

**AIRMAC**



Premium quality blower packages through innovative design and superior construction.

## **SBD Series Blower Packages**



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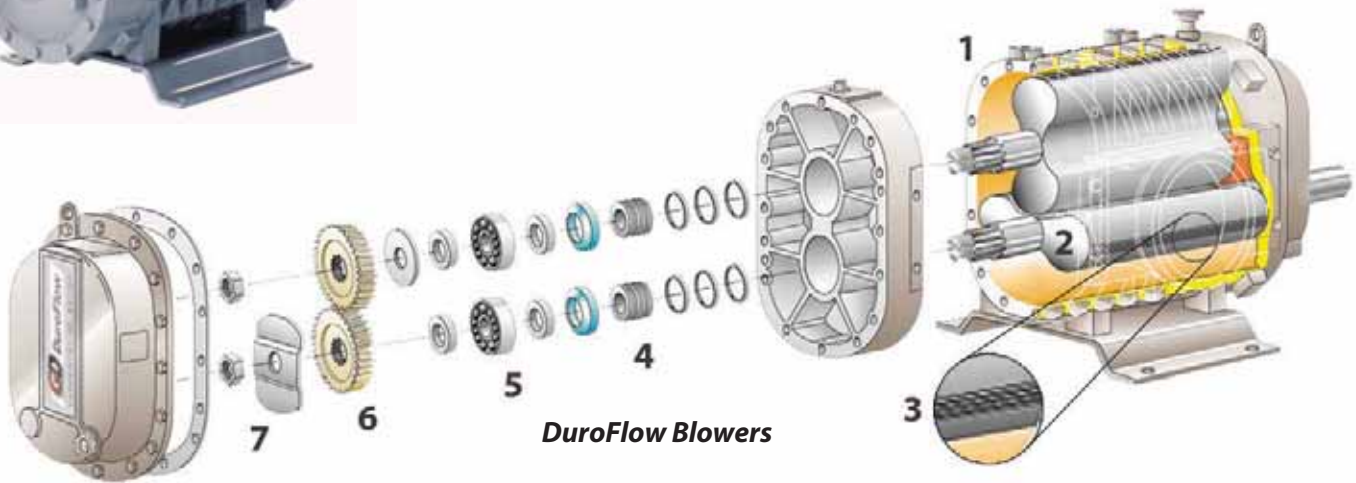
# AIRMAC

## SBD SERIES BLOWER PACKAGES

SBD Series (Silenced Base) rotary lobe blower packages feature DuroFlow blowers with flows to 670 CFM, and pressures to 15 PSIG for bulk transfer of dry materials.



1. Heavy-duty reinforced single piece cast iron cylinder
2. Solid rotor profile precision machined with advanced CNC technology
3. Innovative rotor tip increases blower efficiency
4. Advanced piston ring and flinger oil and air seal design for leak free operation
5. Oversized drive end double-row ball bearings
6. Helical timing gears, precision machined from alloy steel forging & spline mounted
7. Dual sump reliable splash lubrication



Transfer systems using pneumatic power are an efficient method of conveying a wide variety of dry bulk materials. A transfer system uses a rotary valve to feed material to the conveying line, which transfers it to the process.

Un-loader system empties rail cars and tank trucks by pressurizing the tank on one side and supplying air to the product discharge line forcing material out on the other side.

MODEL	HP	CFM	PSIG	Tons / hr *
SBD-4504-30	30	285	15	8 to 14
SBD-4506-50	50	450	15	18-25
SBD-4509-60	60	670	15	24 to 45

\*Tons/hr is only a general guideline based on a “typical” conveying system with the following criteria: Dry materials with a bulk density of 90 lbs/cu.ft. Conveyed through a 3” to 5” ID line with a maximum total length of 100’ with no more than a 70’ vertical rise. Sizing assumes proper material feed to the conveying line and a piping system design with no more than four 90 degree turns, a minimum of flexible hose lengths following good design and construction practices. These capacities are guidelines only since material characteristics, altitude, temperature, moisture level, and air leakage vary from site to site.

## SBD SERIES BLOWER PACKAGES

The low profile design is compact, easy to lift or move, and extremely rugged, suited for the most demanding installations.

### Silenced Base

The unique steel tube design provides a substantial platform for mounting the blower and motor. With a 1/2" wall thickness and internal gussets the tube reduces shell ring and won't twist, bend or flex.

The blower's harmful pulsation energy is virtually eliminated by our exclusive pulsation control design. Inside the tube a combination of reactive and absorptive components provide superior noise reduction with a minimum pressure drop.



### Inlet Filter Silencer

A 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. In addition the weatherproof hood is lined with a "quiet band" of sound deadening barrier material. A dry type replaceable element removes 99% of particles 2 micron and larger.

### Direct Coupled Drive

The flexible coupling features molded, non-lubricated, interchangeable elastomeric EPDM sleeves. Its four-way flexing action accommodates torsional, angular, and parallel misalignment, as well as axial end float.

### Relief Valve

The relief valve is rated for the full capacity of the blower. With a diaphragm assist spring loaded design the valve maintains repeatable set pressures after numerous cycles and remains tight till it reaches "cracking" pressure. Most importantly the valve consistently re-sets below set pressure and does not flutter.

### Standard Equipment

- Positive displacement rotary blower
- Synthetic lubricant fill and level gauge
- Drive motor 208-230-460/3/60 1.15 SF TEFC
- Direct drive coupling with enclosed guard
- Oversized inlet silencer filter combination
- Full flow pressure relief valve
- Pressure Gauge, SS, liquid filled
- Combination Base /Discharge silencer, chambered reactive/absorptive with lifting eyes
- Flexible connector between blower & silencer
- Drawings, instruction & operating manuals



***Inlet Filter Silencer***



***Direct Drive Coupling***



***Relief Valve***



Airmac, 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 2012, 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

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Houston TX 77089  
281-922-5800

8901 Directors Row  
Dallas TX 75247  
866-424-7622

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Oklahoma City, OK 73129  
405-632-2510