# FANS AND BLOWERS

Leading provider of air movement solutions that exceed industry expectations



# **ABOUT US**

Chicago Blower Oceania is the Sole and Exclusive licensee of Chicago Blower Corporation (USA) for the Oceania region. Chicago Blower has been represented in Australia since 1967 with thousands of fan installations in the region.

With access to over 70 years of Chicago Blower's extensive engineering experience and AMCA certified designs, we are equipped to offer a very wide variety of fans and blowers to satisfy any industrial or commercial requirement.

All drafting and fabrication is handled in-house, in Australia, by a team of engineers and production specialists with decades of experience on designing and manufacturing industrial fans.



PROUDLY AUSTRALIAN MADE, OWNED AND OPERATED



OVER 100,000 INSTALLATIONS WORLDWIDE



TRUST THE LEADING NAME IN FANS AND BLOWERS. TRUST CHICAGO

# **BACKWARD INCLINED**



INDUSTRIAL FANS

Design 10 fans are for high volume clean air and most light industrial applications. Single or double width, construction classes I-III. Temperatures up to 425°C.



# HIGH PRESSURE BACKWARD CURVED

Pre-engineered fan, the Design 95 delivers the reliability of a custom designed fan at the price and lead time of a standard production fan. The wheel uses heavy duty backward curved blades designed to handle dusty and harsh environments. The solid steel blades are also ideal for custom applied corrosion resistant coatings. Temperatures up to 425°C.

#### Sizes: 182 up to 890

VOLUME		PRES	SURES
m3/s	CFM	kPa	inch WG
182	385,000	10.0	40



### Sizes: 135 up to 807

	VOLUME		PRES	SURES
ſ	m3/s	CFM	kPa	inch WG
ĺ	124	263,000	7.5	30

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# INDUSTRIAL AIRFOIL FANS

Designed with high-efficiency airfoil wheels these fans are ideal for combustion air, product cooling, high-pressure drying and the supply of air-liquid agitation applications. Single surface backward curved wheels for light dust loads are also available. Fans feature heavy duty roller bearings, shaft and a rugged base mount. They can be provided in Arrangements 1 and 9 belt drive, or Arrangement 8 direct coupled drive.



# PACKAGED FORCED DRAFT

Direct drive Arrangement 4 PFD packaged fans with reinforced airfoil wheels are designed for higher pressure supply air applications, such as packaged boilers. Steep, stable pressure curve allows near constant air delivery. Three wheel designs for all standard motor speeds offer a broad performance range.

#### Sizes: 2700 up to 6600

VOL	UME	PRES	SURES
m3/s	CFM	kPa	inch WG
80	170,000	10.0	40

#### Sizes: 135 up to 807

VOL	VOLUME		SURES
m3/s	CFM	kPa	inch WG
124	263,000	7.5	30



Known for high efficiency, low sound levels, and low horsepower, the Design 51 fan is used extensively in industrial supply and exhaust systems.

#### Sizes: 135 up to 807

VOL	VOLUME		SURES
m3/s	CFM	kPa	inch WG
113	240,000	5.5	22



Designed for greater volumes, the double width Design 51 is ideal for variable air volume systems and available with Chicago's exclusive Inlet Volume Control.

#### Sizes: 135 up to 807

VOLUME		PRES	SURES
m3/s	CFM	kPa	inch WG
201	425,000	5.5	22

# MARKET OPERATION

Chicago Blower fans are designed to be efficient and extremely robust to handle different applications in the industry of your choice. Including:

### HVAC

- Car park Supply and Exhaust Fans (DWDI's)
- Kitchen and Toilet Exhaust Fans (SWSI's)
- Axial Fans (Inline, Wall and Roof Mounted)

### Process

- Food Industry Processes
- Mining Processes
- Combustion Fans
- Fans in Transport Applications
- Fans in Cement Processing
- Waste Water and Treatment
   Processes

### Agriculture

- Silo's and Grain Drying
- Cotton Processing

### Industrial

- Process Fans
- Blasting and Spraying
- Dust and Fume



# PLUG / PLENUM FANS

Unhoused fans for easy installation directly into a plenum. Ideal for retro applications to expand system performance within the same space. Temperatures up to 80°C.

#### Sizes: 135 up to 807

VOLUME		PRES	SURES
m3/s	CFM	kPa	inch WG
109	230,000	4.2	17

# **PRESSURE BLOWERS**

For Combustion Air, Process Applications, Pneumatic Conveying



Design 38 blowers for fume/dust control, forced air drying and cooling. Match multiple wheels/inlets to eight housing sizes to meet required performance. Temperatures up to 90°C.

#### Sizes: 800 up to 1829

1	VOL	UME	PRES	SURES
	m3/s	CFM	kPa	inch WG
	2	5,000	5.0	20



Design 53 blowers are suited for pneumatic conveying, combustion, and various other high pressure applications. Available in belt drive, direct drive or direct coupled configurations. Temperatures up to 345°C.

#### Sizes: A to R

VOLUME		PRESS	SURES
m3/s	CFM	kPa	inch WG
8	18,000	22.6	91

# **RADIAL BLADED FANS**

Pre-Engineered Fans for Dirty Airstreams, Material Handling



## ICF INDUSTRIAL FANS

Industrial centrifugal fans with flat bladed wheel resists material buildup while maintaining balance. Heavy duty shaft and bearings. Temperatures up to 425°C.

#### Sizes: 7 up to 41

VOL	UME	PRES	SURES
m3/s	CFM	kPa	inch WG
57	120,000	10.0	40

# INDUSTRIAL RADIAL TIP

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

### Sizes: 3000 up to 6000

VOL	UME	PRESS	SURES
m3/s	CFM	kPa	inch WG
76	160,000	8.2	33

# ARRANGEMENT 4F FANS

For Dust Collectors, Air Filtration, Pneumatic Conveying and Laser Cutters



Specifically designed to be flange mounted these fans are ideal for installations that require a compact reliable fan. These direct drive fans keep maintenance to a minimum and increase efficiency and reliability.

- Sizes 100 to 365
- Volumes up to 22m3/s / 47,000 CFM
- Pressures up t0 6kPa / 23 inch WG

# **VANE AXIAL FANS**

For Ventilation, HVAC, Industrial Applications



Adjustable pitch fans are recommended for installations where air demands may change but continuous automatic control is not needed. Blade pitch is set externally at the hub to alter air volume or pressure. Aluminum alloy airfoil blades and hub assure reliable

### Sizes: 1650 up to 8075

VOL	UME	PRES	SURES
m3/s	CFM	kPa	inch WG
123	260,000	5.0	20

performance. Direct drive and belt drive.

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# ADJUSTABLE PITCH AXIAL RANGE

### FEATURES

- Case diameters 315—
   2000mm
- Airflow to 75,000 L/s
- Static pressure to 1,500 Pa
- Matching attenuators
- Installation ancillaries
- Speed control range
- Heavy gauge galvanised steel

# **COMPONENTS**

For Retrofit Requirements

High temperature options

- Direct Drive
- Dual Fan Contra-Rotating
- Dual Fan Run and Standby
- Belt Drive
- Bifurcated
- Flame proof options
- Energy efficient smart control options

Wheels, housings, inlet cones, inlet vane controls, shafts, drive components and motors are available for your maintenance requirements. We are able to customise replacement parts for any current fan that may require components (regardless of brand).

Fan Kit SW

Airfoil Wheel with Custom Blue Paint

# **CUSTOM FANS**

Efficient Choice for Clean Air, Fumes, Light Dust



A wide selection of airfoil, backward curved and radial tip wheel designs are available for forced and induced draft applications. Typical installations include incinerators, bag-houses, kilns, furnaces as well as other custom processes. Fans are custom built in most arrangements, fully factory completed, and field erected fans.

### Wheels to 146

VOL	UME	PRESSURES					
m3/s	CFM	kPa	inch WG				
472	1,000,000	17.4	70				



Heavy radial wheels are recommended for pollution control applications, such as continuous duty of primary air on burners, pulverizers, fluidizers and scrubbers. Options include abrasion and corrosion resistant construction materials. Variable widths and diameters provide exact performance with direct drive convenience.

#### Wheels to 150

VOL	UME	PRESSURES				
m3/s	CFM	kPa	inch WG			
208	440,000	26.9	108			



**API FANS** 

All custom fans are available with API 673 and 560 construction features to meet the stringent demands of the petroleum industry. Although fans are built for a variety of refinery applications, each one is individually engineered using one of 15 distinct designs to fulfill performance specifications and the unique demands of the installation.

### Sizes: 135 up to 807

VOL	UME	PRESSURES				
m3/s	CFM	kPa	inch WG			
124	263,000	7.5	30			

# **APPLICATION BY FAN TYPES**

	BACKWARD INCLINED INDUSTRIAL FANS	HIGH PRESSURE BACKWARD CURVED FANS	HIGH VOLUME FANS	INDUSTRIAL AIRFOIL FANS	PACKAGED FORCED DRAFT FANS	SINGLE WIDTH FANS	DOUBLE WIDTH FANS	PLUG / PLENUM FANS	CAST ALUMINIUM BLOWERS
AGRICULTURE - COTTON PROCESSING	1	1		1		<ul> <li>Image: A start of the start of</li></ul>			<ul> <li>Image: A start of the start of</li></ul>
AGRICULTURE - GRAIN AERATION AND DRYING	1			1		1			1
BLAST AND SPRAY PAINTING	1		1	1		1			1
CAR WASH	1					<ul> <li>Image: A start of the start of</li></ul>		1	
CEMENT	1	1				1			1
CHEMICAL PROCESSING	1			1		1			
CLEAN ROOMS			1	1		1		1	
COMBUSTION AND BURNER SYSTEMS		1			<ul> <li>Image: A start of the start of</li></ul>	<b>√</b>			1
DUST AND FUME	1	1			1				1
FOOD AND BEVERAGE	1			1		1			
GENERAL VENTILATION (HVAC)			1			1	1		
MANUFACTURING	1	1	<b>√</b>	1		<b>√</b>			1
MARINE	1					1	1	1	1
MINING AND MINERALS PROCESSING	1			1		<b>√</b>			
PAPER AND PULP PRODUCTION	1	1		1		<b>√</b>	1		
PETROCHEMICAL	1	1		1	1	1	1		
PHARMACEUTICAL	1	1		1		<b>√</b>	1		
PNEUMATIC CONVEYING		1	<b>√</b>	1		<b>√</b>			1
POWER GENERATION	1	1		1		1	1		
RECYCLING	1			1		<ul> <li>Image: A start of the start of</li></ul>			1
TRANSPORTATION						1		1	1
WATER TREATMENT	1			1		✓			1

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# **APPLICATION BY FAN TYPES**

	SINGLE STAGE BLOWERS	INDUSTRIAL FANS	INDUSTRIAL RADIAL TIP FANS	VANE AXIAL FANS	ADJUSTABLE PITCH FANS	MECHANICAL DRAFT FANS	HIGH PRESSURE FANS	- S
AGRICULTURE -				VAN	ADJU9 PITCH FANS			API FANS
COTTON PROCESSING								
AGRICULTURE - GRAIN AERATION AND DRYING								
BLAST AND SPRAY PAINTING		1						
CAR WASH	1						<b>√</b>	
CEMENT	1	1					1	
CHEMICAL PROCESSING	1	1	1		1	1		
CLEAN ROOMS					1			
COMBUSTION AND BURNER SYSTEMS		1	1			1	1	
DUST AND FUME			1	1			1	
FOOD AND BEVERAGE	1	<b>√</b>	1		1	1		
GENERAL VENTILATION (HVAC)				1	1			
MANUFACTURING	1	<b>√</b>	1		1	1	1	
MARINE	<ul> <li>Image: A start of the start of</li></ul>				1			
MINING AND MINERALS PROCESSING	1	1	1	1	1	1	1	
PAPER AND PULP PRODUCTION	1	1	1		1	1	1	
PETROCHEMICAL					1		1	<ul> <li>Image: A start of the start of</li></ul>
PHARMACEUTICAL	1	1	1		1	1	1	
PNEUMATIC CONVEYING		1	1	1			1	
POWER GENERATION	1	1	1		1	1	1	
RECYCLING	1	✓	1		1	1		
TRANSPORTATION				1			1	
WATER TREATMENT	1	<b>√</b>	1		1	1	<ul> <li>Image: A start of the start of</li></ul>	

### **RECENT PROJECTS**



**Mining Project** Western Australia

# APPLICATIONS



BHP Project Queensland



Agriculture Project New South Wales



**Cotton Processing** 



**Dust Collection** 



Ovens



Drag lines



**Power Regeneration** 



Water Treatment



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