balarka FRP fans

widespread range of axial fans

up to 34 feet diameter

EFFICIENT

ACCURATE

ADAPTABLE

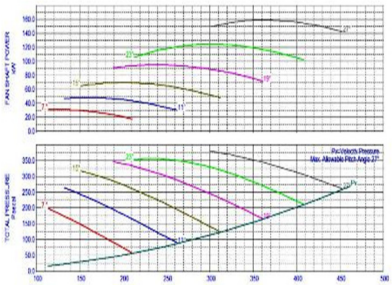
"BALARKA" Aerodynamic design axial flow FRP fans provide the desired non- corrosive quality ensures to operate most insistent situation. It gives high efficiency (up to 85%), lower noise level with lesser power consumption over metallic or other FRP fan for the huge amount of applications.

feature and benefits

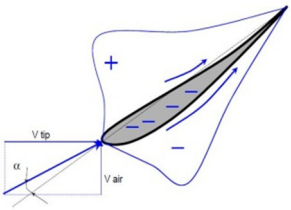
- Advance aerodynamic design
- Cost saving
- High efficiency up to 88 %
- Inter blade changeability
- Less maintenance
- Smooth finish
- UV protected
- Leading edge protected
- Balanced fan assembly
- High air flow with same power
- High strength
- Less power required
- Painted or gel-coated
- Single plate or Double plate
- Uniform air flow
- Steel fasteners

fan design and selection software

The Balarka Fan is specifically designed for the enormous of application. The aerodynamic design provides high efficiency to maintain the precise requirement of the application. Airfoil design became much more specialized for the particular application. The Balarka Fans will operate in both horizontal and vertical plane. Airfoils with good performance, good maximum lift capability, very thick sections, and very low drag sections are now designed for each use. Fan performance curves shall be provided which associate fan horsepower, pressure, and blade pitch angle across the full range of fan capability.



performance curve



blade profile

performance improvement

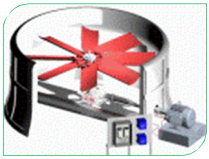
The expectable performance curve shows the entire performance specification of the system. Users of Balarka Fans can benefit from better efficiency by lower power consumption and limited noise level.

- Airfoil shape twisted and tapered from shank to tip to provide maximum efficiency up to 85%.
- Hollow structure of blade for light weight.
- More air with less power means lower operating costs.
- Maximize section area and close tip clearance approach to minimize air recirculation.
- Fan blades shall be capable of manual pitch adjustment.
- Structural and mechanical design.
- Large shank diameter for higher strength.
- Aerodynamic Design of blades to suit any specific industrial application.

focus on blade manufacturing

- Composite molding.
- Strong, lightweight, easy to handle.
- Separate dies for diverse application
- Quality standard material used.
- In house design and development of moulds and patterns.
- Each blade has built in leading edge protection to prevent better erosion rate.

axial flow FRP fans



Series	BCT
Application	Cooling Tower

Diameter up to	10.36 M (34 feet)
Air flow up to	1050 M^3/Sec (2250000 CFM)
No. of blades	12 Nos
Pressure up to	25 mm (1 Inch)
Temperature	-40 to +80 deg

Series	BHE
Application	Heat Exchanger
	Air Cooled Condenser

Diameter up to	10.36 M (34 feet)
Air flow up to	1050 M^3/Sec (2250000 CFM)
No. of blades	12 Nos.
Pressure up to	50 mm (2 Inch)
Temperature	-40 to +80 deg C

Series	BHU
Applications	Humidifier
	Process Coolers

Diameter up to	4.2 M (14 feet)
Air flow up to	210 M^3/Sec (445000 CFM)
No. of blades	10 Nos.
Pressure up to	50 mm (2 Inch)
Temperature	-40 to +80 deg C

Series	BMT
Application	Mine
	Tunnel Ventilation

Diameter up to	3.6 M (12 feet)
Air flow up to	200 M^3/Sec (424000 CFM)
No. of blades	16 Nos.
Pressure up to	250 mm (10 Inch)
Temperature	-40 to +80 deg C

Series	BGV
Applications	General Ventilation
	Tube Axial
	Air Cooler
	Supply & Return

Diameter up to	2.4 M (8 feet)
Air flow up to	47 M^3/Sec (100000 CFM)
No. of blades	08 Nos.
Pressure up to	100 mm (4 Inch)
Temperature	-40 to +80 deg C

standard

Balancing	:	IS 1940 Grade G-6.3
AMCA	:	210
CTI	:	FRP - 131
AISI	:	AISI-304 (Steel fasteners)
IS	:	IS 2062 (Steel)
		IS 2629 (HDG)
		IS 1367 (Steel fasteners)

raw materials

Blades	:	Fibre Glass Reinforced Plastic Material using polyester or epoxy resins
Hub Plates	:	Hot Dipped Galvanized Mild Steel or as per user specifications
Blade Holding	:	Cast aluminum Alloy Grade LM –6 or Cast Iron Grade FG Blocks 200 or FRP
Fasteners	:	SS 304, MS Galvanized
Center Bush	:	Cast Iron, Grade FG 200, MS Galvanized

our products are known for their advanced design and premium quality

your water, power, time and cost saving solutions