PRODUCT GUIDE

THE NEW YORK BLOWER COMPANY
(800) 208-7918 • nyb.com

History

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.

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.

International Operations

In the 1950s and 1960s, the company expanded its presence from regional to national through the development of an extensive network of sales representatives. Throughout the rest of the century and into the 2000s, acquisitions and licensees have allowed for expansion in both product lines and the industrial marketplace.

Today, that presence is worldwide with over 200 representatives, partners, and licensees established around the globe.

Commitment To Excellence

The dedication to product research and innovation is a key ingredient of our business philosophy. 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.

● Manufacturing Locations ● Sales/Representative Offices

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.

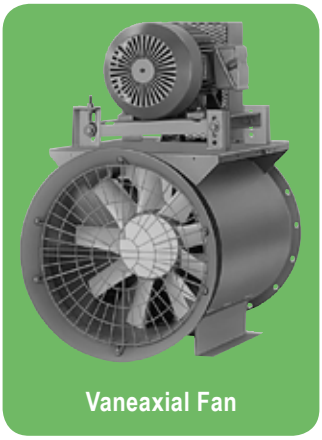
*Product performance data based on tests in an AMCA Accredited Laboratory are not to be construed as being licensed to bear the AMCA Seal.

Axial Clean Air Fans

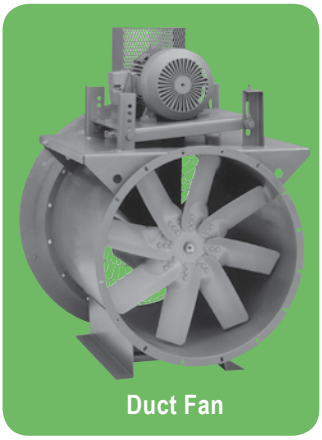
New York Blower axial fans are available in both belt-drive and direct-drive arrangements. Models can be constructed of either mild steel or aluminum.

APPLICATIONS

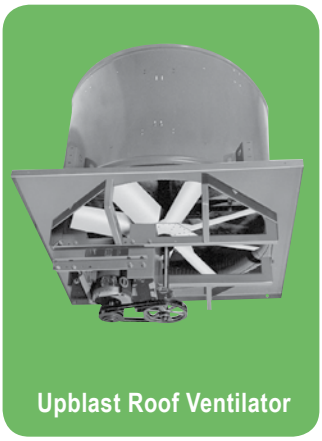
- Building ventilation
- Oven exhaust
- Drying systems
- Moisture blow-off
- Fume removal
- Glass tempering
- Spray-booth exhaust
- Air curtains
- Cooling
- Grain Drying
- Flares

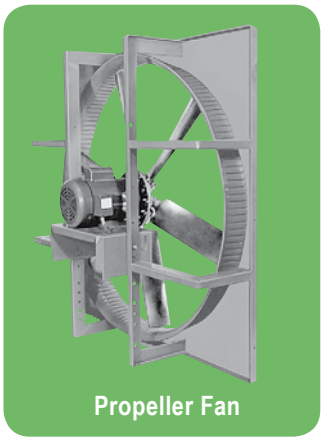

Vaneaxial Fan

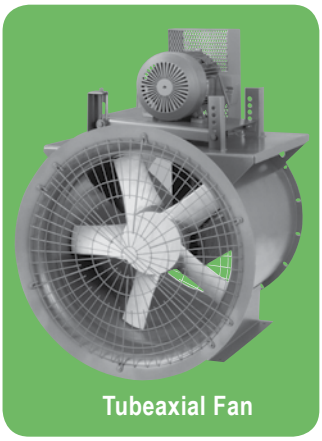

Tubular Acoustafoil Fan

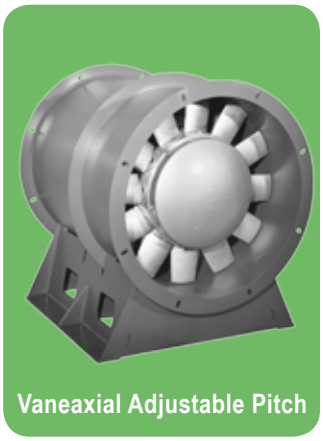

Duct Fan


Vaneaxial Fixed Pitch


Upblast Roof Ventilator


Propeller Fan


Tubeaxial Fan


Vaneaxial Adjustable Pitch

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp. (°F)
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
Vaneaxial Fixed Pitch Fans	Housed axial “Propeller” fan w/vanes	100,000	8	200
Direct Drive Vaneaxial Fixed Pitch Fans	Housed axial “Propeller” fan w/vanes	100,000	8	105
Tubular AcoustaFoil Fans	Centrifugal inline “AcF/PLR” wheel	140,000	14	200
Vaneaxial Adjustable Pitch Fans	Housed axial “Propeller” fan w/vanes	120,000	20	120

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

For state-of-the-art air management systems designed and manufactured based on your application requirements

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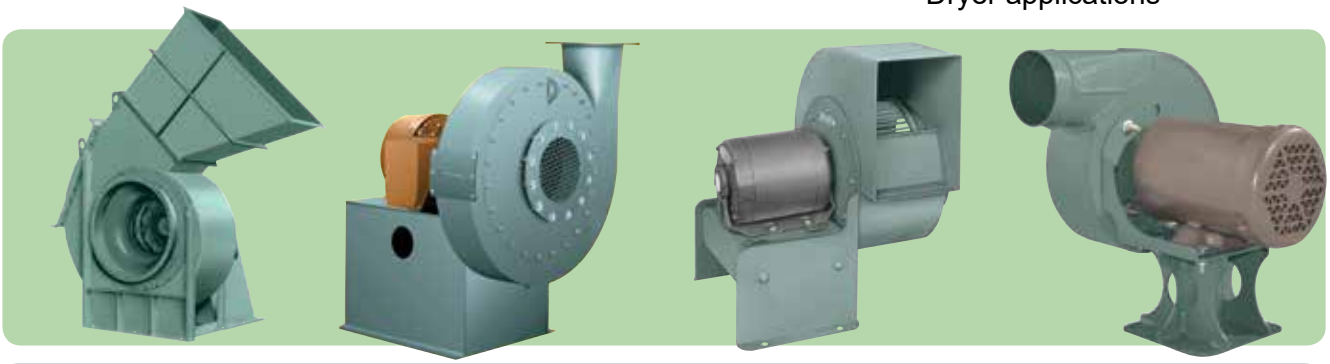
Centrifugal Clean Air Fans

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



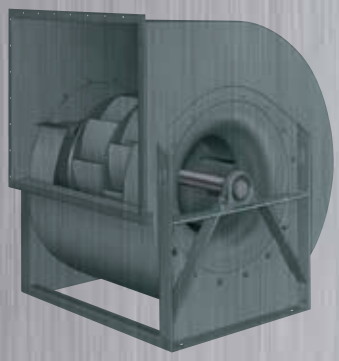
AF Fan | **Type HP Pressure Blower** | **Junior Fan** | **Compact Pressure Blower**

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp. (°F)
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-20 Fans	Centrifugal housed “BC” wheel	260,000	21	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
Surge Limiting Pressure Blowers	Centrifugal housed “Radial” wheel	30,000	180	1200
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

CLASS IV FAN

All of our products are designed
and manufactured to exact specifications

BC Pressure
Blower

Plenum Fan

Plug Fan

Air Kits

Single-Width Fan

Square Fan

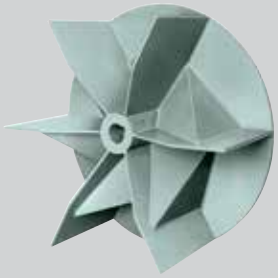
Pressure Blower

Centrifugal Dust/Material Handling Fans

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

Compact GI

Series 20 GI Fan



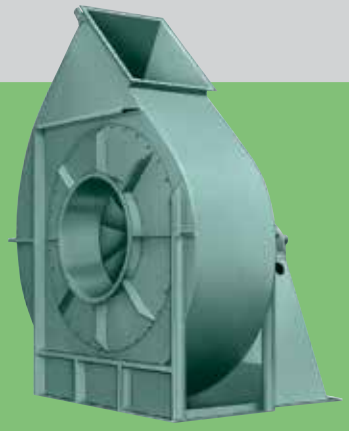
RD Wheel

Series 60 Fan

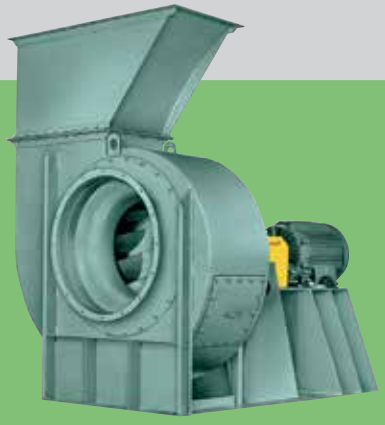
Engineering Letters
Visit nyb.com/eng_letters.asp to review twenty-eight "letters" that cover a wide range of technical fan subjects.

APPLICATIONS

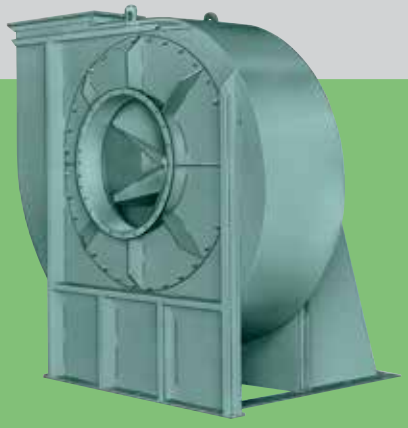
- Dust collection
- Pneumatic conveying
- Scrubber exhaust
- Incineration
- Combustion air
- Pollution control
- Fume-hood exhaust
- Chemical process
- Dryer applications
- Bulk material handling
- Paper converting



Series 30 GI Fan



RTS Fan



Series 45 GI Fan

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp. (°F)
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

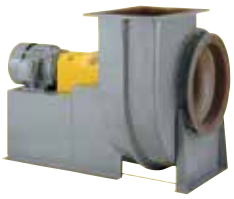
Fiberglass-Reinforced-Plastic

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. (°F)
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

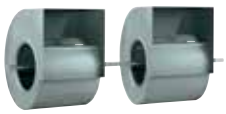
* BC=Backward Inclined Backward Curved, ST=Backward Inclined Single Thickness

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. (°F)
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

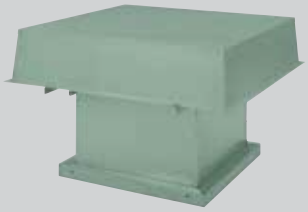

Housing

PRODUCT LINE	DESCRIPTION	MAXIMUM		
		CFM	SP	Temp. (°F)
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

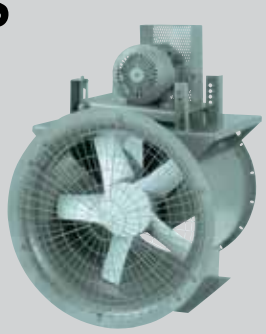
*FC=Forward Curved, AcF=Backward Inclined Airfoil, BC=Backward Inclined Backward Curve, PLR=Backward Inclined Single Thickness

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
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

Heating Products

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

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.

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

Heavy Industrial Fans

INDUSTRIES

- Cement & Lime
- Iron & Steel
- Foundries
- Metals & Minerals
- Paper & Pulp
- Petrochemical
- Power Generation
- Water Treatment

Custom Engineered

Our fans are available in standard catalog sizes or as custom designed units. Each application is analyzed on its own performance and unique requirements. Units can be built in accordance with the customers' specifications.

DESIGN FEATURES
Fan Designs: Centrifugal, Axial, Radial
Volume: to over 1,000,000 CFM
Pressures: beyond 150" WG
Temperatures: to 1800°F
Sizes: beyond 150" in diameter
Arrangements: 1, 2, 3, 4, 7, 8, 9 and 10
Available Materials of Construction:
Carbon Steel, Stainless Steel, Abrasion Resistant Materials, Corrosion Resistant Materials, Inconel®, Carpenter 20, Hastelloy and more.

Testing Services:
- ASTM B117 Salt Fog Chamber Testing for Corrosion
- Balance and Vibration Tests
- Computational Fluid Dynamics (CFD)
- Finite Element Analysis (FEA)
- Impact (Bump) Testing
- Material Identification/Certification
- Modal Analysis
- Stress Analysis
- Prototype/Product Evaluation
- Wheel Deconstruction/Deformation Testing

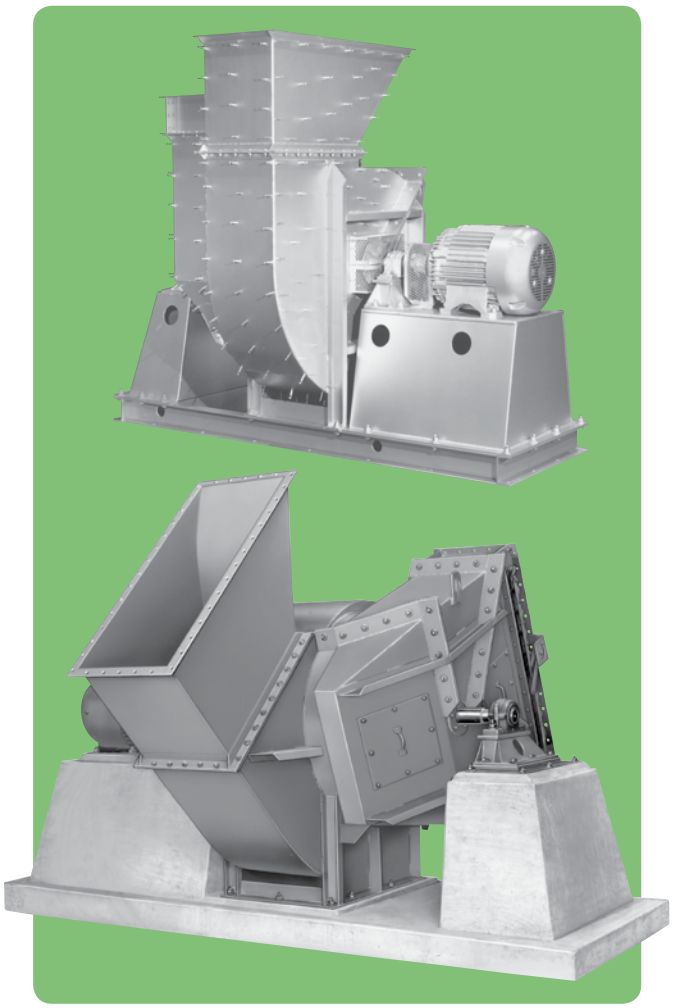
Repair & Rebuild

New York Blower uses their experienced engineers, technicians and Field Service Department to assess and analyze any field issues associated with fan equipment. Fan assemblies can be quickly tested in the field or at the the AMCA accredited laboratory for a quick diagnosis of air, sound and vibration problems. Engineered solutions include modified liners, stiffeners, blade tips, metallurgical changes and fabricated inlets to accomodate changes in application requirements or improve longevity of the equipment. Regardless of the original manufacturer, NYB can accommodate all repair, rebuild and retrofit needs.

Pictured is a wheel from an induced draft fan located on the dirty side of a baghouse exhausting blast furnace. 82" diameter wheel with chromium carbide blade liners.

In addition to wheels, NYB has the ability to field measure difficult to replace components including cones, shafts, wheels and more.

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 Corten.
  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. All NYB products undergo extensive air performance, sound and quality assurance testing prior to release to the market.

On-time Delivery

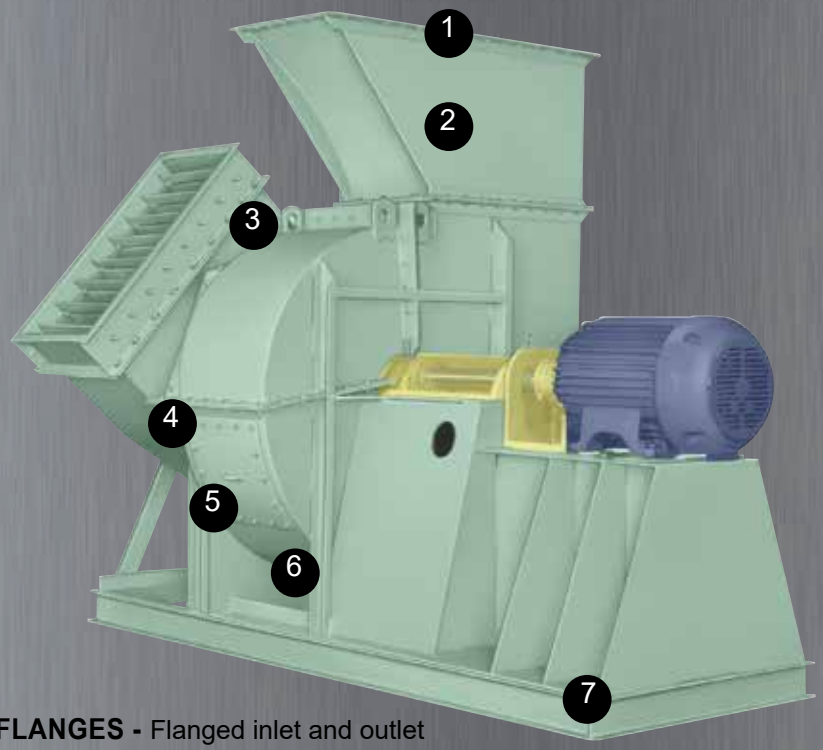
In today's dynamic market, where the formula "Time is money" is more applicable than ever, the New York Blower Company remains unmatched in delivery reliability. The dependable, timely shipments have become synonymous with NYB, as we never fail to meet our customers' deadlines. This outstanding integrity and reliability is highly appreciated by our customers and clearly set us apart from the competition.

Expansive Manufacturing Facilities

NYB has over 460,000 ft^2 of manufacturing floor space that is fully equipped to fufill fabricating and machining requirements. The AMCA accredited laboratory has six test chambers of various flows (up to 130,000 CFM) and pressure capabilities (up to 100" WC) and two reverberant sound rooms.

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 -** Minimize.s 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 -** 1-½" 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

Inlet vane dampers pre-spins the air entering the fan inlet providing a very efficient method of controlling the fan.

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

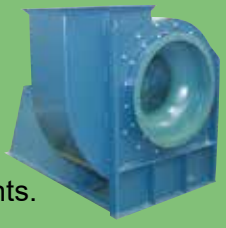
A variety of shaft seals including mechanical type, lip type and ceramic-felt type available.

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
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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.