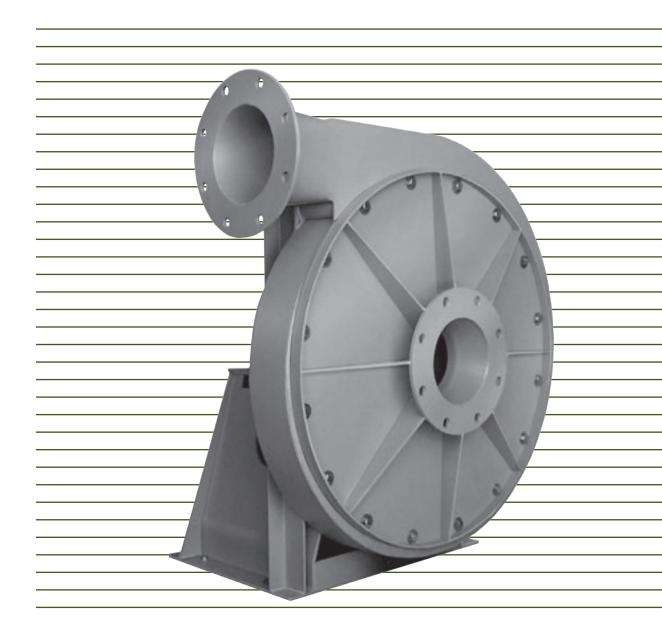
Bulletin 6400-1 October 2000

Series 6400 Centrifugal RB Pressure Blowers

Designs 6410, 6420, 6430, 6440 & 6450





Flanged Inlet and Outlet

Round punched flanges to facilitate the bolting of duct connections. Inlets and outlets are the same size, and match ANSI 125/250 # drilling.

Radial Blade

Superior combination of efficient operation and rugged, dependable service.



Bearings

Heavy duty ball or split pillow-block spherical roller bearings sized for a generous B-10 life.

Shaft

Turned ground and polished or fully machined to close tolerance.

Shaft Seal

Used to reduce leakage through the shaft hole in the housing.

Heavy Duty Structural Bearing Pedestal

Housing

Rugged heavy gauge all welded steel housing with substantial framing sections for maximum rigidity. Standard features include flanged inlet, flanged outlet, shaft seal, gasketted inlet and gasketted housing split (where applicable).

Balancing

Wheel and shaft assemblies are dynamically balanced to ISO 1940 specifications and are either interference fit or have taper-lock bushings on all models.



Shafts and Bearings

Shafts

Selected to have suitable strength and operate well below the first critical speed for each maximum class condition.

Bearings

Anti-friction, grease lubricated, roller type split housing, manufactured to internationally adopted standards by companies having worldwide acceptance and support services. Bearings are selected for continuous operation with a generous bearing life.



Capacities and Pressures

Catalogued up to 50,000 CFM. Available to 100,000 CFM. Catalogued up to 70" WG. Available to 145" WG.

Temperatures

| High Temperature Operating Limits | | |
|-----------------------------------|--------------------------|-----------------------|
| Arrangement | Without Cooling Wheel | With Cooling Wheel |
| 1 & 8 SISW 4 SISW | 300°F 150°F | 800°F _ |
| 9F SISW | 300°F | 650°F |

Arrangements

| Arrangement | Design | Fan Size Range |
|-------------------|---------------------|----------------|
| A/1, 8 & 9 - SISW | All Designs | 25 - 75 |
| A/4 - SISW | Designs 6410 & 6420 | 25 - 50 |
| A/4 - SISW | Design 6430 | 25 - 55 |
| A/4 - SISW | Design 6440 | 25 - 60 |
| A/4 - SISW | Design 6450 | 25 - 65 |

Series 6400

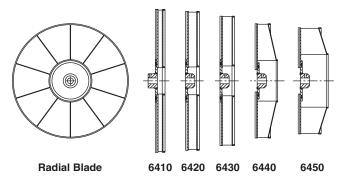
RB Pressure Blower Wheel

The Northern Blower Radial Blade (RB) Pressure Blower wheel is designed to generate high pressure in a single-stage blower. Blades are formed from heavy gauge high strength low alloy steel, stainless steel or other special metal construction.



The fans are offered in a family of wheel designs with overlapping performance ranges. The wheels progress from large diameters with narrow blades to small diameters with wide blades, so that a perfectly sized fan can be supplied for the job. The impellers are available from 85 to 100% of nominal diameter in a fixed width housing.

Performance for these diameters is determined using Northern Blower's **FanFinder™** computer program.



Standard Fan Features

- Heavy Duty Ball or Split Pillow Block Spherical Roller Bearings
- Integral Bearing Pedestal
- Shaft Seal
- · Hinged, flush mounted access door
- · Punched, flanged inlet and outlet to match ANSI

125/250# drilling

- · Continuous welded housing
 - 3/16" thick for sizes 25 to 35 1/4" thick for sizes 40 to 70 3/8" thick for sizes 75 and larger





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Performance Range Standard Conditions

