

ALLOY WHEEL AND SHAFT ASSEMBLIES FOR FIBERGLASS PRESSURE BLOWERS

FPB-22 Arrangement 1, Clockwise, Up Blast, with optional flange drilling, drain, graphite impregnation, unitary base, motor, v-belt drive, and guards.



FPB Radial Alloy Wheel



Fiberglass Pressure Blowers (FPB) are used to move low volumes of highly corrosive gases at high pressures. Typical applications include pulp and paper processes, chemical-fume extraction, and soil remediation. These applications can involve high amounts of moisture that, when moving at high velocity, can erode the resin in a fiberglass wheel. To address this problem, **nyb** provides optional alloy wheel and shaft assemblies for Arrangement 1 and 8 FRP Pressure Blowers.

DESIGN FEATURES

- Capacities to 9000 CFM.
- Static Pressures to 47" WG.
- Temperatures to 250°F.
- Available for Arrangement 1 and 8 fans.

CONSTRUCTION FEATURES

Choice of two alloy options (alloy construction includes the wheel, shaft, mounting hardware and balance weights):

- 316 stainless steel - to combat the erosive nature of moisture on FRP and temperatures to 250° F.
- Hastelloy® C-276 - for more corrosive applications and temperatures to 250°F.

The additional weight of the alloy wheel limits the maximum speed capability of the standard shaft and bearings. To maximize the speed capability of the alloy wheels, an optional shaft and bearing upgrade is available. Details are provided in the specifications table.

PERFORMANCE

Page 2 contains comparative performance curves for each fan size that illustrate the pressures and capacities available when operating at maximum safe speed. For alloy wheels there are no speed derates for temperatures up to the limit of 250°F. For comparison, FRP wheel speed derates can be found in the FPB product bulletin. Consult your New York Blower Electronic Catalog for specific fan selection results.

FRP shaft seals with Viton® or Teflon® elements are available for use with alloy wheel and shaft assemblies and are sized to seat directly on the shaft (shaft sleeves are not available with alloy wheels).

Hastelloy is a registered trademark of Haynes International, Inc.

Viton and Teflon are registered trademarks of DuPont Dow Elastomers and DuPont respectively.



THE NEW YORK BLOWER COMPANY
7660 Quincy Street
Willowbrook, IL 60527-5530

Visit us on the Web: <http://www.nyb.com>
Phone: (800) 208-7918 Email: nyb@nyb.com

Alloy FPB Wheel Options

Size	Material Type	Wheel and Shaft Ass'y Weight [lbs.]		Wheel WR2 [Lb. - Ft.2]
		Standard Shaft	Upgraded Shaft	
18	Std. FRP	28	--	4.3
	316 SST	57	61	9.0
	Hastelloy	64	68	10.0
22	Std. FRP	50	--	9.2
	316 SST	68	73	18.0
	Hastelloy	76	81	20.0
28	Std. FRP	65	--	27.5
	316 SST	108	114	46.0
	Hastelloy	120	126	51.0
Size	Material Type	Shaft Diameter [in.]	Unit Max. Safe Speed [RPM]	Bearing Type
18	Std. FRP	1 7/16	4000	A
	Alloy*	1 7/16	3500	A
	Alloy*/Upgrade	1 11/16	4800	A
22	Std. FRP	1 7/16	3600	D
	Alloy*	1 7/16	3000	D
	Alloy*/Upgrade	1 11/16	4000	D
28	Std. FRP	1 11/16	2500	D
	Alloy*	1 11/16	2850	D
	Alloy*/Upgrade	1 15/16	3100	D

A - Link-Belt P3-U200 ball bearings.

D - Link-Belt P-U300 ball bearings.

nyb reserves the right to substitute bearings of equal quality

*Alloy designation refers to either 316 SST or Hastelloy C-276

