



# Air at work



Designer & Manufacturer:

MP BL\$WERS PVT. LTD.

An ISO 9001:2015 Certified Company Visit us: www.airkingblower.com



## Engineering Better Value





## Air that works

Many industries need to put air to productive use. Equipments that utilise the power of air include "**AIR KING**" brand Centrifugal Blowers, Axial Fans, Hot Air Driers, Air Ventilators, etc.

Many industries also need to ensure clean ambient air. So that the health of productive workers, well-being of people in the vicinity of factories and quality of the environment improves. Thus, industries need air pollution control systems like "AIR KING" brand Dust Collectors, Industrial Vacuum Cleaners, Dust-free Pneumatic Material Conveying Systems, etc.



Service

Quality

## We make air work for you

## At MP BLOWERS PVT. LTD., we take air seriously.

We help industries like yours to put air to productive use as well as to ensure a pollution-free working environment with the well-known "AIR KING" brand of equipments and systems.

We have been active in the field since 1969. Some of our founders and directors have gained vast expertise and experience of over 37 years. Besides this, the following facts about our clientele, markets and manufacturing facility speak up for us:

## High-profile clients

We have executed assignments for diverse clients from both private and public sectors. They include big names like L&T, Essar Steel, Reliance Industries, Birla VXL, Grasim Industries, Godrej Soaps, Electrotherm, Scheriber Dynamix Dairies, Plasma Research Institute, Torrent Research Institute, Sardar Patel Renewable Energy Research Institute, among others. We have a sizable proportion of repeat customers in our customer base.



## National & International markets

Our products go to every part of India and are even shipped to the distant shores of Middle East countries like Iran, Nigeria, Doha and Abu Dhabi.

## Manufacturing strength

Our 18,000 sq.ft. manufacturing setup is furnished with the latest equipment and systems to meet the most stringent of standards. Our aim is always to design & manufacture products to meet international standards.

Testing Standards (For Blowers):
Air Performance - IS 4894/BS/AMCA
Dynamic Balance - ISO 1940 Q 2.5 & Q 6.3
Vibration - VDI 2056



## Our Quality Policy

We at MP BLOWERS PVT. LTD. are committed to give our customers value for their money by supplying them our well designed products:

- To perfectly fit in their existing system / match their specifications.
- With rightly chosen materials source from the best in the business.
- Backed up by efficient services and prompt deliveries.

We shall attain the above by continual improvement in our ways of working and maintaining the **Quality Management System.** 





Centrifugal Suction / Flow Blowers



Axial Flow Fans



Industrial Vacuum Cleaners



Portable
Dust Collectors



Centralized
Dust Collection Systems



Pneumatic Material Handling Systems



Hot Air Drier



Air Handling Unit



L.A.P. Oil Fire Burner



Turbo Air Ventilator

## **Applications:** Centrifugal Blowers

Crucible Furnaces, Oil Fire Furnaces, Cupola Furnaces, Ceramic Industries, Chemical Plants, Cattle Feed Plants, Rolling Mills, Flour Mills, Cement Factories, Fertilizer Industries, Boilers, Plastic Machinery Plants, Textile Mills & Process Industries, Hot Mix Plants.

#### **Axial Flow Fans**

Spot cooling for Men, Machines, Materials or Ventilation, Air conditioning and Fumes exhaust.

### **Dust Collections Systems / Ind. Vacuum Cleaners**

Foundries, Machine Shops, Chemicals, Foods, Pharmaceuticals, Textiles, Dyes, Paints & for control of any kind of dust creating points.

## Pneumatic Material Handling System

Plastic Machinery and Plant, Food Industries, Spice Industries, Chemical Plants, Pharma Industries etc. or any other Industry where you want to convey material without dusting in atmosphere.

#### Hot Air Drie

Plastic Machinery and Plant, Food Industries, Spice Industries, Chemical Plants, Pharma Industries etc.

## **Air Handling Unit**

Pharmaceutical, Hospital, Bulk Drug Industries or when were you need filtered cold Air.

#### Oil Fired Burners

Glass, Bricks, Ceramics, Bakery Ovens, Kilns & Galvanizing equipment. Varnish Pots, Tea Driers, Chemicals Plants, Rolling Mills, Foundry Ovens, Boilers etc.

#### Turbo Air Ventilator

Industries, Workshops, Ware houses, Schools, Hostels, Auditoriums were you want to cool down atmosphere.

And more...





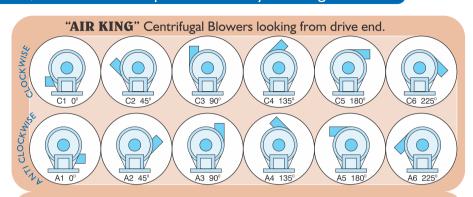
## Centrifugal Suction / Flow Blowers

There has been a long felt need for high efficiency, trouble-free high speed blowers and this has been achieve successfully with the introduction of our "AIR KING" centrifugal blowers are embodiment of special features like;

+ High Efficiency upto 88% → More Air with Less HP → Smooth in Running + Low Noise → Direct Motor, Belt Drive or Couple Drive → Any Discharge Position

These advantages make "AIR KING" centrifugal blowers leader in the field. Each type has been provided in many installations throughout the country.

Robust, Welded, M.S. sheets and Plates reinforced with angle iron frame, suction side is provided with wire gauge to meet all safety standards. The blowers can be supplied with any type of outlet direction of rotation & discharge to specification requirement of the customers.



This table showing Clockwise and Anti Clockwise position of "AIR KING" standard blowers. When ordering please specify the position required.

Please specify Clockwise / Anti clockwise direction of the blower from above mentioned table.











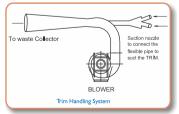


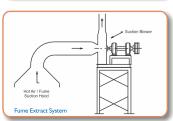






All impellers are fabricated from M.S. sheets and plates. All are of multi blade type in standard form. All vanes are hand riveted and welded for long life. Clearance between impeller and the casing is so controlled, as to minimize air slippage, resulting in high volumetric efficiency and are accurately statically and dynamically balanced for smooth operation. Design of the impeller may be changed as per application.







Direct Motor Drive Blower



Motor Coupled Blowe





## **Direct Motor Drive Blowers:**

All direct motor drive blowers are supplied with suitable size of totally enclosed, fan cooled motors and suitable for phase 230/440 Volts. 50cycles AC supply. Fans can be supplied with Single / 3 Phase motors and also flame proof motors.

## **Belt Drive / Motor Coupled Blowers:**

All belt driven blowers are provided with EN-8 Steel shaft extension running with ball bearing of ample size and rigid housings. The shaft is provided with V belt or flat pulley/couple of suitable size. The whole blower with the V belt drive/couple drive is mounted on M.S. fabricated base plate.



## (A) "AIR KING" Centrifugal Single Stage SISW / DIDW Blower

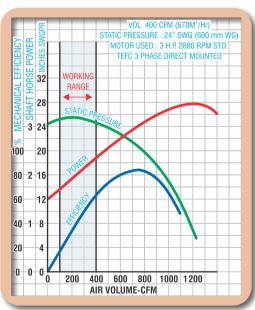
Range: 0.25 to 200 HP Volume: 100 to 1,20,000 CFM Pressure: 25 mm to 1,300 mm St. WC

## (B) "AIR KING" Centrifugal Two Stage Blower

Volume: 3,000 CFM Max Pressure: 3,000 mm St. WC

D							Taabaa	inal Ca	: fi	4:							
Pressure WG	Į"	2"	3"	4"	5"	6"	lecnn 8"	ісаі <b>э</b> р	ecifica	.tions :		24"	28"	32"	36"	44"	FOII
	-	2	3"	4"	5						20"	24	28"	32"	36"	44"	50"
Motor HP						Approximate Capacity in Cu. Feet / Minute. at NTP											
0.25	750	400															
0.5	1500	800	500	400	320	260	200	160	130								
1	3000	1600	1050	800	640	530	400	320	260	200							
2	6000	3200	2130	1600	1280	1060	800	640	530	400	320	270					
3	8000	4800	3200	2400	1920	1600	1443	1155	950	720	570	400	340				
5	11500	7350	5150	4000	3200	2650	2400	1925	1600	1203	960	800	570	500			
7.5	14500	10250	7500	6000	4800	4100	3000	2880	2400	1800	1440	1200	1030	750	650		
10	20000	13400	9750	8000	6400	5330	4000	3850	3200	2400	1925	1600	1375	1000	880		
12.5	27500	17000	12500	10000	8000	6660	5000	4800	4000	3000	2600	2000	1720	1500	1100	900	
15	33000	20000	15250	12000	9600	8000	6000	5775	4800	3600	2880	2450	2000	1800	1600	1100	960
20	45000	25000	18500	16000	12800	10600	7800	7700	6400	4800	3850	3200	2750	2400	2130	1450	1280
25	55000	40000	28000	18000	16000	13330	10800	9600	8000	6000	4800	4000	3430	3000	2200	1850	1600
30		48000	34000	24000	19200	16000	12000	11500	8800	7200	5600	4800	4100	3600	3200	2200	1900
40		65000	48000	34500	24000	21300	16000	15400	10500	9600	7700	6410	5500	4800	4200	2900	2550
50			53000	40000	32000	26000	20000	17500	13300	12000	9600	8020	6870	6000	5350	3650	3200
60				48000	38000	32000	24000	19200	16000	14400	11550	9600	8250	7200	6400	4360	3800
75					48000	40000	30000	24000	20000	18000	14450	12000	10300	9000	8000	5400	4800
100						53000	40000	32000	26600	24000	19000	16000	13750	12000	10700	7300	6400

## A typical graph of characteristic curves for a combustion blower



### For offer send details as below:

- ▲ Volume in CFM or M³/Hr.
- La Static pressure in inches or mm of water gauge
- Direction of rotation and discharge
- **Operating temperature**
- Æ Fan arrangement (Direct / Belt / Couple drive)
- Any other accessories desired

### **Optional Features:**

#### **Access Door:**

It is for quick access to casing interior and impeller for inspection and cleaning.

The door is designed to match the scroll curvature and made leak proof with a gasket.

#### **Split Housing:**

Easier access to impeller for maintenance & repair.

### **Drain Plug:**

A coupling or flanged type to the lowest point on the casing for draining of condensate or other liquid.

#### **Dissipating Disc:**

Cast Aluminum make disc for air cooling of the bearing & shaft.

### **Gland Packing:**

For Chemical / Dust / Powder / Gas conveying blowers at the shaft side on the casing. We can provide gland packing to prevent the leakage.

### **Applications:**

Crucible Furnaces, Oil Fire Furnaces, Cupola Furnaces, Ceramic Industries, Flour Mills, Rolling Mills, Chemical Plants, Cattle Feeds Plants, Cement Factories, Fertilizer Industries, Boilers, Plastic Machinery Plants. Textile Mills & Process Industries, Hot Mix Plants & Suction Blowers for Dust, Vapor, Powder, Gases, Hot Air & Light Materials Handling & for many other industries.

### Also Available:

- High pressure blowers for Oil fire furnaces & Cupola furnaces.
- Suction blowers for Dust, Vapor, Powder, Gases, Hot Air and Light Materials Handling.
- PP / FRP lining / Rubber lining / S.S. 304 / S.S. 310 / S.S. 316 / S.S. 409 / S.S. 410 quality sheet fabricated blowers for Chemical plants.
- For other applications as per your requirements.



"AIR KING" Axial Flow Fans







## **Axial Flow Fans**

**"AIR KING"** Axial flow fans man coolers are designed for spot cooling for Men, Machines, Materials or for Industrial ventilation, Air conditioning and Fumes exhaust. It has three types Floor mounting, Pedestal and Tubular. The above three models have the specific features of swiveling and tilting arrangements to provide the close delivery with high velocity of air.

#### **Construction:**

The casing is fabricated from mild steel sheets fitted with flanges & strong wire guard (optional). The impeller of fan is made of Aluminum / M.S. / S.S. and dynamically balanced.

**Types**: 1. Direct Motor Drive - Impeller & motor both housed inside the Casing & Impeller directly mounted on motor shaft. Suitable up to 65°C.

2. V-Belt Drive - The Impeller mounted on a separate shaft supported on two Ball Bearings and Plummer blocks inside casing. The motor is mounted on outside of the casing and shaft is driven with V-belts. Suitable for 65° C. to 150° C.

**Motors:** Standard ACTEFC motors suitable. Flame proof motors can be use.

## **Technical Specifications:**

Mode	RPM	Motor	Free Air	Volume CFM at Static pressure in W.G.						
		HP	CFM	5 mm	10 mm	15 mm	20 mm	25 mm	30 mm	
AK-12	1440	0.25	1000	900	800	300	-	-	-	
AK-12	2880	0.5	1600	1400	1200	1000	700	-		
AK-12	2880	0.5	1900	1500	1350	1200	1000	600	-	
AK-1!	1440	0.5	2050	1950	1600	1450	950	-	-	
AK-18	1440	0.5	3060	2850	2600	2250	1950	-	-	
AK-18	2880	1.5	5500	4500	3500	3000	2500	2000	1800	
AK-24	1440	1.0	6500	6410	5550	4680	3220	-	-	
AK-27	<b>71</b> 1440	2.0	10600	10550	10250	8200	7600	5850	-	
AK-3	960	1.5	10500	9350	7600	5850	-	-	-	
AK-3	1440	5.0	16000	15400	14600	13450	12300	11400	8190	
AK-3	960	3.0	19500	17500	15400	12000	10000	-	-	
AK-3	1440	7.5	26000	24500	23100	21600	20000	19000	17500	
AK-39	960	5.0	21100	19300	18150	15800	13450	-	-	
AK-47	71 740	5.0	26600	25200	22800	17600	-	-	-	
AK-47	<b>72</b> 960	7.5	35700	33900	32800	31000	29200	26300	18700	

## Low Air Pressure Oil Fire Burners

### **Technical Specifications:**

Size of Burner	LAP - 00	LAP - 0	LAP - I	LAP - 2	LAP - 4	
Oil consumption in Liter/hrs	2-6.5	4-11	6-28	21-57	32-110	
Oil connection	3/4" BSP	3/4" BSP	3/4" BSP	I ¼"BSP	I ¼"BSP	
Air connection	I"BSP	I ½"BSP	2"BSP	3 "BSP	4"BSP	
HP of Blowers (min)	I	2	3	5	7.5	
Blower Capacity M <sup>3</sup> (min)	5	12	15	17	26	
Total pressure in mm WG (min)	450	450	500	600	600	
Oil Preheater	Lkw	2 kw	3 kw	4.5 kw	6 kw	

## **Applications:**

Due to the superior design and performance, the Burners are extensively used for Various types of Oil Fired Furnaces for Glass, Bricks, Ceramics, Bakery Ovens, Kilns & Galvanizing equipment. Varnish Pots, Tea Driers, Chemicals Plants, Rolling Mills, Foundry Ovens, Boilers etc.



## 'AIR KING"

## Portable Dust Collecting Systems

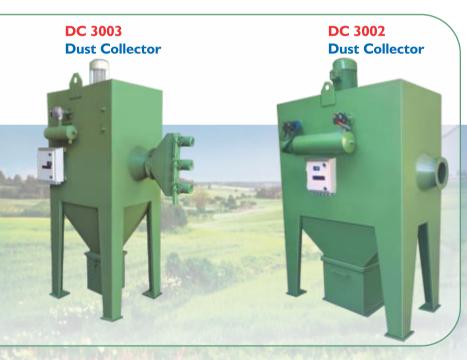


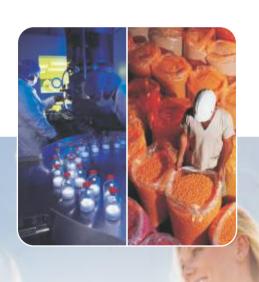
**DC** 3004 **Dust Collector** 













## **Complete Dust Collecting System**

Material not passing through Blower. It can be supplied with a mechanical shaker or with Pulse Jet automatic cleaning.

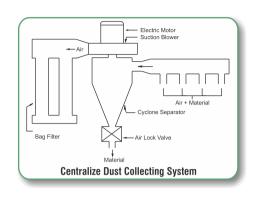
Dust collectors are useful for Foundries, Machine Shops, Chemicals, Pharmaceuticals, Foods, Textiles, Dyes, Paints & for control of any kind of dust creating points.





## Centralize Dust Collector

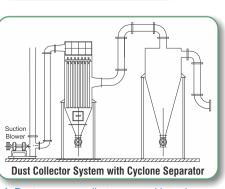












◆ Design as per pollution control board norms.





### Filter Bags



**Pleated Bags** 



**Cartridge Filter** 



Wire Cage



### "AIR KING" Make fabric Dust Collectors-Bag filter AKPC/AKMC

- Balanced design to achieve high efficiency.
- Auto pulse jet cleaning / mechanical shaker cleaning system available.
- Low / Medium ratio fabric filter.
- Low maintenance / Low operation cost.

The AKPC / AKMC Bag filter utilizes our many years of experience in the field of bag filters. The AKPC / AKMC filter can effectively be used for Saw Mills, Cement Mills, Process Industries, Chemical Industries, Pharmaceutical Industries and Food Processing Industries with proven performance.

It has an extensive Air / Gas flow capacity ranging from 500 to  $90,000 \text{ m}^3/\text{hr}$ . It can design to work at high temp. up to  $300^{\circ}\text{C}$ .

The bag filter type AKPC / AKMC is a high efficient collector and is intended for manual / continuous automatic service at low / high air to cloth ratio. It consists essentially of an air tight housing containing filter bags, bag cages, hopper and any dust discharge equipment, compressed air cleaning equipment and timer.

The dust laden Air/Gas entry into the filter is made though a hopper. The inlet at the hopper is provided with baffles and perforated plate which has a dual purpose of collecting coarse particles and gas distribution. The inlet dust concentration for these filters should be limited to 40 gm/m<sup>3</sup>.

### Salient Features:

- Heavy construction with stiffeners.
- Hopper entry with baffles and plates.
- Filtration cloth area 8.0 m<sup>2</sup> to 1500 m<sup>2</sup>.
- Inlet pressure : up to 800 mm WG.
- Wide choice of bag 4"/6" dia & up to 5 met. length with suitable Fabric/Media.
- Easy installation & maintenance of bags.
- Well designed Most efficient venture and cage assembly.
- 12/25/40/50 NB angle type solenoid diaphragm air pulse valve max. 14 Bags/each valve.
- Automatic compressed Air Pulse cleaning at 4-6 kg / cm² pressure, and Air should be as free from Water and Oil as possible (max. 22 gm of water and 0.02 gm of oil per m³ of free air) with sequential timer.
- The cleaning is done on sequential basis based on bag row selection & continues based on either preset on & pause time or fabric filter differential pressure.
- The dust collected at the hopper (may be pyramidal or trough) is carried away by means of a rotary feeder or a screw conveyor.

**Pulse Cleaning** 



Air lock Valve



**Solenoid Valve** 



**Sequential Timer** 



## **General Characteristics and Resistance of Filter Media:**

Fibre	Continuous	Max Short	Strong	Weak	Strong	Weak	Solvents	Oxidizing	Hydrolysis
(Generic Name)	Operating Temp °C	Duration Temp <sup>o</sup> C	Acids	Acids	Alkalis	Alkalis		Agents	Resistance
Polyester	150	170	Good	Good	Poor	Fair	Good	Very Good	Poor
Polypropylene	90	100	Very Good	Good	Very Good				
Polyamide	110	120	Poor	Good	Good	Good	Good	Good	Fair
Polyaramid	200	220	Fair	Good	Good	Good	Good	Good	Fair
Acrylic	130	140	Good						
(Homopolymer)									
Acrylic	120	130	Fair						
(Co-Polymer)									
Polyphenylene	190	210	Good	Good	Fair	Fair	Good	Poor	Very Good
Sulphide									
PTFE	250	260	Very Good						
Co-Polymide	240	260	Good	Good	Poor	Fair	Good	Fair	Good



## **Pneumatic Conveying System &**



## **Pneumatic Material Handling Systems**

## To convey material without dust

**Range:** 20 kg/hr to 5,000 kg/hr

### Salient Features :

- Convey any type of materials (Powder/Granules) without any dusting in the working area.
- Convey material with no. of bends.
- Control the flow of material.
- System available as per your requirement with Negative/Positive pressure & anti-dusting system.

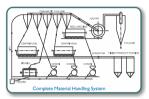
#### Material Feeding to Pouch Packing M/c.



### **Applications:**

Plastic Machinery & Plant, Food & Spice Industries, Chemical Plants, Pharma Industries etc. or any other industry where you want to convey material without dusting in atmosphere.







For Powder

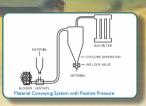
**Portable Material Conveying System** 



### Powder Feeding to Extruder M/c.







## **Bag Dumping System**



Regenerative Blower



## For offer send details as below:

- Density of material to be convey.
- Conveying Rate/Hr.
- Horizontal / Vertical distance & No. of Bends.

### **Hot Air Drier** To Remove Moisture



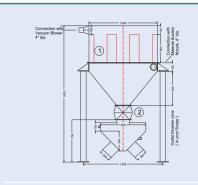


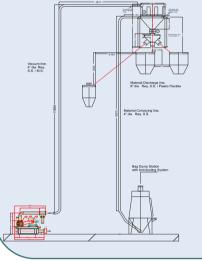


## **Pneumatic Conveying Systems**

## For powder material









## Air Handling Unit

## **AHU 602 Air Handling Unit**

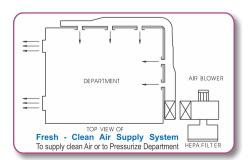
"AIR KING" make Single / Double skin air handling units are fabricated from S.S. / G.I. / CRCA panels. Double skin type panels having insulated layer of PUF / Mineral Wool / Thermocol and Bolted to extruded aluminum section frame. It is designed in six sections for easy installation & maintenance.

(1) Pre Filter Section (2) Fan Section

(3) Coil Section (4) Damper Section

(5) Filter Section with  $10\mu$ ,  $5\mu$  or Hepa Filter (6) Mixing Section

Double skin AHU require no separate room. It can be roof mounted, ceiling supported or can be placed inside the area.









Designer & Manufacturer:

## MP BL\$WERS PVT. LTD.

An ISO 9001:2015 Certified Company

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