CENTRIFUGAL FANS
Paddle Bladed Fans

The PB range is sub divided into three types: PB1, PB2 & PB3. Each type is based on different width proportions with the PB3 being the widest.

Due to their robust construction & true flat radial blade configuration, paddle bladed fans are suitable for pneumatic conveyance of high dust loads, fibrous material, paper, wood waste & certain solid particles.

Depending on the application involved, the impeller will be designed with a spider or backplate blade support, or a combination of both.

The impeller can also be manufactured as an extra heavy duty design & fitted with cutter blades for the material chopping industry.

The PH range of fans are narrower than the PB type. They can be run at higher tip speeds and along with their robust construction are suitable for pneumatic conveying on systems with a high pressure requirement.

Typical industries include:
- Pneumatic conveying,
- Dust extraction (dirty side of filter).

TECH/SPEC

**arrangement**

Centrifugal fans are available in either Right Hand (RD) or Left Hand (LH) rotation. Discharge orientation can be any of the standard Eurovent & ISO angles, along with any angle in between as a special design.

Multiple drive arrangements are available including:
- V / belt drive,
- direct coupled (drive through coupling),
- direct drive (fan impeller mounted directly on the motor shaft).

Various bearing / impeller arrangements are available including:
- Overhung impeller & impeller between bearings.

Fan inlets can be open, ducted or fitted with an inlet box.

**ATEX**

ATEX (II 2/3G/D T1-T6) specification fans available for hazardous areas.

**motors**

In most instances foot mounted T.E.F.C Electric motors are fitted.

The common voltages are 220, 220/380, 380, 240/415 and 460. Motors can be wound for any voltage / frequency and also for dual voltage. The use of standard foot mounted motors of this type guarantees interchangeability in most countries of the world with machines of similar speed/power.

EEExd, EEExnA, single phase, 2/3 speed and company specification motors can always be obtained.

**extra features**

Flexible Connections
Inlet & Discharge Guards
Anti-Vibration Mountings
Insulated Casings

Acoustic Enclosures
Vibration & Condition Monitoring
Attenuators
I.V.C. / Dampers

**finish**

Standard – Zinc Phosphate
Optional – Epoxy Paint or Hot Dipped Galvanised or Stainless Steel

**notes**

It must be noted that all these fans have an overloading power characteristic, where power increases with flow rate, up to a maximum power at maximum flow. Care must be taken not to over estimate the system pressure.
USEFUL INFORMATION

Standard Fan Arrangement

**Arrangement 1**
General overhanging pulley drive with bearings mounted on full depth pedestal.

**Arrangement 2**
Impeller directly mounted on motor shaft and all mounted on full depth pedestal.

**Arrangement 3**
Impeller mounted on its own shaft and directly driven through flexible shaft coupling on full depth pedestal.

**Arrangement 4**
Double inlet, double width. Commonly known as D.I.W. with impeller mounted between bearings (both in airstream).

**Arrangement 5**
Single inlet, single width. Commonly known as S.I.W. with impeller mounted between bearings.

**Arrangement 6**
Compact belt drive unit widely used for space saving purposes on site.

**Arrangement 6A**
Compact belt drive unit used as an option to Arrangement 6.

**Arrangement 7**
Single inlet single width with impeller mounted between bearings and directly driven through flexible coupling.

Standard Handings

As viewed from drive side:

- RD270
- RD315
- RD0
- RD45
- RD90
- RD135
- RD180
- LG270
- LG315
- LG0
- LG45
- LG90
- LG135
- LG180

Standard Motor Positions

- Position Z
- Position W
- Position Y
- Position X