

Gardner Denver

Sutorbilt®

8000 Series

8000 Q Series

Blowers &
Vacuum Pumps



Delivering More

Throughout its history, Gardner Denver has continually raised the standard of every product we've designed and manufactured.

The Sutorbilt 8000/8000 Q Series Positive Displacement Blowers are the latest example of this commitment. Each model was designed and built by craftsmen to ISO 9001 Certified Quality Standards. Only the highest quality materials are used in the manufacture of Sutorbilt Blowers. Exhaustive testing against strict standards insures that every product in the line delivers top performance and reliability over the long haul.

Every Sutorbilt Blower is backed by one of the most comprehensive warranties in the business and is fully supported by a worldwide network of trained professionals.



8000 Q Series



8000 Series

Creativity, Engineering and Craftsmanship

At the heart of the Sutorbilt 8000/8000 Q Series is a significantly enhanced rotor profile. Computer designed and precision machined at our state-of-the-art manufacturing facility, each rotor set produces less internal slip, reduces temperature rise and increases blower efficiency.

Rotor shaft diameter and bearing sizes have been increased to allow blower operation at higher pressures without sacrificing bearing life.

Thanks to these and other advanced design features, Sutorbilt Blowers deliver greater efficiency at higher pressure and vacuum levels than ever before.

A Full Range of Sizes to Fit Your Application Needs

Available in a wide range of models from 950 CFM-40,000 CFM, 1,600 m³/h-68,000 m³/h, Sutorbilt 8000/8000 Q Series Blowers deliver up to 20 PSIG, 1.4 bar discharge pressure or 16" Hg, 470 mbar vacuum to match your application requirements.

Each blower model can be custom manufactured to meet your exact specifications. Available options include water injection, mechanical seals, special coatings, pressure lubrication systems, gear end shaft arrangement, single or multi-stage packages, monitoring and control systems.



Sutorbilt two stage air separation package

INDUSTRY

Milling and Baking
Resin and Plastic
Power Generation
Chemical
Wastewater
Pulp and Paper
Cement and Lime
Oil and Gas
Soil Remediation
Air Separation

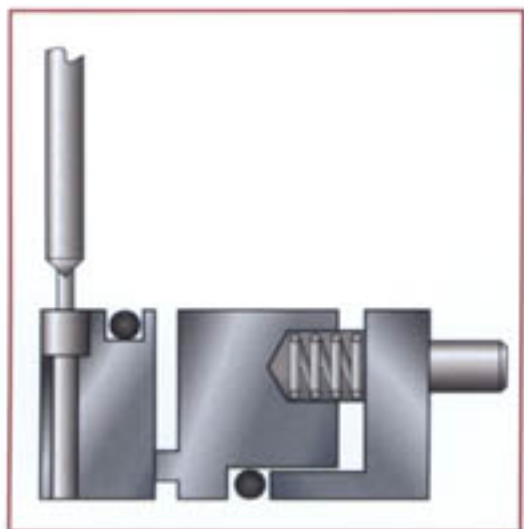
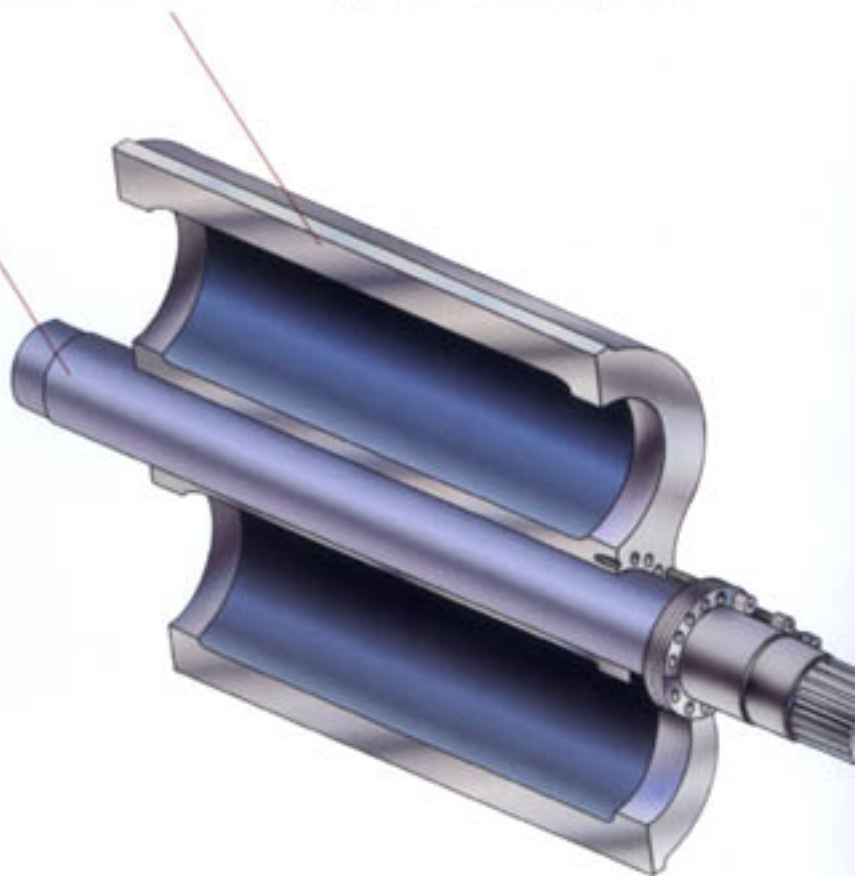
APPLICATION

Blending and Conveying
Processing and Conveying
Fly Ash Conveying and Aeration
Vacuum Processing and Conveying
Aeration and Backwashing
Chip Conveying and Process Vacuum
Fluidization and Conveying
Gas Collection and Sparging
Vacuum Extraction and Sparging
Gas Collection and Transportation

A Clear Look At Sutorbilt's Superior Features

Dynamically balanced high-density, ductile-iron impellers mean smooth running and lower bearing loads.

One-piece chrome alloy steel shafts are interference-fit through the impeller and flanged to the gear end. Advanced design includes a larger shaft diameter in critical areas to reduce torsional deflection for increased pressure ratings and efficiencies. Higher working loads for V-belt drives are permitted without additional bearings.



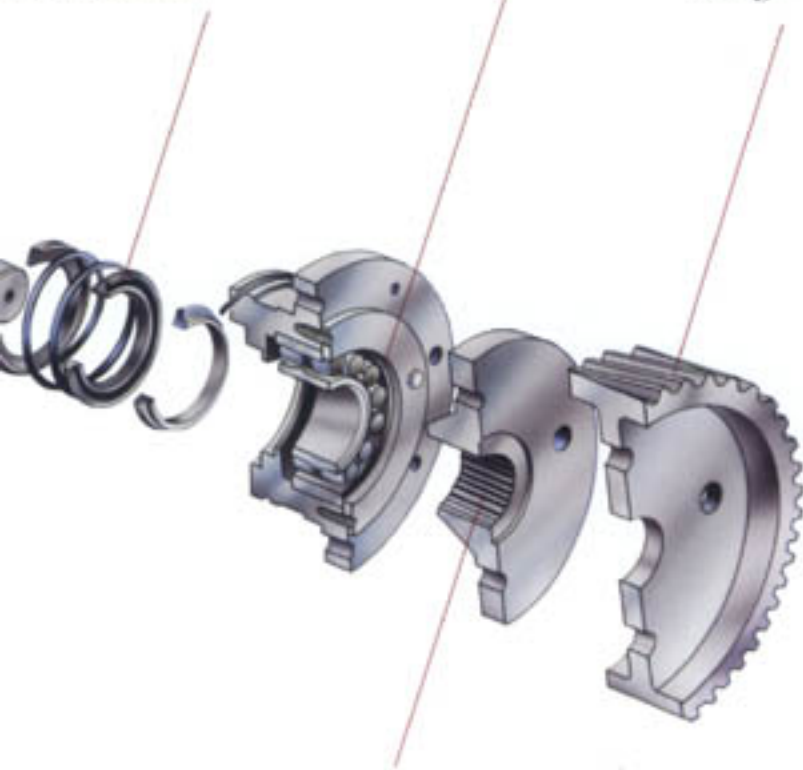
New optional mechanical seals prevent gas leaks and are recommended for all gas-handling service in pressure or vacuum applications.

Efficient lubrication with splash lubrication of all bearing and timing gears. Optional pressure lubrication system and oil cooler available with unidirectional, shaft-mounted pump deliver oil to bearings and gears from a single sump.

Heavy duty, double-row, spherical roller bearings held in machined bearing cartridges allow for easy field maintenance. Gear end bearings fixed axially against shaft shoulder control thrust loads and maintain end clearances.

Available mechanical or standard viton seals provide longer life and positive sealing any temperature.

Heat-treated, alloy steel timing gears are attached to timing hubs by high tensile strength bolts. Timing gear diameters in 10" through 14" are of helical design; 16" through 22" are of straight spur design.



Timing hubs are accurately positioned by splines on the drive shaft to simplify timing and serviceability.

Other 8000 Series Features:

High-tensile, cast-iron headplates keep all internals perfectly aligned.

Generous seal vent areas assure better sealing and longer life.

Large machined footpads offer excellent, permanent mounting surfaces.

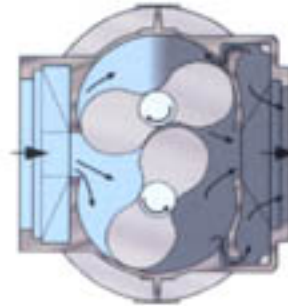
Reinforced case design assures greater rigidity under pressure or vacuum.

Energy-saving ports with larger inlet and discharge ports allow for greater air flow and optimum air velocity.

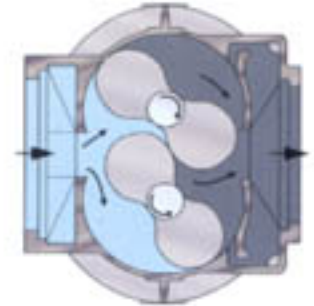
The 8000 Q Series Greatly Reduces Pulsations for Significantly Reduced Noise

The 8000 Q Series Blower design reduces pressure pulsations created at the discharge port of a straight lobed blower. This is accomplished by bleeding some of the discharge gas back through a feedback plenum into the closed pocket. The pressure within the blower gradually increases until it nearly equals the discharge line pressure. When the rotor tip passes the long edge of the port, there is very little disturbance to create noise and unwanted pulsations.

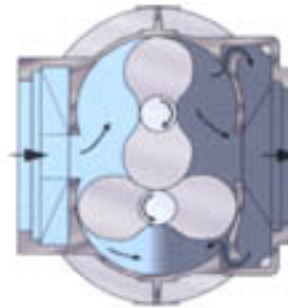
The Q Series option is available for 10" through 22" gear size machines. In most applications, the option can reduce the blower's noise level by approximately 5 dBA.



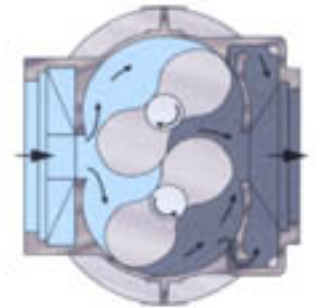
Pressure in upper pocket begins to be equalized through feedback port.



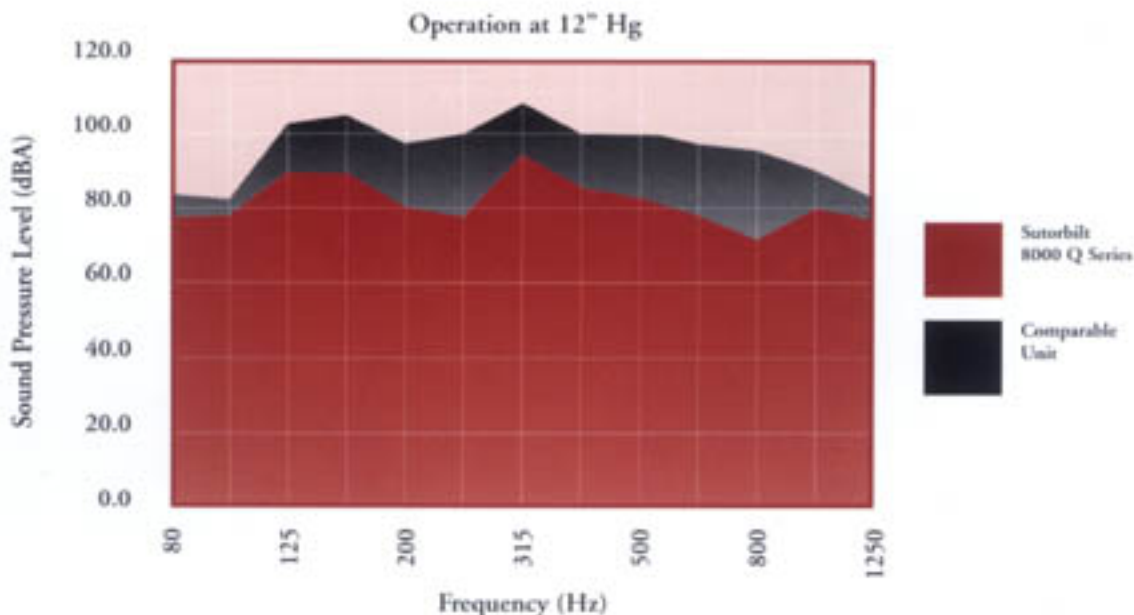
Lower air pocket about to be sealed off at inlet.



Pressure in pocket is equalized through feedback port.

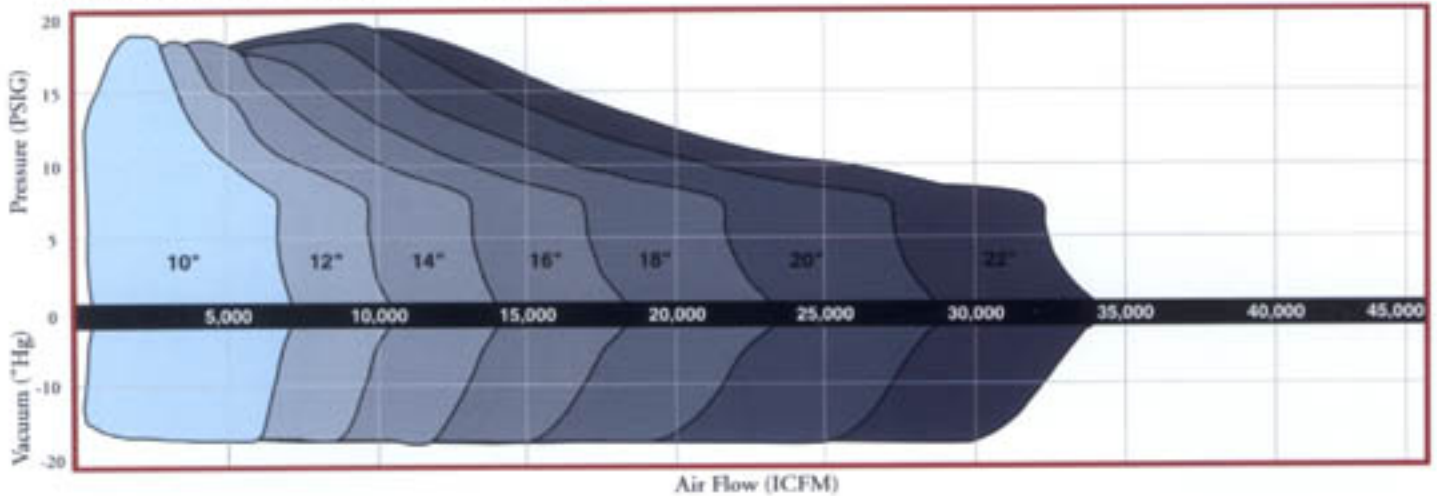


Discharged air pulsations and noise levels are greatly reduced.

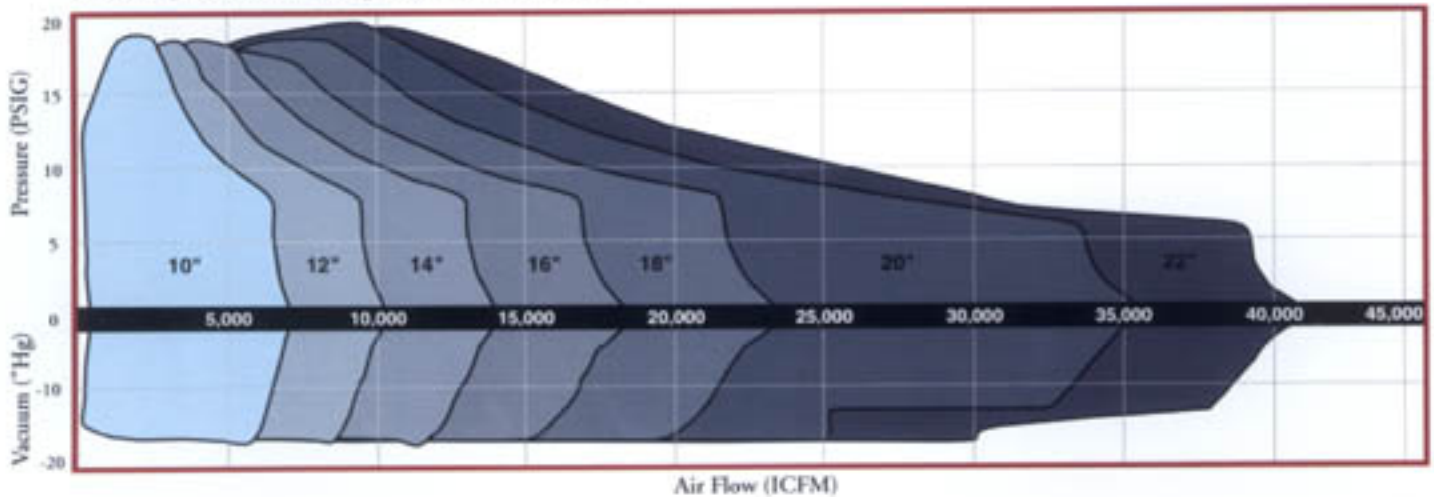


Selection Guide

8000 Series Air Map By Gear Diameter



8000 Q Series Air Map By Gear Diameter



Specific Model Selection

With over 100 individual Sutorbilt 8000/8000 Q Series Positive Displacement Blower models available there is one to meet your application requirements.

Contact your Local Authorized Sutorbilt Distributor or Gardner Denver Blower Division for specification assistance, engineering support and blower sizing.

The Sutorbilt Promise

Superior Service

A complete offering of customer services, from engineering support to remanufacturing programs, is available to Sutorbilt owners through Gardner Denver and local distributors.

Highest Quality

Every Sutorbilt blower is expertly designed and manufactured to ISO 9001 Certified Quality Standards.

Least Possible Cost

The latest state-of-the-art CNC machining centers and labor savings material processing systems allow Sutorbilt to produce blowers quickly, efficiently and economically.

Best-In-The-Business Warranty

Every Sutorbilt 8000/8000 Q Series Blower is covered for 18 months from the date of shipment or 12 months from the date of installation.



Superior service and support is available through a local distributor network.



State-of-the-art manufacturing means highest quality products.

Gardner Denver

For additional information on products featured in this brochure, contact your local representative or

Gardner Denver Blower Division

100 Gardner Park, Peachtree City, GA 30269

Toll Free 800-543-7736

Phone 770-632-5000 • Fax 770-486-5629

E-mail: blowersmktg@gardnerdenver.com

Visit our web site: www.gardnerdenver.com

For Parts Information, Contact:

Toll Free 800-982-3009

Gardner Denver Blower Division Customer Service

Phone 770-632-5000 • Fax 770-631-0765