INDUSTRIAL FAN GUIDE

·INDUSTRIAL·AIR·PRODUCTS·

IAP INC.

PO Box 56 ▪ Phillips, WI 54555 ▪ E-mail: Sales@iapfan.com

Phone: 715-339-3024
Fax: 715-339-3017

AIR MOVEMENT AND CONTROL ASSOCIATION amca INTERNATIONAL INTERNATIONAL

MEMBER

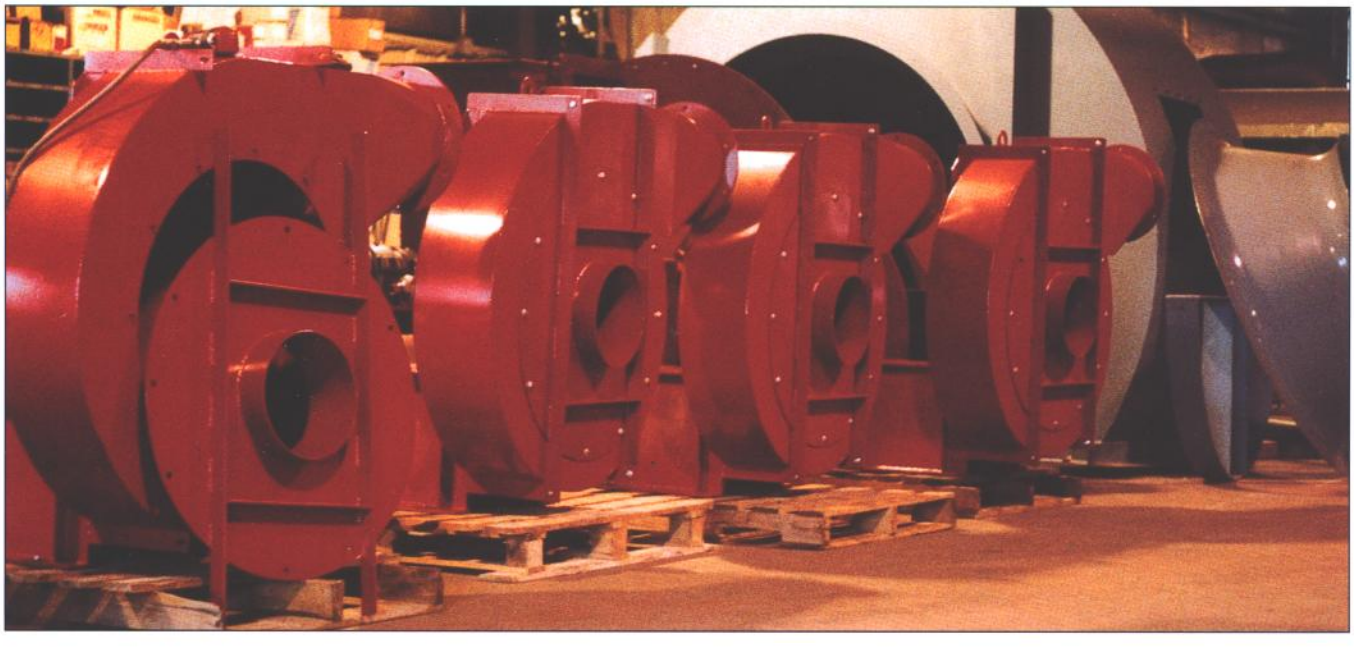
IAP, INC. FACILITIES and TECHNOLOGY

Qualified personnel with over fifty years of experience in the design of industrial fans and blowers, together with skilled production workers, assure the uniform high quality and dependability of every piece of equipment bearing the IAP name.

IAP sales, engineering and production employees conform to a rigid set of guide lines to ensure our customers receive a high quality product. The use of computer aided design (CAD) and Finite Element Analysis (FEA) along with quality assurance programs guarantee our customers satisfaction. Dedicated field service personnel assure a high quality, low maintenance installation.

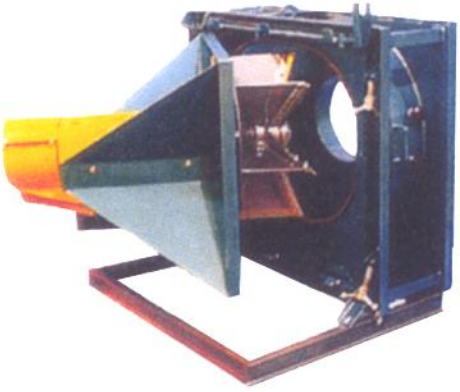
STANDARD PRODUCTS

IAP excels in the production of standard fans and blowers for today's modern industrial and commercial needs. With the ever growing demands of today's fast paced life styles and building requirements, IAP offers standard air handling and particulate moving fans and blowers. With fast response time and short lead times, IAP has developed a wide customer base across America, Canada, Mexico and the world.



SPECIALTY AND EXOTIC MATERIAL FANS AND BLOWERS

The growing awareness of air and noise pollution, as well as the increased sensitivity regarding environmental issues makes it important to tailor the design of industrial blowers and fans to each application. New materials, gasses and chemicals to be transported create the need for specialized air moving equipment. The addition of blowers to existing installations without careful analysis can create, rather than solve problems. We manufacture all types of standard and specialty industrial fans and blowers. The extraordinary is where IAP Inc. excels.



SWINGOUT DESIGNS

Send Us Your Requirements

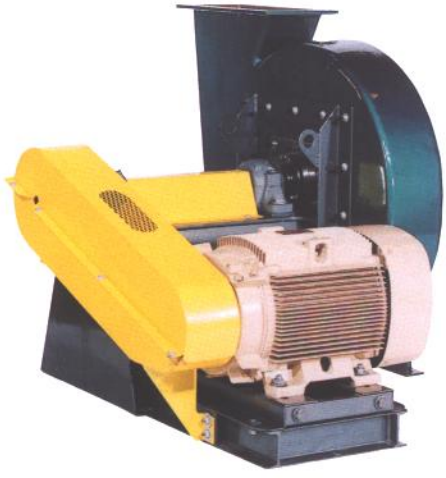
1. Volumetric Capacity (CFM)
2. Static pressure (in W.G.)
3. Application
4. Environment
5. Individual problems

We'll Furnish a Recommendation.

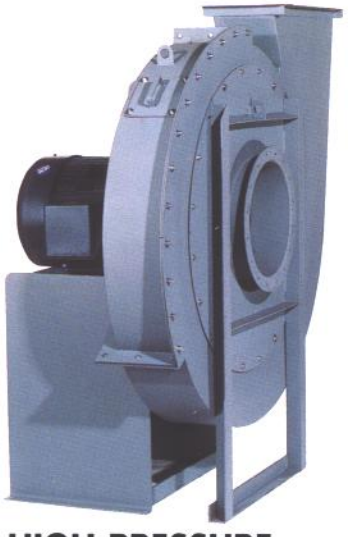
PLUG FANS

A Few Typical Applications

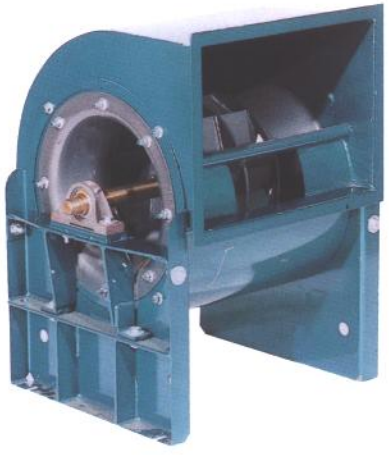
- Recirculation in Furnaces and Ovens
- Exhausting of fumes and gases from processes
- Supply air for drying and heating systems
- Thermal Oxidation
- Pneumatic Conveying
- Scrubber Exhaust
- High Pressure Cooling
- Process Exhaust
- Fluidizing Processes
- Induced and Forced Draft Service
- Industrial Ventilation



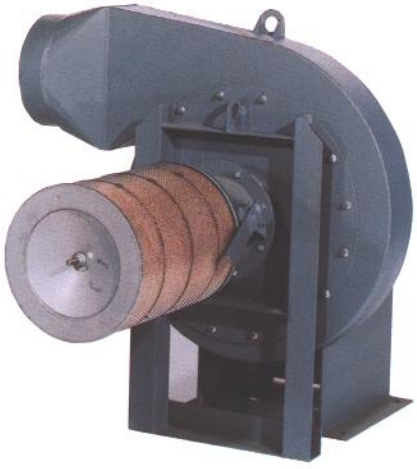
FIBERGLASS



HIGH PRESSURE



DWDI VENTILATION



COMBUSTION AIR

AXIAL

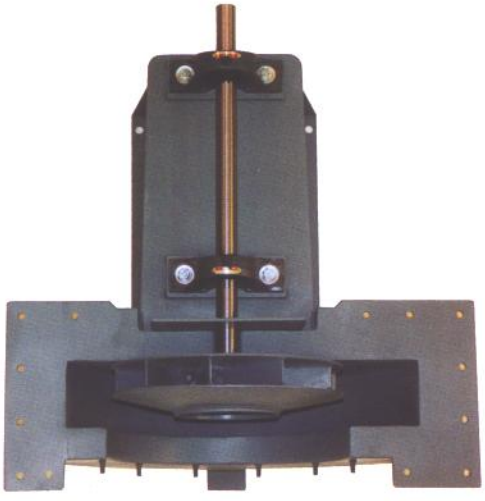
HIGH HEAT APPLICATON FANS

IAP Inc. has a sound background in supplying fans for high heat applications. This includes fan applications of 1500 degrees (F.) or more. Typical high heat fan applications include:

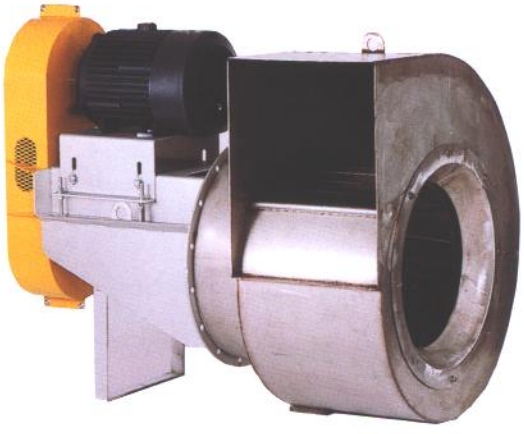
- Recirculate air in furnaces, ovens, kilns, and dryers
- Exhaust fumes and gases from industrial processes
- Supply air for heating and drying systems

High heat fans include the standard line of fans, plus special fans designed and constructed for high heat applications. Contact IAP Inc. for a personal consultation regarding your application. The high heat fans available include:

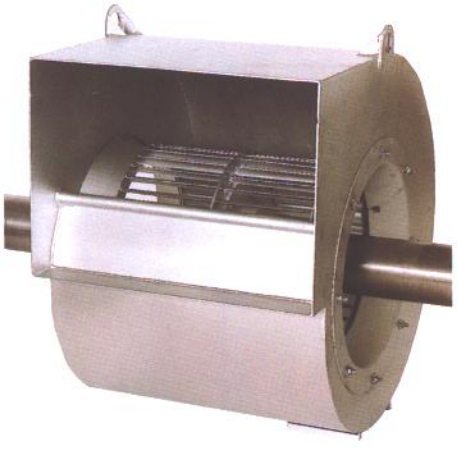
- Non-insulated heavy duty fans with a high heat option for temperatures up to 600°F
- Totally insulated housings for free standing fans, with 3", 6", 8" or more of insulation, required by its specific application
- Floor mounted plug fans with 3", 6", 8" or more insulation, offered in arrangements 1, 8, or 9
- Wall mounted plug fans with 3", 6", 8" or more insulation available in arrangement 2
- Unique dual outlet fans, can avoid the requirement for a second fan
- Air kits, with the fan wheels, housings, shafts and bearings, for easy installation in dryers and ovens



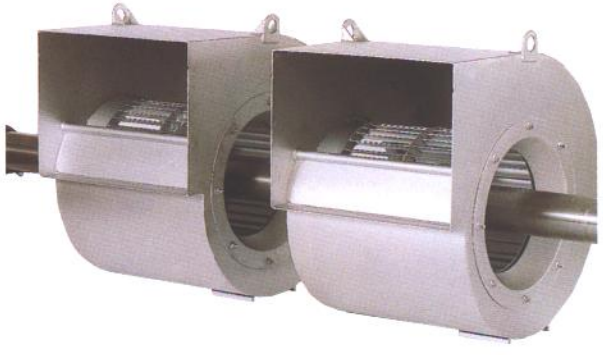
FAN WITH INSULATED HOUSING



WALL MOUNTED PLUG FAN



SINGLE FAN DOUBLE WIDE AIR KITS



TWIN FAN DOUBLE WIDE AIR KITS

WHEEL DESIGNS

TYPE A
Airfoil

TYPE F
Forward Curved

TYPE B
Backward Inclined

TYPE P
Modified Radial Tip

TYPE HP
Radial Blade

TYPE ORB
Open Radial

TYPE RTB
Radial Tip

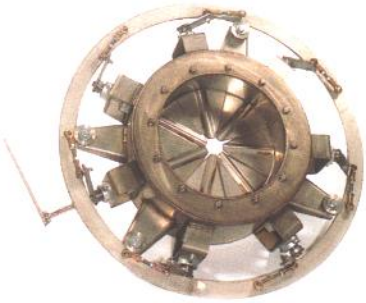
Vaneaxial

Max. Pressure Range	Temp. Range	Material Handling	Static Efficiency Range	ACFM	General Applications
40	900° F	None	78 to 82%	375,000 S.W. 675,000 D.W.	Good force draft fan. High efficiency with clean air.
24	1600° F	None	50 to 60%	400,000 S.W. 720,000 D.W.	Low tip speed ideal for high temperature applications.
40	1500° F	Light loading i.e baghouse, etc.	78 to 80 %	450,000 S.W. 800,000 D.W.	Smallest wheel diameter for given CFM. Good for corrosive jobs. Easily coated or made of special alloys.
50	1500° F	Light to moderate loading i.e. baghouse I.D. fan with collector	65 to 72%	200,000 S.W. 360,000 D.W.	Good induced draft fan. Good efficiency with light dust loading. Modified radial tip design. Low wear rate.
100	1200° F	Heavy loading fly ash & cement dust, etc.	75 to 79%	200,000 S.W. 360,000 D.W.	High pressure fan strongest structural design. Ideal for wheel wear plates, high static pressures.
40	2000° F	Heavy loading chips, sawdust, etc.	60 to 65%	175,000 S.W. 315,000 D.W.	Strong structural design good for severe induced draft service. Suitable for wheel wear plates and housing liners.
40	1000° F	Moderate dust loading fly ash & cement dust, etc.	72 to 80%	200,000 S.W. 360,000 D.W.	Ideal for heavy duty induced draft work. Radial tip design. Self cleaning with low wear rates.
10	200°F	None	70 to 78%	2,300 to 203,400	Good medium pressure system ventilation unit. Cast steel blades for corrosion or elevated temperature applications.

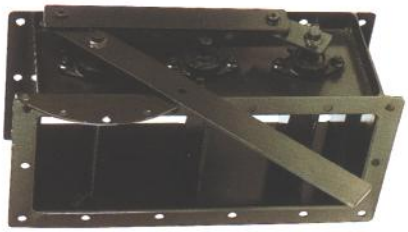
AIR FLOW CONTROLS

IAP Inc. offers you the options to effectively manage your air flow requirements. The options to optimize your air flow include the inlet box, outlet evase, round or rectangular inlet and outlet dampers, and the variable frequency motor drives (VFD).

FLEX CONNECTOR
For installation between the fan and ducting

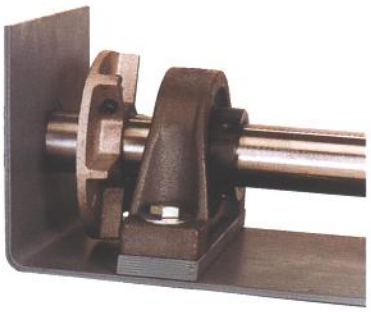


VARIABLE INLET VANE



RECTANGULAR INLET OR DISCHARGE DAMPERS

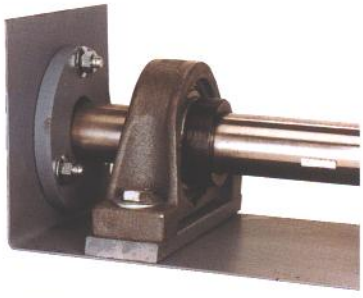
FAN OPTIONAL FEATURES



COOLING WHEEL
Heat slingers to protect the fan bearings, one piece or bolted two-piece

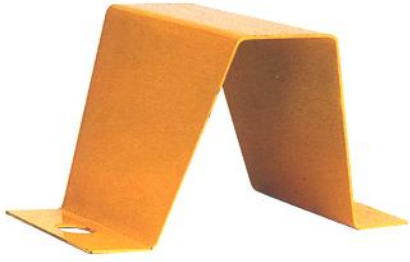
HOUSING DRAIN
Half coupling, screw type or special application types available

ACCESS DOOR
For cleaning and inspection, specify size, location and type

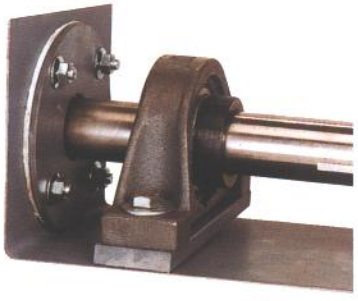


STANDARD SHAFT SEAL
Air stream material and gases are sealed within the housing, special application seals available

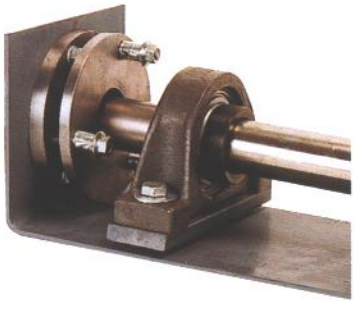
BELT GUARDS
OSHA style belt guards for belt driven fans



SHAFT GUARDS
OSHA style shaft guards



AIR DAM TYPE SHAFT SEAL



STUFFING BOX TYPE SHAFT SEAL

NOISE ATTENUATORS
Fan inlet, outlet and motor noise dampeners are available

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