

Air Pollution Control

Centrifugal 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 150mm size to 1,400mm; hoods and covers, mist eliminators, ductwork and stacks.

Performance

Fan Type	HBI Series	HCL Series	HCB Series
Volume (Up to)	110, 000 CFM	150, 000 CFM	110, 000 CFM
Pressure Range	12-inches water gauge	11-inches water gauge	28-inches water gauge
Impeller Type	Backward curved impellers	Forward curved radial tip impellers	Paddle wheel type impellers
Impeller Size (Ranges From)	12" to 60"	6" to 60"	6" to 42"



Air Pollution Control

HBI Series



HBI Design Characteristics

- Maskell HBI series fans are designed to offer a wide range of economical performances
- Backward curved impeller - curved in the direction opposite the rotation, resulting in high static efficiency with peak efficiency occurring to right of peak static pressure, leaving some margin of pressure available if required
- Pressure characteristics of backward curved impeller are lower than forward curved or radial designs, resulting in higher tip speeds required to generate a given pressure
- Horsepower rises moderately to best efficiency point, then decreases as volume increases, having "non-overloading" or "self-limiting" horsepower characteristics
- Ideal for application where system may see slight variation in pressures
- Used in low to moderate static pressure systems for ventilation and corrosive fume exhaust application where small amounts of particulate may be present in air stream

HBI Applications

Maskell's experience and fan know-how are evident in the HBI series fans for exhausting of highly corrosive fumes and are widely used in the chemical, electronic, aerospace, automotive, pulp and paper, pharmaceutical, plating and textile industries throughout the world.

When you have a corrosive fume exhaust problem, call the Heil to provide HBI series fan to you particular application, where high efficiency and lower horsepower consumption are main factors in fan selections.

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: info@maskell.co.nz Website: www.maskell.co.nz

Air Pollution Control

HCB Series



HCB Design Characteristics

- Maskell HCB series fans are designed to offer a wide range of economical performances.
- Radial Impeller (straight blade) design with conical end ring and centre cone has greater mechanical strength combined with higher pressure characteristics compared to forward or backward curved blades.
- Lowest specific speed for a given volume and pressure requirement, resulting in less wear and longer life of vital moving parts.
- Excellent for demanding high pressure air and corrosive fume removal applications and systems.
- Radial blade design has excellent "self cleaning" characteristics and may be used in ventilations and corrosive fume exhaust applications where particulate may be present in the gas stream.

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: info@maskell.co.nz Website: www.maskell.co.nz

Air Pollution Control

HCL Series



HCL Design Characteristics

- Maskell's HCL series fans are designed to offer a wide range of economical performances.
- Forward curved impeller - curved in the direction of rotation provides the greatest tangential and radial velocity with respect to impeller size.
- This type of fan is smaller in size and operates at a lower speed for a given performance.
- Low space requirements - ideal for areas where space is limited.
- Lower tip speeds - longer life of impeller, bearings and shaft.
- Quiet operation - for areas where noise level must be kept to a minimum.
- Relatively inexpensive due to wheel design and size for comparable performance of other type fans.
- Used in low to moderate static pressure systems for ventilation and corrosive fume exhaust applications where heavy particulate is not present in the air stream.

Performance

- Volumes up to 150,000 CFM - pressures up to 12" W.G.
- Sizes - eleven sizes range from 6" to 60" inlets to match standard duct diameters.

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: info@maskell.co.nz Website: www.maskell.co.nz

Air Pollution Control

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.

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: info@maskell.co.nz Website: www.maskell.co.nz