

## Centrifugal and Axial Fans

Our principals have been designing and building air pollution control equipment for over 45 years. Maskell Productions pioneered the use of glass reinforced plastics (fibreglass) in fume scrubbers, and has been responsible for more than 1,500 fume scrubber installation, providing the engineering design, manufacture and installation supervision. From highly corrosive fume origins to their ultimate dispersal, Maskell Productions have designed and built the equipment capable of handling, moving, cleaning and dispersing them.

*As well as the scrubbers they are pioneers in the use of FRP fans, either axial or centrifugal, from 150 mm size to 1,400 mm, hoods and covers, mist eliminators, ductwork and stacks.*

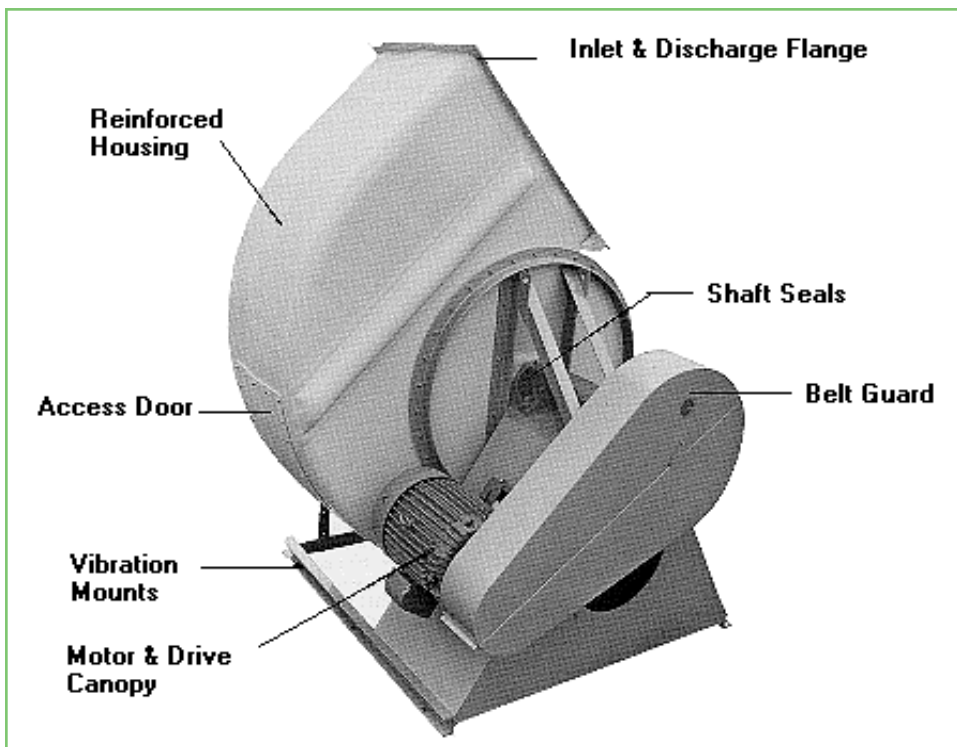
## CENTRIFUGAL FANS

### HBI Series

The backward curved impellers are designed into the HBI Series of high efficiency non-overloading fans. This high efficiency design results in reduced horsepower requirements and lower power consumption. The non-overloading characteristics of the backward curved impeller make these fans ideally suited for applications where volume or pressure fluctuations may occur. These fans are available in 15 sizes from 6-inch through 60-inch I.D., with volumes to 75,000 CFM, and static pressures to 8-inches water gauge.

### HCL Series

Designed to move air volumes up to 150,000 CFM and develop static pressures to 11-inches water gauge, the HCL Series Fans use forward curved radial tip impellers with conical end rings. They offer a wide range of economical performances. Fans are available in 14 sizes to fit standard duct inside diameters from 6-inches through 60-inches.



### HCB Series

The high efficiency HCB Series Fans utilise paddle wheel type impellers with conical end rings to generate static pressures to 28-inches water gauge and move air volumes up to 100,000 CFM. The "self-cleaning" characteristics of these fans make them an excellent choice for use in air streams which may contain solids. HCB Series Fans are available in 13 standard duct sizes from 6-inches through 42-inches, I.D.



MASKELL PRODUCTIONS LIMITED.

24 Bowden Road, Mt. Wellington, PO Box 11-185, Auckland 5, New Zealand.

Phone +64-9-573-0548, Fax +64-9-573-0666.

Email: don@maskell.co.nz Website: www.maskell.co.nz



## Centrifugal and Axial Fans

Fans of standard design contain a sleeve-type inlet and discharge connections. Available options and accessories include:

- Inlet and Discharge Flanges (drilled or undrilled) to 150 lbs. standard or standard duct dimensions.
- Access Door - For inspection of the impeller and housing interior.
- Housing Drain - Coupling or flanged type.
- Discharge Transitions - Flanged or sleeve-type connections.
- Motor and Drive Canopy - Protects motor, shaft, bearings and the V-belt drive assembly.
- Shaft Seals - In most applications, leakage out of the housing around the shaft is prevented since there is negative pressure within the housing. If the fan is operating under positive pressure, a shaft seal may be required to reduce or prevent leakage at the shaft opening. A variety of seal designs are available.
- Drives - A variety of motor types, slide bases, and V-belt drives are available to fill the requirements of most applications.
- Vibration Mounts - Elastomer or sprint type are available to fill the needs of specific applications



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### AXIAL FANS

Axial fans produced by Maskell Productions are available as a tubeaxial and design. Units of the design are fabricated of solid fibreglass reinforced plastic. A premium grade, fire-retardant resin is used. Fan shafts, bearings and drive components are protected from corrosion by a streamlined drive housing that totally encloses all components and isolates them from the corrosive fumes. A gasketed access door permits inspection of bearings and shaft.

A labyrinth grease seal is applied at the shaft opening in the drive enclosure to prevent fumes from entering. Oversized shafts and bearings are specified to ensure long-lasting operation and low maintenance. The motor is mounted on an adjustable steel motor base that is completely isolated from the airstream.

#### HAL Series

This series of duct tubeaxial fans is designed for either horizontal or vertical mounting in an exhaust system. The streamlined drive housing designed into these units protects drive components from corrosive fumes. Efficient design results in both low initial costs and low operating costs. Fans are available in 8 sizes to handle volumes up to 68,000 CFM and static pressures to 3-inches water gauge. Sizes range from 18-inches through 60-inches diameter. *Contact us for assistance in selecting the properly sized fan.*

**Selecting the proper centrifugal fan fro a specific application is an important responsibility.**

Some of the more important factors to be considered include the volume of air to be handled, the static pressures involved, and the power needed to drive the fan. Maskell Production engineers welcome the opportunity to provide detailed assistance in this selection and to discuss the advantages of using fibreglass construction.

In contacting us for assistance, please provide information on the fume conditions involved including concentration and temperature and indicate if fan operation is to be continuous, intermittent or occasional.



#### Other Maskell Production products available in fibreglass

Fibreglass is widely recognised for its many advantages in handling corrosive materials. Maskell Production engineers utilise this material in the design and manufacture of a wide range of process equipment. In addition to the centrifugal tubeaxial fans described in this bulletin and other Maskell Productions equipment available in fibreglass construction includes tanks, hoods, ducts, fume scrubbers, pipe and stacks. Much of this equipment can also be furnished in thermoplastic construction.