

UNIMAC



Premium quality blower packages through innovative design and superior construction.

B Series Blower Packages



B SERIES BLOWER PACKAGES

B Series Base Mounted rotary lobe blower packages provide a rigid mounting platform for the blower, motor and discharge silencer.

Blower selection is made using computer modeling software carefully considering bearing life, % of maximum pressure, blower speed, temperature rise and noise level.



Sutorbilt Legend

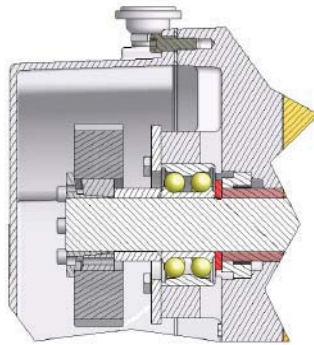
Features

- Cylinder is machined from a single piece of cast iron, is heavily ribbed for high-strength and features oversized dowel pins for precise mounting and alignment of head plates.
- Head plates, machined from cast iron, are ground on the interior surface to precise operating tolerances. Bearing fits are machined into head plates to assure exact bearing positioning.
- Impellers are machined from cast iron to an exact profile and are permanently fastened to steel shafts. They are dynamically balanced for smooth operation.
- Precision machined alloy steel timing gears are securely fastened to the shafts assuring non-slip timing.
- Timing gears and gear end bearings are splash lubricated utilizing an abundant oil reservoir. Drive end bearings are either grease lubricated through fittings or splash lubricated.
- High temperature Viton® oil seals provide leak free operation.
- Each Sutorbilt Legend is manufactured in a state of the art ISO 9001 certified facility in Sedalia, Missouri, individually tested to meet rigorous performance specifications.



Engineered Air Gap

The air gap between the lubricant sump and the impeller cylinder reduces temperatures up to 15° F extending lubricant, bearing and blower life.



Bearings & Viton® Seals



Gear Locking Rings

Timing gears are mounted with Grip Rings which expand against the bore and compress on the shaft for a secure, mechanical shrink fit. with a 6.0 safety factor.

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Performance

- All inlet and discharge losses are factored into package performance calculations
- Motor nameplate HP is not exceeded even at relief valve settings.
- V-Drives are designed for maximum life and minimum bearing load, with a service factor of 1.4
- 100% of Unimac packages are tested at design and relief valve conditions. Critical operating parameters are measured and permanently recorded on a Test Data Report.

Formed Steel Base

3/8" steel plate is formed into a elevated base provides a rigid mounting platform for the blower, motor and discharge silencer.

Combination inlet silencer - filter

Incorporates multiple silencing tubes around the outside of the base and a central tubular steel acoustic section layered with absorptive media for maximum attenuation. A dry type replaceable element removes 99% of particles 2 micron and larger.

Discharge Silencer

An all welded steel absorptive style discharge silencer has minimal pressure drop and provides insertion loss levels between 10 to 45 dB across the frequency bands.

Relief Valve

The relief valve is rated for the full capacity of the blower. The diaphragm assist spring loaded design maintains repeatable set pressures after numerous cycles.



Standard Equipment

- Positive displacement rotary blower
- Synthetic lubricant fill and level gauge
- Drive motor 208-230-460/3/60 1.15 SF ODP, EPACT
- V-Belt drive with enclosed guard
- Oversized inlet silencer filter combination
- Full flow pressure relief valve
- Pressure gauge, SS, liquid filled
- Discharge silencer, absorptive
- Flexible connector between blower & silencer
- Formed steel plate mounting base
- Drawings, instruction & operating manuals

Options

- TEFC, IP-55 drive motor
- Discharge check Valve
- Air filter maintenance gauge
- Premium efficiency motor
- Weighted relief valve
- Temperature gauge
- IEEE-841 motor
- Additional Flex connector
- High air temperature switch
- 380/3/50 & 575/3/60 voltages
- VFD variable frequency drive
- Across the line motor starter
- Custom paint colors

UNIMAC

Unimac LP, founded on the principle of offering superior blower packages, has a history of innovation and excellence that sets standards for the industry. For twenty years Unimac LP has supplied blower packages on an international scope, with installations in the Middle East, Central and South America, Indonesia and the United States.

Our 16,000 sq. ft. shop is located on over an acre with an overhead crane, welding shop, metal-cutting saws and paint booth. A 600-amp test stand allows full load testing up to 250 HP and a VFD drive allows testing with 50 Hz power, common for international voltages.

Products are designed using Autodesk INVENTOR 2009, and manufactured in house, adhering to standardized quality control procedures. Critical steps in the fabrication process such as cutting, welding, piping, wiring and painting are performed by fabricator-welders, mechanics and technicians experienced in their craft with a proven track record of success in producing quality equipment. The end result is a consistent level of high quality that ships on time and performs as expected.

Pre-designed packages range from bare bones "Base Mounted" to "Quiet Enclosed" for maximum noise attenuation. By standardizing our designs we can streamline the whole manufacturing process, providing an excellent value with faster delivery. Our products incorporate innovative design concepts with added features to improve reliability, extend useful life, and make routine service easier. Attention to detail and an exceptional level of construction quality are evident throughout our products.

Sizes from 1 to 27,000 CFM • Pressures to 40 PSI • Vacuum to 27" Hg • Combined Pressure-Vacuum



Base Mounted



Table Top



Clam Shell



Quiet Enclosed



Gas Booster

