



# PRODUCT GUIDE

**THE NEW YORK BLOWER COMPANY**  
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In 1889, two brothers—J.W. Mathis and August Mathis—opened a sheet-metal shop on the South Side of Chicago and formed Mathis Brothers Company. They designed and installed heating and ventilating systems.

In 1904, the brothers bought The New York Blower Company, a fan manufacturer founded in 1893. The plant was moved from Bucyrus, Ohio, to La Porte, Indiana, in 1919. The New York Blower Company was one of 12 founding companies of the National Association of Fan Manufacturers, the earliest predecessor to the Air Movement and Control Association International.

In the 1950s and 1960s, the company expanded its presence from regional to national through the development of an extensive network of sales representatives. Today, that presence is world-wide with over 200 representatives, partners, and licensees established around the globe.

Spanning the decades since 1889, The New York Blower Company has been designing and building fans and blowers to move air in all types of commercial and industrial applications. Today, New York Blower has one of the most comprehensive lines of fans and blowers in the world, with literally thousands of designs and models available.

## Commitment To Technical Excellence

Consistent capital investment has resulted in the most modern production equipment and research facilities in the industry. This has allowed New York Blower to provide an unmatched combination of technology and manufacturing expertise in its products. New York Blower fan designs provide the highest aerodynamic efficiencies compatible with specific systems and gas-stream requirements.



Welding and Assembly Operations.



Product Research Center



Headquarters Willowbrook, Illinois.

The New York Blower Company is a charter member of the Air Movement and Control Association International, which was founded to establish test standards for air-moving equipment.



**MEMBER**



## Lab

New York Blower's AMCA-accredited laboratory and research center ensure the company performs to the highest standards in product development and research including sound, air performance, vibration, finite element analysis, and speed-testing.

\*Product performance data based on tests in an AMCA Accredited Laboratory are not to be construed as being licensed to bear the AMCA Seal.

# Axial Clean Air Fans

New York Blower axial fans are available in both belt-drive and direct-drive arrangements. Models can be constructed of either mild steel or aluminum.

## APPLICATIONS

- Building ventilation
- Oven exhaust
- Drying systems
- Moisture blow-off
- Fume removal
- Glass tempering
- Spray-booth exhaust
- Air curtains
- Cooling
- Grain Drying
- Flares



Vaneaxial Fan



Tubular Acoustafoil Fan



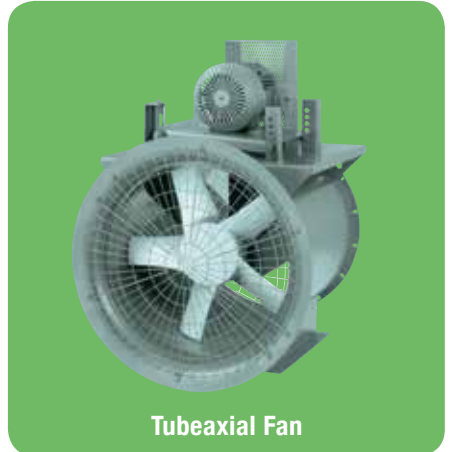
Duct Fan



Upblast Roof Ventilator



Propeller Fan



Tubeaxial Fan

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
Propeller Fans	Propeller panel fan	117,800	3/4	105
Upblast Roof Ventilators	Housed "Propeller" fan w/rainhood	118,000	3/4	180
Duct Fans	Housed axial "Propeller" fan	60,000	2	350
Tubeaxial Fans	Housed axial "Propeller" fan	86,000	3	200
Vaneaxial Fans	Housed axial "Propeller" fan w/vanes	100,000	5	200
Tubular Acoustafoil Fans	Centrifugal inline "AcF/PLR" wheel	140,000	14	200

\*AcF=Backward Inclined Airfoil, PLR=Backward Inclined Single Thickness

For state-of-the-art air management systems designed and manufactured to suit your conditions

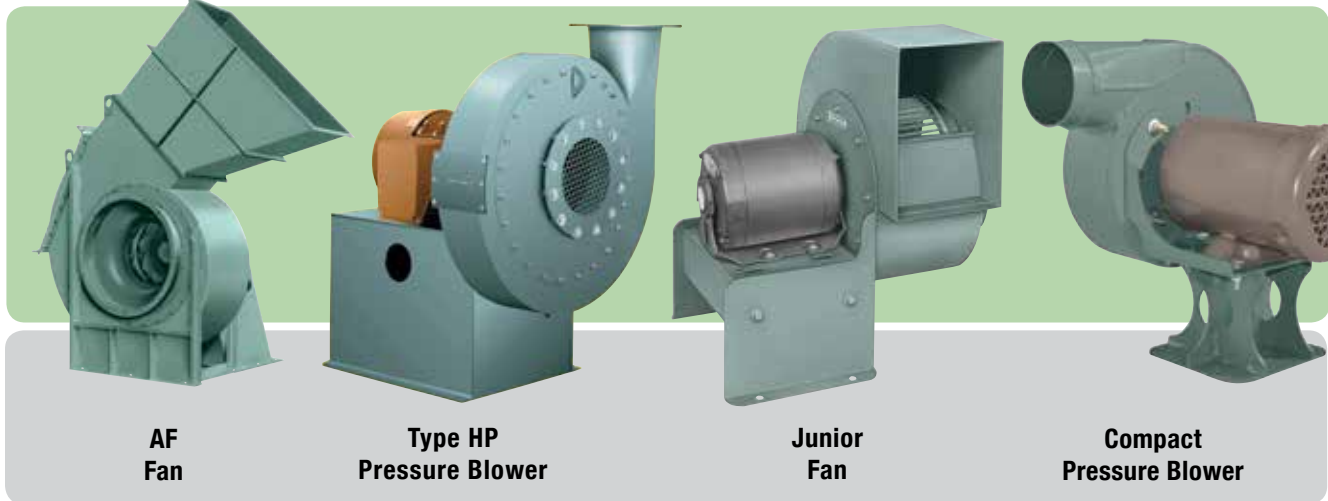
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# Centrifugal Clean Air Fans

New York Blower centrifugal fans are available in both belt-drive and direct-drive arrangements. Models can be constructed of either mild steel, aluminum, stainless steel or special alloys.

## APPLICATIONS

- Dust collection
- Pneumatic conveying
- Incineration
- Combustion air
- Pollution control
- Fume-hood/Scrubber exhaust
- Chemical process
- Dryer applications



PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
Junior Fans	Centrifugal housed "FC" wheel	4,600	2-1/2	450
General Purpose Fans	Centrifugal housed "AcF/PLR" wheel	26,500	8	650
Square Fans	Centrifugal square housed "AcF/PLR" wheel	29,000	22	180
Forward Curved DWDI Fans	Centrifugal DWDI "FC" wheel	32,000	3-1/4	120
Tubular AcoustaFoil Fans	Centrifugal inline "AcF/PLR" wheel	140,000	14	200
Single Width Fans	Centrifugal housed "AcF/BC/PLR" wheel	200,000	14	1000
Double Width Fans	Centrifugal housed "AcF/PLR" wheel	350,000	14	120
Class IV Fans	Centrifugal housed "AcF/PLR" wheel	250,000	20	1000
BC Pressure Blower	Centrifugal housed "BC" wheel	80,000	110	800
High Pressure Backward Curved	Centrifugal housed "BC" wheel	170,000	40	750
AF-30 Fans	Centrifugal housed "AF/BC" wheel	123,000	30	750
AF-40 Fans	Centrifugal housed "AF/BC" wheel	240,000	46	750
AF-50 Fans	Centrifugal housed "AF/BC" wheel	130,000	50	750
BC-15 Fans	Centrifugal housed "BC" wheel	150,000	15	750
BC-20 Fans	Centrifugal housed "BC" wheel	260,000	21	750
BC-30 Fans	Centrifugal housed "BC" wheel	290,000	31	750
BC-40 Fans	Centrifugal housed "BC" wheel	300,000	40	750
Compact GI Fans	Centrifugal housed "Radial" wheel	2,200	14	600
Compact Pressure Blowers	Centrifugal housed "Radial" wheel	4,000	23	600
Pressure Blowers	Centrifugal housed "Radial" wheel	5,200	58	600
Type HP Pressure Blowers	Centrifugal housed "Radial" wheel	20,000	128	600
Plenum Fans	Centrifugal un-housed "AcF/BC/PLR" wheel	180,000	13	120
Plug Fans	Centrifugal un-housed "AcF/PLR" wheel	74,000	20	1300
Air Kits	Centrifugal housed "FC" wheel	100,000	6	1000

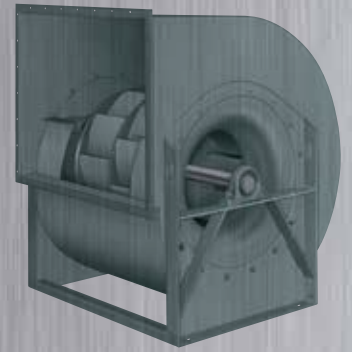
\*FC=Forward Curved, AcF/AF=Backward Inclined Airfoil, BC=Backward Inclined Backward Curved, PLR=Backward Inclined Single Thickness



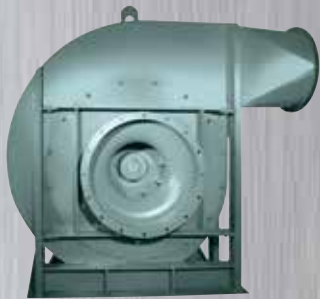
**General Purpose Fan**



**Tubular  
Acoustafoil Fan**



**Double-width Fan**



**BC Pressure  
Blower**



# CLASS IV FAN

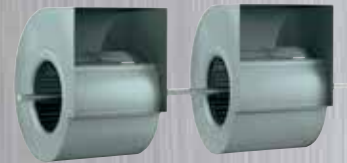
**All of our products are designed  
and manufactured to exact specifications**



**Plenum Fan**



**Plug Fan**



**Air Kits**



**Single-Width Fan**



**Square Fan**



**Pressure Blower**

# Centrifugal Dust/Material Handling Fans

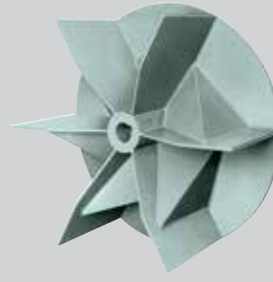
Centrifugal fans in belt-drive and direct-drive arrangements, constructed of mild steel, aluminum, stainless steel or special alloys.



Compact GI



Series 20 GI Fan



RD Wheel



Series 60 Fan



### Engineering Letters

Visit [nyb.com/eng\\_letters.asp](http://nyb.com/eng_letters.asp) to review twenty-eight “letters” that cover a wide range of technical fan subjects.

### APPLICATIONS

- Dust collection
- Pneumatic conveying
- Scrubber exhaust
- Incineration
- Combustion air
- Pollution control
- Fume-hood exhaust
- Chemical process
- Dryer applications
- Bulk material handling
- Paper converting



Series 30 GI Fan



RTS Fan

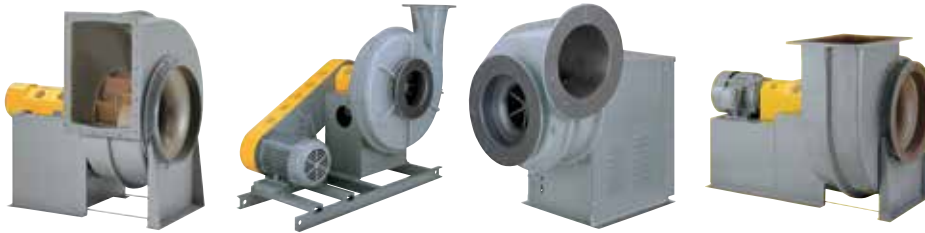


Series 45 GI Fan

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
Compact GI Fans	Centrifugal housed “Radial” wheel	2,200	14	600
Compact Pressure Blowers	Centrifugal housed “Radial” wheel	4,000	23	600
Series 20 Fans	Centrifugal housed “Radial” wheel	77,000	22	1000
Series 30 Fans	Centrifugal housed “Radial” wheel	95,000	32	1000
Series 45 Fans	Centrifugal housed “Radial” wheel	100,000	46	1000
Series 60 Fans	Centrifugal housed “Radial Tip” wheel	66,000	70	800
RTS	Centrifugal housed “Radial Tip” wheel	250,000	36	750

# Fiberglass-Reinforced-Plastic

# FRP



FRP General-Purpose Fume Exhauster

FRP Pressure Blower

FRP Radial Fume Exhauster

FRP Fume Exhauster

Fiberglass-reinforced-plastic [FRP], fans with alternative corrosion-resistant materials, stainless steel, aluminum, hot-dip galvanizing and other special coatings.

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
FRP Radial Fume Exhausters	Centrifugal housed "Radial" wheel	7,500	14	250
FRP Pressure Blowers	Centrifugal housed "Radial" wheel	5,000	36	250
FRP General Purpose Fume Exhausters	Centrifugal housed "ST" wheel	73,000	17	250
FRP Fume Exhausters	Centrifugal housed "BC" wheel	84,000	25	250

\* BC=Backward Inclined Backward Curved, ST=Backward Inclined Single Thickness

## Process Components



Plenum Fan

Plug Fan

Forward Curved DWDI Fan

Air Kits

### APPLICATIONS

- Air handlers
- Ovens and dryers
- Clean rooms
- Air curtains
- HVAC ventilation
- Air recirculation
- Spray booths

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
Forward Curved DWDI Fans	Centrifugal housed "FC" wheel	32,000	3-1/4	120
Plenum Fans	Centrifugal un-housed "AcF/BC/PLR" wheel	180,000	13	120
Plug Fans	Centrifugal un-housed "AcF/PLR" wheel	125,000	20	1300
Air Kits	Centrifugal housed "FC" wheel	100,000	6	1000

\*FC=Forward Curved, AcF=Backward Inclined Airfoil, BC=Backward Inclined Backward Curved, PLR=Backward Inclined Single Thickness

## Fan Components



Acoustafoil® Wheel

Backward Curved Wheel

PLR Wheel

Inlet Cone

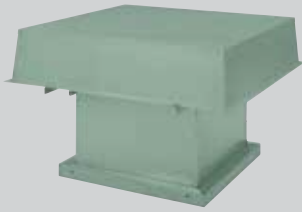
Housing

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
Wheels	Centrifugal "AcF/BC/PLR" wheel (10"-89" dia)	250,000	20	1300
Cones	Spun inlet cones for wheel (10"-89" dia)	250,000	-	1300
Housings	Housing for "AcF/BC/PLR" wheel (10"-89")	250,000	40	1300

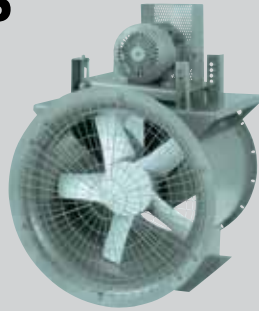
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The New York Blower Company has been providing air-handling equipment to the construction and process industries for over 125 years. To ensure the highest quality, OEM components use the same designs as our standard products.

# Roof Ventilators



**Hooded Roof Ventilator**



**Tubeaxial Fan**



**Duct Fan**

## APPLICATIONS

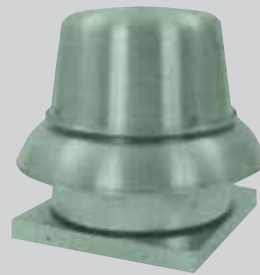
- Commercial ventilation
- Oven exhaust
- Institutional HVAC
- Industrial ventilation
- Smoke/fume removal
- Agriculture



**Tubular Acoustafoil Fan**



**Vaneaxial Fan**



**Centrifugal Roof Exhauster**



**Upblast Roof Ventilator**

New York Blower Roof Ventilators are available in both belt-drive and direct-drive arrangements. Models can be constructed of either mild steel or aluminum.

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp.
Hooded Roof Ventilators	Housed "Propeller" fan w/mushroom cap	106,000	3/4	105
Upblast Roof Ventilators	Housed "Propeller" fan w/rainhood	118,000	3/4	105
Centrifugal Roof Ventilators	Housed "Centrifugal" fan w/rainhood	35,000	3-1/4	105
Duct Fans	Housed axial "Propeller" fan	60,000	2	350
Tubaxial Fans	Housed axial "Propeller" fan	86,000	3	200
Vaneaxial Fans	Housed axial "Propeller" fan w/vanes	100,000	5	200
Tubular Acoustafoil Fans	Centrifugal inline "AcF/PLR" wheel	140,000	14	200

\* AcF=Backward Inclined Airfoil, PLR=Backward Inclined Single Thickness

# Heating Products

The New York Blower Company manufactures complete lines of steam Unit Heaters and steam heating coils. Because there are numerous coil sizes and two different fin styles available, we suggest you contact your New York Blower representative to assist you in making the final selection.



## APPLICATIONS

- Food processing
- Industrial heating
- Drying systems
- Make-Up Air systems

PRODUCT LINE	DESCRIPTION	CFM	MAXIMUM	
			Max. Steam Temp	Max. Steam Pressure
Unit Heaters	Steel heating coil w/propeller fan	5,800	600	200 psi
STEELfin Coils	Steel heating coil	17,500	600	200 psi



# BC Pressure Blowers



## APPLICATIONS

- Combustion Air
- Oven Exhaust
- Drying Systems
- Fluidized Beds
- Venturi Scrubbers
- Spray-Booth Exhaust
- Air Curtains
- Cooling

New York Blower BC 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 BC Pressure Blower suitable for a wide range of systems.

## DESIGN FEATURES

**Wheel Design:** Backward Curved Wheel

**Volume:** to 80,000 CFM

**Pressures:** to 110" WG

**Temperatures:** to 800°F

**12 Sizes:** 24" through 73"

**Arrangements:** 1, 4, 8

**Available Materials of Construction:**

Carbon Steel, Stainless Steel, Aluminum, Special Alloys

## Accessories:

- Companion Flanges
- Evase
- Drain
- Cleanout Door
- Inlet Box
- Shaft Seals
- Inlet Dampers

## Similar Product Lines:

High Pressure Fans, HPBC Fans, Pressure Blowers, Series 60 Fans

# BC Fans

New York Blower BC Fans are ideally suited for a wide range of High-flow, high-pressure, industrial-process applications including: combustion air, solvent recovery, thermal oxidation, fluidizing, dust collection, and air recirculation.



## APPLICATIONS

- Air handlers
- Ovens and dryers
- Clean rooms
- Air curtains
- Kilns
- HVAC ventilation
- Air recirculation
- Industrial/commercial ventilation
- Spray booths

## DESIGN FEATURES

**Wheel Design:** High-Efficiency - Backward Curved

**Volume:** to 300,000 CFM

**Pressures:** to 40" WG

**Temperatures:** to 750°F

**14 Sizes:** 24" through 89"

**Arrangements:** 1, 4, 8 and 9

**Available Materials of Construction:**

Carbon Steel, Stainless Steel, Aluminum, Special Alloys

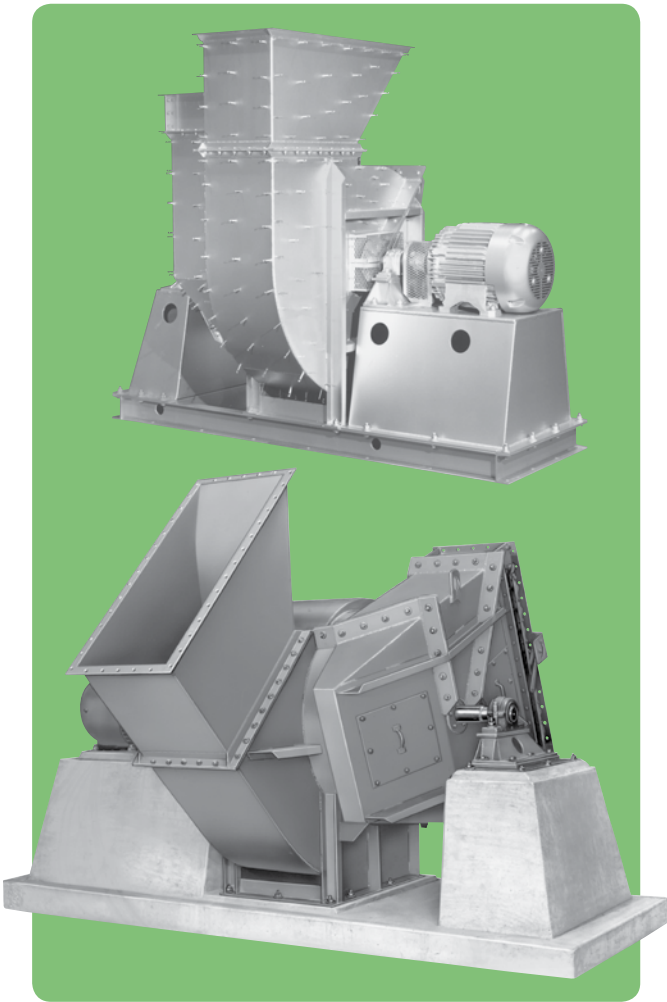
## Accessories:

- Companion Flanges
- Evase
- Drain
- Cleanout Door
- Inlet Box
- Shaft Seals
- Inlet Dampers

## Similar Product Lines:

- Single Width Fans
- Class 4 Fans
- AF Fans
- HPBC Fans

# Custom Products



New York Blower's custom-engineered products are designed to exacting specifications. Designs meet specific flow, pressure, temperature, leak integrity, and configuration requirements.

Specialty areas include:

- Configurations—choices range from having fan wheels mounted directly on motor shafts to independent pedestal configurations . . . to match mounting, space limitations, and application requirements.
- High temperatures—employing alloys for strength and insulation, and cladding for heat retention and protection.
- Corrosion/abrasion-resistance—alternatives include a wide variety of alloys such as Hastelloy®, Ferallium, Inconel®, Chrome Carbide, and Cor-ten.

*Hastelloy® is a registered trademark of Haynes*

*International, Inc. Inconel® is a registered trademark of Special Metals Corporation.*

- Low leakage—options include purgeable mechanical seals, full-face gasketing, double welding of housing seams, and factory pressure testing.
- Volatile gases—spark-resistant construction incorporating special materials, buffers, and design elements.
- Petrochem (API), Nuclear (NQA-1), Coal (NFPA), Etc.

**Contact your New York Blower representative with your specific application requirements.**

## Quality & Experience

Our fan designs provide the highest aerodynamic efficiencies compatible with specific systems and gas stream requirements. Durable fan structures are designed for long life in the harshest and most demanding industrial applications. We have also maintained an AMCA-registered laboratory that allows us to meet the highest standards in product development and product performance testing. All NYB products undergo extensive air performance, sound and quality assurance testing prior to release to the market.

## On-time delivery you expect

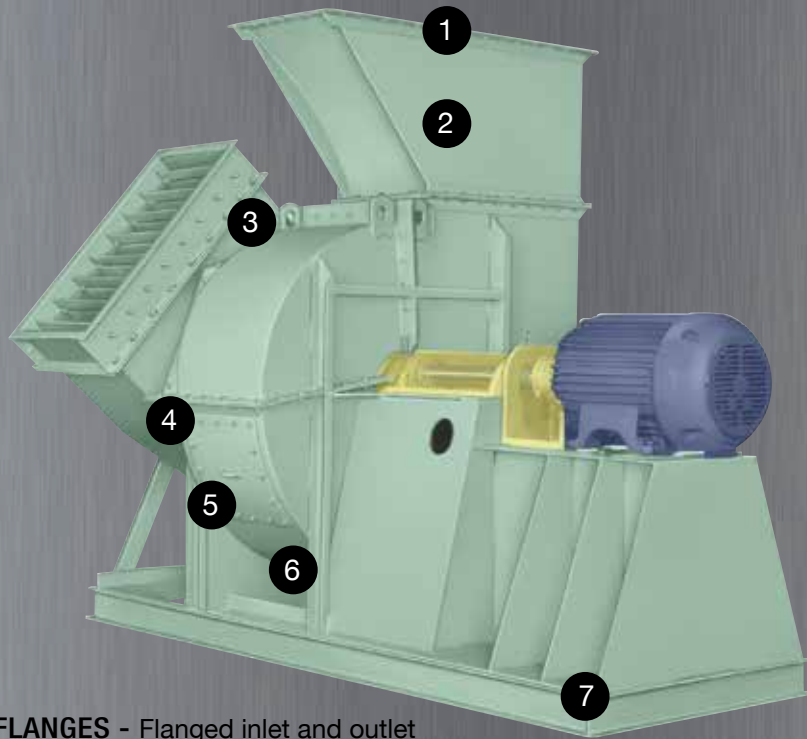
In today's dynamic market, where the formula "Time is money" is more applicable than ever, the New York Blower Company remains unmatched in delivery reliability.

The dependable, timely shipments have become synonymous with NYB, as we never fail to meet our customers' deadlines. This outstanding integrity and reliability is highly appreciated by our customers and clearly set us apart from the competition.



# NYB Options

We can customize your fan with a wide variety of accessories and modifications to meet your unique requirements.



- 1 **FLANGES** - Flanged inlet and outlet connections standard on all sizes
- 2 **EVASE** - Provides static-pressure regain and reduced discharge velocities
- 3 **INLET BOX** - Minimizes entry losses also available with parallel-blade damper for efficient volume control.
- 4 **SPLITHOUSING CONSTRUCTION** - Section can be removed without disturbing inlet or outlet duct connections.
- 5 **CLEANOUT DOOR** - Gasketed door for secure seal
- 6 **DRAIN** - 1-1/2" tank flange located at lowest point in housing scroll.
- 7 **UNITARY BASE** - Structural-steel base provides common support for fan, motor, and drive components. Available with spring or rubber-in-shear isolators.



## Motors and Drives

A wide array of motors, belt-drives, and coupling components available factory mounted by New York Blower.

## Heat-Fan Construction

Fans handling gas streams above 301°F furnished with shaft coolers and guards . . . surfaces are coated with high-temperature paint . . . refer to each fan line for specific limitations.



## Inlet-Vane Damper

Vane construction provides prespun air effect that reduces fan capacity efficiently . . . not recommended for use with inlet box.



## Special Alloys

Most fans and models available with various grades of stainless steel, exotic alloys or aluminum for corrosive, non-abrasive airstream applications

## Shaft Seals

A variety of shaft seals including mechanical type, lip type and ceramic-felt type available.

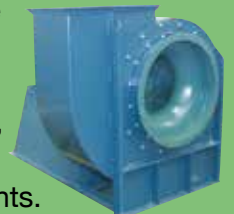
## Outlet Damper

Outlet dampers available with parallel or opposed blades to suit dampering requirements.



## Coatings

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





**THE NEW YORK BLOWER COMPANY**

7660 Quincy Street, Willowbrook, IL 60527-5530

(800) 208-7918 • nyb.com



Go to nyb.com to download more information. Complete NYB Catalog, Product Bulletins, Fan-Selection Program, Guide Specifications, Engineering Letters, Installation and Maintenance Literature, Listing of New York Blower Representatives and other resources.

All charts in this catalog have been designed to assist you in locating the fan that best meets your system requirements. Generally, there is more than one product line that will meet a particular flow and pressure requirement so we suggest you contact your New York Blower representative to assist you in making the final selection.