Centrifugal Fans and Blowers

Applications

FANS

Our Fans have been used successfully in many diverse applications. The following is offered as a guide to specific fans and their applications. However, we are happy to advise on selecting the correct fan for your application.

AIRFLOW™

SPECIALISTS IN AIR MOVEMENT TECHNOLOGY SINCE 1955

HVAC (HEATING, VENTILATING & AIR CONDITIONING)

Air Cleaners and Fan Filter Units
Moving air through electrostatic, carbon, HEPA and other filter media.

Smoke inlet double inlet and stack fans 48F7FL to 64F7FL to 64E7FL (60x)

Air Conditioning

Elimination of conditioned air.

Generally Double mist types

Boiler Combustion Air Fans (Gas Fired)
Providing air or a gas’ mix to burners.

Boiler Heater Fan Blowers (Gas Fired) and Gas Fired Overhead Radiant Tube Heaters

Needed for introducing the products of combustion to atmosphere.

Domestic and Commercial (Domestic and Commercial)

Distribution of demanded air at homes. Timber warehouses etc.

Typically impellers on fan units sizes 26 to 71.

Diffusion Units

Returning high level warm air in factories & warehouses to working level.

Ductwork @ 3.00X. 1.00X. 0.50X.

DOMESTIC WARM AIR HEATING

Distribution of air, via a gas fired heat exchanger & ducting around a property.

Double inlet & standard fans in sizes 64F9FL 90F9FL 105C9FL 120C9FL.

Door Curtains

Warm air “curtain” at doorways, retail and industrial premises.

90S9FLY (Commercial 125kw sheet metal industrial unit plus office).

Fan Coil Units

Passing air over heat exchangers (often LPHW) for heating, typically offices.

Duple fans, typical size 9DF7.

Flue Dilation Fans

Dilute combustion products from gas fired boilers for low level discharge.

The GDF2 & GDF7 range.

General Air Handling Units (AHU’S)

“Central” plant for distributing air into a ventilation system, heated, filtered etc.

Large AHU’s use twin drive fans. Smaller units 83F9FL 105F7FL.

General Ventilation

Simple distribution of air through combination of ducts, grilles etc.

Generally the ranges of double inlet and single fans.

Heat Pumps

Usually water to air by passing air over the heat exchanger then distributed.

90C9FL 120C7FL Duple.

Heat Recovery Units

For supply & extract. Supply fan collects heat from exhaust air.

90C9FL (4 & 6-pole) 120C7FL (4 & 6-pole) and 152C14W.

Industrial Warm Air Heating

Distribution of warm air via fans, steam, gas and gas fired heat exchangers.

Dual units and large direct drive double inlet fans, eg 105C9FL.

Oil Burners

Provide combustion air for oil fed boilers.

Generally impellers only typically 45 and 52 sizes.

VAV (Variable Air Volume) Units (Powered)

Mixing of conditioned and recirculated air and distribution into office areas.

178E9FL, 83F9FL, 90E9FL, 100C9FL.

Whole House Ventilation

Left uncontrolled usually fans to trickle vent houses to aid in maintaining.

Life Fire

Electrical, Electronics & Optical

Electrical Component Cooling, General
To dissipate heat build-up generated by components, within enclosures.

37AFL to 32BFL, 40F7FL double and larger. Could be any fan size/flow.

Electronic Component & IC Testing

Air circulation within environmental test chambers.

57F7FL.

Climbing of Large Motors & Transformers

Forced ventilation through machines to keep temperatures within limits.

57F7FL, 52C5S, 52D7.

Photocopiers

Lamp cooling.

30P7FL.

Photographic Processing Equipment

Drying film, tite plates etc.

45F7C, 52B7FL, 105C9FL, 152F7C.

Projection Equipment, Theatre & Disco

Lighting equipment.

Consists mainly cooling for conventional & laser light.

30F7C, 40F7C, 64E7FL.

Telecommunications, Mobile Phone Transmitting Cabinets

Ventilation of cabinets containing Transmitter electronics.

300F7FL, 640F7FL, 102H14FL.

Laboratory & Medical Equipment

Dental X-Ray Machines

Drying dental x-ray film.

3087FL.

Environmental Chambers

Circulation of conditioned air.

902C9FL, variable impeller sizes.

Laboratory Ovens

Hot air circulation.

Heated wall ovens.

Medical isolation beds.

Supply of sterile air to highly contagious patients.

40F7FL.

Leisure

Air and Interactive Displays

Generally used to demonstrate Neurontin third law of motion.

Any fan size to suit the desired effect. Recently ACY 30X7FL has been used.

Bouncy Castles

Inflation and maintenance of pressure.

Impellers for robust and portable fans, typically 52,57 & 71 sizes.

Film & Theatre Special Effects

Smoke effects, flying effects etc.

90D9FL, often used.

Swimming Pool Domes

Inflatable and maintains plastic dome over outside swimming pools.

200C9FL.

Production/Process Equipment

Air Conveying

The transportation of lightweight product along ducts or channels.

71 size impellers. ACY 6086FL, 57D8FL.

Cotton Conditioning

Drying cotton bales in large portable cabinets.

60C9FL Duple.

Laminar Flow Cabinets

Produce uniform, clean airflow across work stations, electronics, etc.

90D9FL, 45C2FL Duple etc.

Packaging Machinery

Various functions inc. cooling shrink wrap & poly bag inflation.

305F7C, 40F7FL.

Plastic Bottle Manufacturing

Cooling mass produced plastic bottles used in the soft drinks industry.

ACY 30X7FL.

Plastic Extrusion Machines

Cooling extrusion barrels.

308C7FL, 120F7FL.

Printed Circuit Board Manufacture

Cooling and testing & solder flame extract.

32F7FL.

Tank Heaters

Blowing hot combustion product down tubes for indirect heating of liquids.

52F7C, 52D3S, 52D7.

Tunnel Ovens

Heating, cooling, & curing mass produced products, eg frames.

57D8FL.

Vacuum Forming Machines

Cooling large plastic components to speed up production cycle time.

DOMESTIC EQUIPMENT / APPLIANCES

Cooker Fans

Circulation of hot air around oven cavity.

1000mm oval adjustable impeller, and 75mm intermediate cooling fan.

Gas Fire Flame Boosters

Extract combustion products from “open” fires without a flue.

48F7FL.

Microwave Ovens (Commercial)

Cooling of the microwave magnetron.

26F7C, 40F7FL, 64E7FL.

Shower/Steam Cubicles

Circulates warm humid air into shower cubicle.

27AFL.

Shower/Body Dryers

Distributes heated air through perforated duct to dry without the use of towels.

45C7FL (brushed metal).

Miscellaneous

Advertising

Various including dynamic window dressings & rotatable displays.

Various including 45C7FL & 64E7FL.

Air Tables for the Clothing Manufacturing Industry

Provides an air cushion to allow multiple layers of cloth to be moved for cutting.

64E7FL saw fan.

Carpet Dryers

Circulates air under carpets to dry out after flood damage.

48F7FL Duple.

Commercial Catering Ovens

Circulation of air in warming and cooking ovens.

25F7C, 3207ALU.

Commercial Vehicle Ventilation

Part of the heating and ventilation systems in truck, buses, coaches and vans.

60F7 (2-wayless motor) 450-impellers.

Grain Conditioning

Permanent trickle ventilation in grain stores. “Spot Cooling” with a tube spout.

64E7FL & 70P4 (wall fans and 528F7FL for the spot cooling HAND DRYERS

Provides high velocity heated air.

40F7FL, HF speed. 72B7FL, 40F, 52F7FL & 52F7FL dryers.

Hydraulic Oil Coolers

Driving air through oil cooling heat exchangers on transport vehicles.

Impellers only 52 to 76.

Laundry Equipment

Ventilation of industrial ironing boards.

52F7FL fans. 71D7 impellers.

Military

Electronic cooling in Shannon, Radar equipment etc.

40F7FL, 60C9FL etc.

Pet Grooming Equipment

Hair dryers.

48F7FL.

Vehicle Washers (Portable)

Cooling pump motors.

57D3S impellers & o clips.

Specialist in Air Movement Technology Since 1955