1/2	1 11/16	1210
			284TS - 286TS	34 3/4		26 1/4					62 3/4	54 1/2		1 11/16	1215
			324TS - 326TS	35 3/4		26 1/4					66 1/4	58		1 15/16	1230
364TS - 365TS			34 1/2	34		68 1/4		60			2 3/16	1380			
404TS - 405TS			35 1/2	34		73 1/4		65			2 3/16	1410			
10		254T - 256T	34	35 1/2	26 1/4	4	630	61 3/4	52 1/2		4	1 11/16	1230		
		284TS - 286TS	34 3/4		26 1/4			63 3/4	54 1/2			1 11/16	1235		
		324TS - 326TS	35 3/4		26 1/4			67 1/4	58			1 15/16	1250		
		364TS - 365TS	34 1/2		34			69 1/4	60			2 3/16	1400		
		404TS - 405TS	35 1/2		34			74 1/4	65			2 3/16	1430		
		444TS - 445TS	34 1/2		55 1/4			46	79 1/4			70	2 15/16	1550	
12		254T - 256T	34	37 1/8	26 1/4	4 7/8	665	63 3/8	52 1/2		4 7/8	1 11/16	1265		
		284TS - 286TS	34 3/4		26 1/4			65 3/8	54 1/2			1 11/16	1275		
		324TS - 326TS	35 3/4		26 1/4			68 7/8	58			1 15/16	1285		
		364TS - 365TS	34 1/2		34			70 7/8	60			2 3/16	1440		
		404TS - 405TS	35 1/2		34			75 7/8	65			2 3/16	1465		
		444TS - 445TS	34 1/2		44 7/8			46	80 7/8			70	2 15/16	1590	
		447TS - 449TS	34 1/2		56 7/8			46	88 7/8			78	2 15/16	1660	
14		254T - 256T	34	39 3/8	26 1/4	6	700	65 5/8	52 1/2		6	1 11/16	1300		
		284TS - 286TS	34 3/4		26 1/4			67 5/8	54 1/2			1 11/16	1310		
		324TS - 326TS	35 3/4		26 1/4			71 1/8	58			1 15/16	1320		
		364TS - 365TS	34 1/2		34			73 1/8	60			2 3/16	1475		
		404TS - 405TS	35 1/2		34			78 1/8	65			2 3/16	1500		
		444TS - 445TS	34 1/2		47 1/8			46	83 1/8			70	2 15/16	1625	
	447TS - 449TS	34 1/2	59 1/8		46			91 1/8	78	2 15/16		1695			

HIGH-PRESSURE FAN OPTIONS FOR HIGHER AIRFLOW APPLICATIONS

Refer to separate bulletin on each product line.



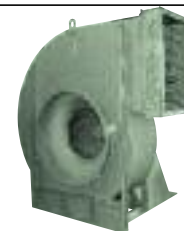
AF FANS

High-efficiency, airfoil wheel designed for clean-air applications. Capacities to 240,000 CFM [6800 CMM], static pressures to 50" [12.4 kPa].



RTS FANS

High-efficiency, radial-tip wheel suitable for particulate-laden airstreams. Capacities to 220,000 CFM [6200 CMM], static pressures to 30" [7.5 kPa].



HPBC FANS

High-efficiency, backward-curved wheel capable of handling light particulate-laden or moist airstreams. Capacities to 170,000 CFM [4815 CMM], static pressures to 40" [9.9 kPa].

DIMENSIONS

Not to be used for construction unless certified. Arrangement 1, 4, and 8 bare fan weight does not include wheel or motor. For wheel weights, see page 11. Weights in pounds.

Tolerance: ± 1/8"

Size	Outlet size	Motor frame	Arrangement 4					Arrangement 8						
			A _s	H	N	R	Bare fan weight	A	H	N	R	Shaft diameter, drive end	Bare fan weight	
330-350	8	254T - 256T	35 1/2	32 5/8	23 3/8	4 3/8	841	36 3/4	64 1/2	55 1/4	4	27/16	1670	
		284TS - 286TS	36 1/4	35 1/8	25 7/8		865		66 1/2	57 1/4		27/16	1689	
		324TS - 326TS	37 1/4	37 7/8	28 5/8		891		72 1/2	63 1/4		27/16	1717	
		364TS - 365TS	32 5/8	43 1/4	34	4	953		72 1/4	63		2 15/16	1699	
		404TS - 405TS	33 5/8		34		76 3/4		67 1/2	37/16		1735		
		444TS - 445TS	37 3/4	46	82 1/2		73 1/4		37/16	1788				
		447TS - 449TS	37 3/4	46	91		81 3/4		37/16	1864				
	254T - 256T	35 1/2	33 3/4	23 3/8	4 7/8		857		65 5/8	55 1/4	4 1/2	27/16	1686	
	284TS - 286TS	36 1/4	36 1/4	25 7/8			881		67 5/8	57 1/4		27/16	1705	
	324TS - 326TS	37 1/4	39	28 5/8			907		73 5/8	63 1/4		27/16	1732	
	364TS - 365TS	32 5/8	44 3/8	34		4 1/2	969		73 3/8	63		2 15/16	1715	
	404TS - 405TS	33 5/8		34			77 7/8		67 1/2	37/16		1750		
	444TS - 445TS	37 3/4	46	83 5/8			73 1/4		37/16	1804				
	447TS - 449TS	37 3/4	46	92 1/8			81 3/4		37/16	1880				
	254T - 256T	35 1/2	34 1/4	23 3/8	5 1/4		871	66 1/8	55 1/4	4 7/8	27/16	1700		
	284TS - 286TS	36 1/4	36 3/4	25 7/8			895	68 1/8	57 1/4		27/16	1719		
	324TS - 326TS	37 1/4	39 1/2	28 5/8			921	74 1/8	63 1/4		27/16	1747		
	364TS - 365TS	32 5/8	44 7/8	34		4 7/8	983	73 7/8	63		2 15/16	1729		
	404TS - 405TS	33 5/8		34			78 3/8	67 1/2	37/16		1765			
	444TS - 445TS	37 3/4	46	84 1/8			73 1/4	37/16	1818					
	447TS - 449TS	37 3/4	46	92 5/8			81 3/4	37/16	1894					
	254T - 256T	35 1/2	36 1/2	23 3/8	6 3/8		897	68 3/8	55 1/4	6	27/16	1725		
	284TS - 286TS	36 1/4	39	25 7/8			921	70 3/8	57 1/4		27/16	1745		
	324TS - 326TS	37 1/4	41 3/4	28 5/8			947	76 3/8	63 1/4		27/16	1772		
	364TS - 326TS	32 5/8	47 1/8	34		6	1009	76 1/8	63		2 15/16	1755		
	404TS - 405TS	33 5/8		34			80 5/8	67 1/2	37/16		1790			
	444TS - 445TS	37 3/4	46	86 3/8			73 1/4	37/16	1844					
	447TS - 449TS	37 3/4	46	94 7/8			81 3/4	37/16	1920					
360-380	10	254T - 256T	35 1/2	32 3/4	23 3/8		4 3/8	906	40	66 5/8	57 1/4	4	27/16	1867
		284TS - 286TS	36 1/4	35 1/4	25 7/8			930		68 5/8	59 1/4		27/16	1887
		324TS - 326TS	37 1/4	38	28 5/8			956		74 5/8	65 1/4		27/16	1917
		364TS - 365TS	32 5/8	43 3/8	34	4	1019	74 3/8		65	2 15/16		1873	
		404TS - 405TS	33 5/8		34		78 7/8	69 1/2		37/16	1912			
		444TS - 445TS	37 3/4	46	84 5/8		75 1/2	37/16		1969				
		447TS - 449TS	37 3/4	46	93 1/8		83 3/4	37/16		2050				
	254T - 256T	35 1/2	33 7/8	23 3/8	5		928	67 3/4		57 1/4	4 5/8	27/16	1889	
	284TS - 286TS	36 1/4	36 3/8	25 7/8			952	69 3/4		59 1/4		27/16	1909	
	324TS - 326TS	37 1/4	39 1/8	28 5/8			978	75 3/4		65 1/4		27/16	1939	
	364TS - 365TS	32 5/8	44 1/2	34		4 5/8	1040	75 1/2		65		2 15/16	1895	
	404TS - 405TS	33 5/8		34			80	69 1/2		37/16		1934		
	444TS - 445TS	37 3/4	46	85 3/4			75 1/2	37/16		1991				
	447TS - 449TS	37 3/4	46	94 1/4			83 3/4	37/16		2072				
	254T - 256T	35 1/2	35 7/8	23 3/8	6		953	69 3/4	57 1/4	5 5/8	27/16	1913		
	284TS - 286TS	36 1/4	38 3/8	25 7/8			977	71 3/4	59 1/4		27/16	1933		
	324TS - 326TS	37 1/4	41 1/8	28 5/8			1003	77 3/4	65 1/4		27/16	1963		
	364TS - 365TS	32 5/8	46 1/2	34		5 5/8	1065	77 1/2	65		2 15/16	1920		
	404TS - 405TS	33 5/8		34			82	69 1/2	37/16		1958			
	444TS - 445TS	37 3/4	46	87 3/4			75 1/2	37/16	2015					
	447TS - 449TS	37 3/4	46	96 1/4			83 3/4	37/16	2097					
	254T - 256T	35 1/2	36 5/8	23 3/8	6 3/8		968	70 1/2	57 1/4	6	27/16	1928		
	284TS - 286TS	36 1/4	39 1/8	25 7/8			992	72 1/2	59 1/4		27/16	1948		
	324TS - 326TS	37 1/4	41 7/8	28 5/8			1018	78 1/2	65 1/4		27/16	1978		
	364TS - 365TS	32 5/8	47 1/4	34		6	1080	78 1/4	65		2 15/16	1935		
	404TS - 405TS	33 5/8		34			82 3/4	69 1/2	37/16		1973			
	444TS - 445TS	37 3/4	46	88 1/2			75 1/2	37/16	2030					
	447TS - 449TS	37 3/4	46	97			83 3/4	37/16	2112					

s For Arrangement 4 fan sizes 330-380, and motor frames above 326TS, the A dimension listed above applies for all discharges except BH. For BH fans with larger motor frames, the A dimensions are: 364TS-365TS - 39 1/4 ; 404TS-405TS - 40 1/4 ; 444TS-449TS - 39 1/8 .

ARRANGEMENTS 1, 4, AND 8

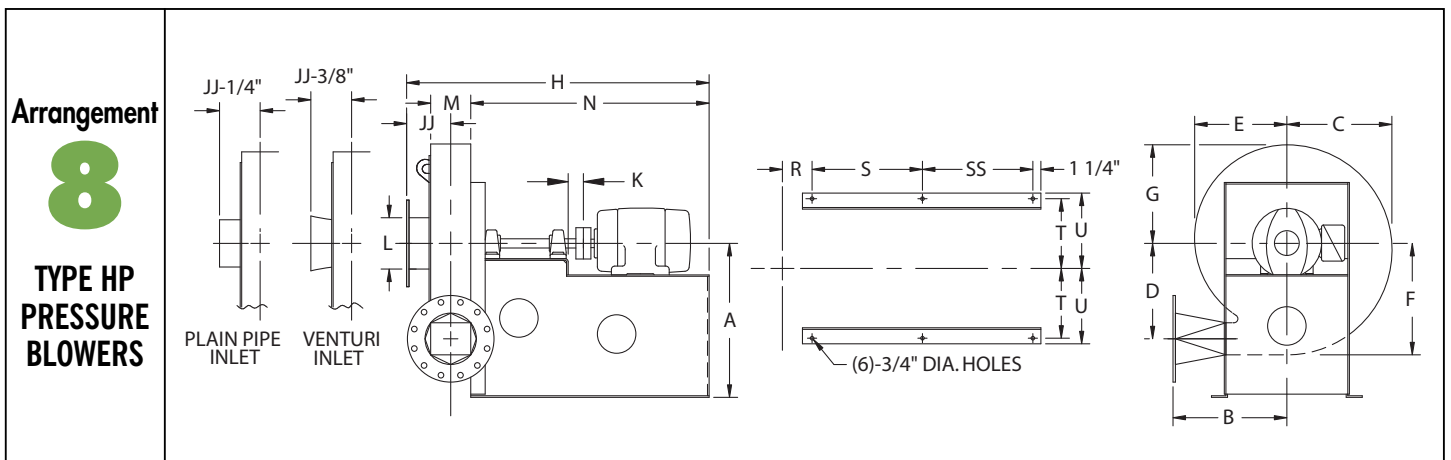
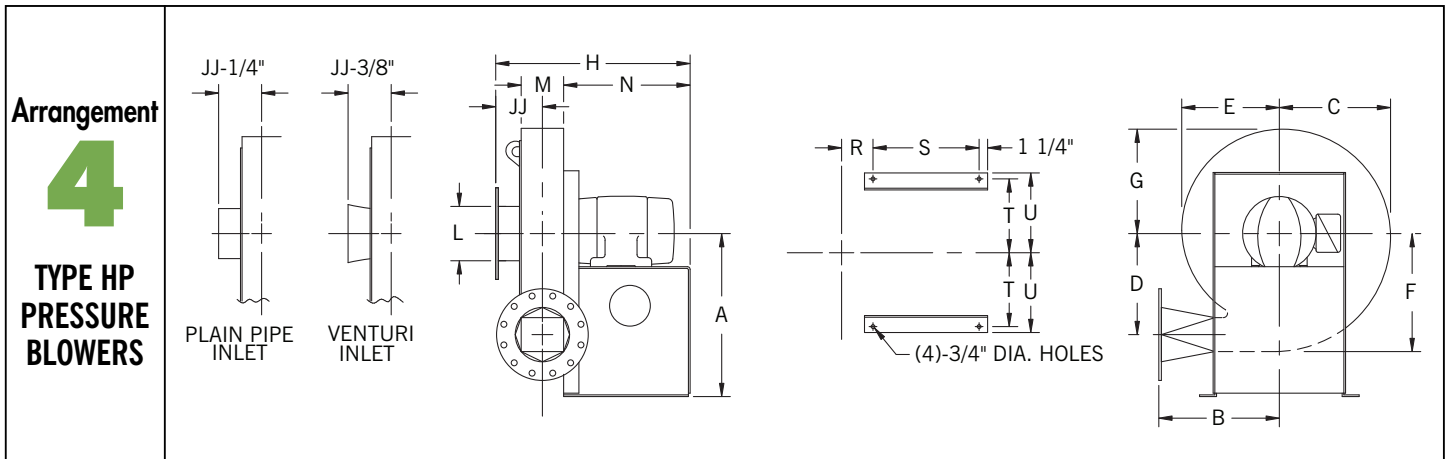
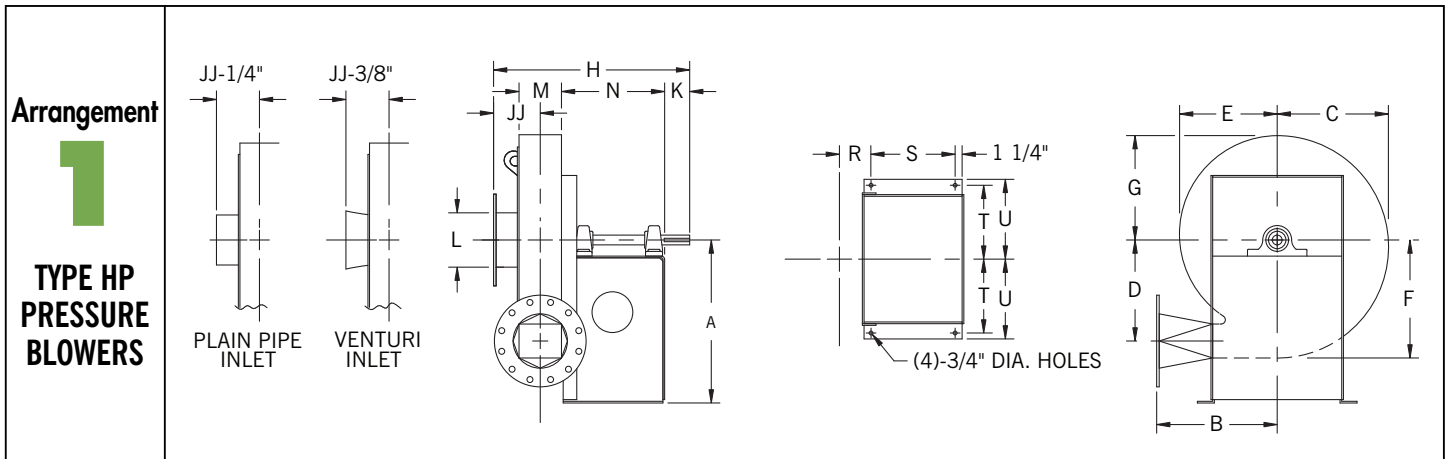
Size	Outlet size	Inlet flange	B	C	D	E	F	G	JJ	L [Inlet I.D.]	M
270-290	4/6	6	19 ³ / ₄	21 ³ / ₄	19 ³ / ₄	19 ¹ / ₈	23 ¹ / ₈	20 ¹ / ₂	6	6	4 ³ / ₈
	8	8							6 ¹ / ₂	8	5 ³ / ₈
	10	10	23 ³ / ₄						7	10	6 ¹ / ₂
	12	12							8	12	8 ¹ / ₂
300-320	6/8	8	20 ¹ / ₄	24	21 ³ / ₄	21 ¹ / ₈	25 ³ / ₈	22 ¹ / ₂	6	8	4 ¹ / ₂
	10	10	7						10	5 ¹ / ₂	
	12	12	7 ³ / ₈						12	7 ¹ / ₈	
	14	14	8 ¹ / ₂						14	9 ³ / ₈	
330-350	8	8	28 ³ / ₄	26 ¹ / ₈	24 ¹ / ₈	23	27 ³ / ₄	24 ⁵ / ₈	6 ¹ / ₂	8	5 ¹ / ₂
	10	10							7	10	6 ⁵ / ₈
	12	12							7 ³ / ₈	12	7 ¹ / ₈
	14	14							8 ¹ / ₂	14	9 ³ / ₈
360-380	10	10	29 ¹ / ₄	28 ³ / ₈	26	25	30	26 ⁵ / ₈	6 ¹ / ₂	10	5 ⁵ / ₈
	12	12							7 ¹ / ₈	12	6 ³ / ₄
	14	14							8 ¹ / ₈	14	8 ³ / ₄
	16	16							8 ¹ / ₂	16	9 ¹ / ₂

ARRANGEMENT 1

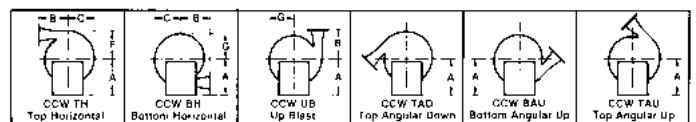
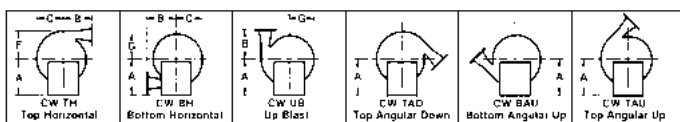
Size	Outlet size	A	H	K	N	R	S	T	U	Bare fan weight
270-290	4/6	31 ¹ / ₄	37 ¹ / ₈	7	22	3 ¹ / ₂	19 ¹ / ₄	13 ³ / ₈	14 ⁵ / ₈	765
	8		38 ¹ / ₈			4				775
	10		39 ¹ / ₄			4 ¹ / ₂				805
	12		41 ¹ / ₄			5 ¹ / ₂				840
300-320	6/8	34 ¹ / ₂	40 ¹ / ₄	8	24	3 ¹ / ₂	21 ¹ / ₄	13 ³ / ₈	14 ⁵ / ₈	950
	10		41 ¹ / ₄			4				970
	12		42 ⁷ / ₈			4 ⁷ / ₈				1005
	14		45 ¹ / ₈			6				1040
330-350	8	36 ³ / ₄	44	9	25 ³ / ₄	4	23 ¹ / ₄	14 ³ / ₈	15 ⁵ / ₈	1255
	10		45 ¹ / ₈			4 ¹ / ₂				1270
	12		45 ⁵ / ₈			4 ⁷ / ₈				1285
	14		47 ⁷ / ₈			6				1310
360-380	10	40	47 ¹ / ₈	10	27 ³ / ₄	4	25 ¹ / ₄	14 ³ / ₈	15 ⁵ / ₈	1420
	12		48 ¹ / ₄			4 ⁵ / ₈				1440
	14		50 ¹ / ₄			5 ⁵ / ₈				1465
	16		51			6				1480

ARRANGEMENT 4 AND 8

Size	Motor frame	K	S		SS	T	U	
		Arr. 8	Arr. 4	Arr. 8	Arr. 8		Arr. 4	Arr. 8
270-290	254T - 256T	3	23 ¹ / ₂	19 ¹ / ₄	28 ³ / ₄	13 ³ / ₈	14 ¹ / ₄	14 ⁵ / ₈
	284TS - 286TS				30 ³ / ₄			
	324TS - 326TS				34 ¹ / ₄			
	364TS - 365TS				27 ³ / ₄			
	404TS - 405TS				30 ¹ / ₄			
300-320	254T - 256T	3	23 ¹ / ₂	21 ¹ / ₄	28 ³ / ₄	13 ³ / ₈	14 ¹ / ₄	14 ⁵ / ₈
	284TS - 286TS				30 ³ / ₄			
	324TS - 326TS				34 ¹ / ₄			
	364TS - 365TS	3 ³ / ₄	31 ¹ / ₂	28 ³ / ₄	28 ³ / ₄	14 ³ / ₈	15 ⁵ / ₈	15 ⁵ / ₈
	404TS - 405TS				31 ¹ / ₄			
	444TS - 445TS				33 ³ / ₄			
	447TS - 449TS				37 ³ / ₄			
330-350	254T - 256T	3 ³ / ₄	20 ¹ / ₂	23 ¹ / ₄	27 ¹ / ₈	14 ³ / ₈	15 ⁵ / ₈	15 ⁵ / ₈
	284TS - 286TS				29 ¹ / ₈			
	324TS - 326TS				35 ¹ / ₈			
	364TS - 365TS	4 ¹ / ₂	31 ¹ / ₂	30 ¹ / ₄	30 ¹ / ₄			
	404TS - 405TS				32 ¹ / ₂			
	444TS - 445TS				35 ³ / ₈			
	447TS - 449TS				39 ⁵ / ₈			
360-380	254T - 256T	3 ³ / ₄	20 ¹ / ₂	25 ¹ / ₄	27 ¹ / ₈	14 ³ / ₈	15 ⁵ / ₈	15 ⁵ / ₈
	284TS - 286TS				29 ¹ / ₈			
	324TS - 326TS				35 ¹ / ₈			
	364TS - 365TS	4 ¹ / ₂	31 ¹ / ₂	31 ¹ / ₄	31 ¹ / ₄			
	404TS - 405TS				33 ¹ / ₂			
	444TS - 445TS				36 ³ / ₈			
	447TS - 449TS				40 ⁵ / ₈			



FAN DISCHARGES – VIEWED FROM DRIVE SIDE



Clockwise – angular discharges at 45°

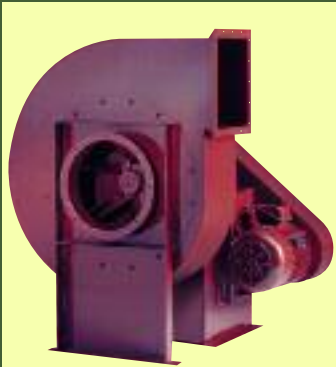
Counterclockwise – angular discharges at 45°

Housings are non-reversible and non-rotatable. Discharges available in 22½°. Contact **nyb** for Down Blast discharge.

The New York Blower Company has a policy of continuous product development 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 finding 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.

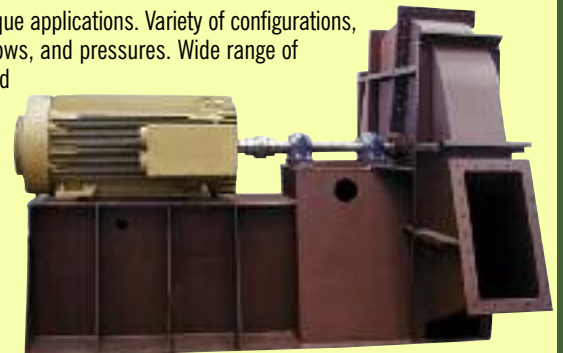


FIBERGLASS REINFORCED PLASTIC [FRP]

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.