

Industrial Dust Collector

Fan Applications



DUST COLLECTION FAN APPLICATIONS

Chicago Blower is a leading provider of fans and blowers for industrial dust collector applications. Our products are used for either supplying dirty or corrosive air into the system or exhausting clean filtered air out of the system. A wide range of accessories, including AMCA spark resistant construction, are available for easier installation, maintenance, fan monitoring, or greater safety in explosive environments. Whether it is sawdust, metal scraps, or welding smoke, we offer a variety of pre-engineered and custom heavy duty fans that control the harsh particles exhausted into air streams.

PROJECT EXAMPLES



Top mounted PBI Packaged fan installed on a dust collector being used to recirculate the clean exhaust in a manufacturing facility.



A BI Industrial fan being used as the main dust collection fan on an 18,000 cfm industrial dust collector.



BI Industrial fan serving a baghouse dust collector for a guitar manufacturer.



High Pressure Backward Curved fan installed on a dust collector system in Canada.

WHEEL TYPES

Backward Inclined

Heavy backward inclined steel blades provide maximum performance in hostile environments.



Radial Tip

Five wheel designs w/overlapping performance envelopes available to match specific volume & pressure demands.



Long Shavings (LS)

Ideal for sticky, heavy or abrasive dust, such as coal dust.



Wool-Fiber (WF)

Designed for long fibers & stringy material and developed to handle dusty, fibrous airstreams.



CBC FANS FOR DUST COLLECTION

BACKWARD INCLINED CENTRIFUGAL

Top or side mounted on the clean side of the collector



PBI Packaged Fans

Ideal for both top & side mount collectors, the PBI is offered in 12 fan sizes and comes with a 3-year warranty (an industry first). AMCA Type B & Type C spark resistant construction available. Temperatures to 200°F.

- Sizes: 122 to 365
- Volumes to 46,100 CFM
- Pressures to 23" wg

Request Bulletin PBI



BI Industrial Fans

Reliable alternative to a radial bladed fan, the BI uses efficient backward inclined blades allowing the use of lower HP motors. AMCA Type C spark resistant construction available. Temperatures to 800°F.

- Sizes: 135 to 807
- Volumes to 263,000 CFM
- Pressures to 30" wg

Request Bulletin BCF or DFOB



SQB Square Fans

SQB "B" wheel backward inclined blades handle corrosive or dusty airstreams. Commonly used for dust collector exhaust. AMCA Type B & Type C spark resistant construction available. Temperatures to 650°F.

- Sizes: 12-1/4 to 44-1/2
- Volumes to 70,000 CFM
- Pressures to 17" wg

Request Bulletin SQB



High Pressure Backward Curved

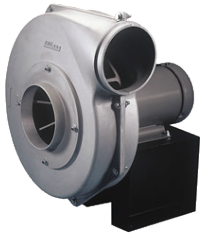
The HPBC delivers the reliability of a custom designed fan at the price and lead time of a standard production fan. The wheel uses heavy backward curved blades designed to handle dusty and harsh environments. The solid steel blades are also ideal for custom applied corrosion resistant coatings. AMCA Type B & Type C spark resistant construction available. Temperatures to 800°F.

- Sizes: 182 to 890
- Volumes to 385,000 CFM
- Pressures to 40" wg

Request Bulletin BCHP

PRESSURE BLOWERS

Same as Backward Inclined but for higher SP through the collector



Cast Aluminum

For fume/dust control, forced air drying and cooling. Non-sparking properties qualify Chicago's cast aluminum pressure blowers for AMCA spark resistant construction, earning an AMCA Type B spark resistant rating. Temperatures to 200°F.

- Sizes: 800 to 1829
- Volumes to 5,000 CFM
- Pressures to 20" wg

Request Bulletin CAPB



Single Stage

Design 53 blowers are also suited for pneumatic conveying, combustion, and various other high pressure applications. Available in aluminum, and steel wheel styles up to 650°F.

- Sizes: A to R
- Volumes to 18,000 CFM
- Pressures to 91" wg

Request Bulletin CPB

COMMON ACCESSORIES

- Inlet/Outlet Flanges or Slip Connections
- Access Door (bolted, hinged, quick clamp)
- Shaft Seals (non-gas tight, multi labyrinth)
- Inlet Box
- Outlet & Inlet Dampers
- Outlet & Inlet Silencers
- Outlet & Inlet Expansion Joints
- Split Fan Housing for rotor removal or cleaning
- Vibration & Temperature Monitoring
- Spark Resistant Construction
- 304/316 Stainless Steel Construction

ARRANGEMENTS

- A/1
- A/4 with Base
- A/4V Vertical Mount (No Base)
- A/7
- A/8
- A/9 with or without Unitary Base

RADIAL BLADED

Mounted on dirty side so fan is handling the material first & suitable for stringy items, paper or shavings

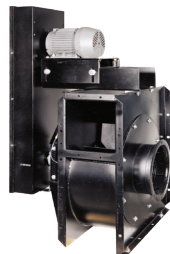


Industrial Radial Tip

With rugged radial tipped wheels, the IRT is ideal for industrial dust collection, and most harsh airstreams. The fan is available in belt drive Arrangement 1 and 9 configurations plus direct drive Arrangement 8.

- Sizes: 3000 to 6000
- Volumes to 160,000 CFM
- Pressures to 33" wg

Request Bulletin IRT



SQI Industrial Fans

Heavy Duty "LS" wheel exhausts harsh corrosive airstreams. Compact industrial fan w/gusset mounted bearings to provide a compact arrangement. Temperatures to 650°F.

- Sizes: 5 to 17
- Volumes to 17,000 CFM
- Pressures to 19" wg

Request Bulletin SQI



ICF Industrial Fans

Flat bladed wheel resists material buildup while maintaining balance. Heavy duty shaft and bearings. Temperatures to 800°F.

- Sizes: 7 to 41
- Volumes to 120,000 CFM
- Pressures to 40" wg

Request Bulletin ICF

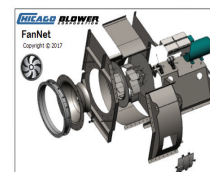
RESOURCES



CBC Fan App

Engineering calculations at your finger tips. Get it on Google Play or download on the App Store.

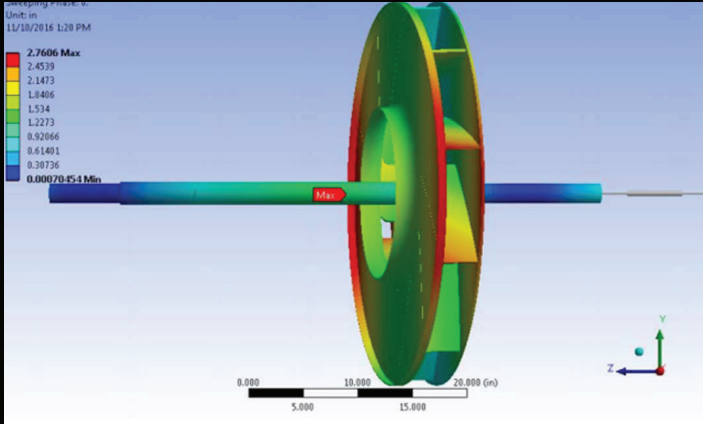
FanNet



Refer to Chicago Blower's FanNet software for performance, fan curves and sound data. Contact your local CBC sales engineer for software and assistance.

SETTING THE STANDARD FOR QUALITY

Innovative Engineering through Application Analysis



Chicago Blower Fans are also available worldwide:

- Argentina
- Australia
- Azerbaijan
- Belarus
- Belgium
- Brazil
- China
- Estonia
- Georgia
- India
- Indonesia
- Israel
- Kazakhstan
- Korea
- Kyrgyzstan
- Latvia
- Lithuania
- Luxembourg
- Mexico
- Mozambique
- Netherlands
- New Zealand
- Norway
- Russia
- Saudi Arabia
- Singapore
- South Africa
- Spain
- Sweden
- Taiwan
- Tajikistan
- Thailand
- Ukraine
- Uzbekistan
- Venezuela
- Zambia
- Zimbabwe

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