

Rotary Lobe Blowers

Features and Benefits At A Glance

Processors and manufacturers across the country use blowers and blower packages in a wide variety of applications. From bulk and pneumatic conveying to soil remediation and waste water treatment, blowers produce high volumes of low pressure air.

directly proportional to the changes in motor speed – a significant energy advantage.

Blower Construction Features

Evaluate the blower's manufacturing and design quality. Look for quality materials and equipment designed to work together.

sealing and will help ensure a long service life and reliability

Precision Gears – spur-type, case-hardened, precision ground timing gears minimize vibration and mechanical noise, and allow accurate rotor to rotor timing for improved efficiency.

Reliable Splash Lubrication – Oil

Blower Type

Among blowers, there are two common options for most processing applications: centrifugal blowers and positive displacement rotary-lobe blowers. Centrifugal blowers are dynamic machines designed to produce variable flows at a constant pressure. Though highly effective for large flows at moderate to low pressures, centrifugal blowers must operate at high speed and are only variable within a narrow range.



Rotary-lobe blowers are positive-displacement machines delivering constant volumes at variable pressure. Positive-displacement blowers are variable over a wide range of speeds and the power requirements are almost

Heavy Duty Bearings – capable of absorbing 100% of widely varying radial forces.

Piston Ring Sealing – heat-treated metal piston ring air and oil labyrinth type seals provide the best

slingers on both the drive and gear ends create the most reliable method of splash oil lubrication to both bearings and gears and will minimize wear and reduce operating temperatures.

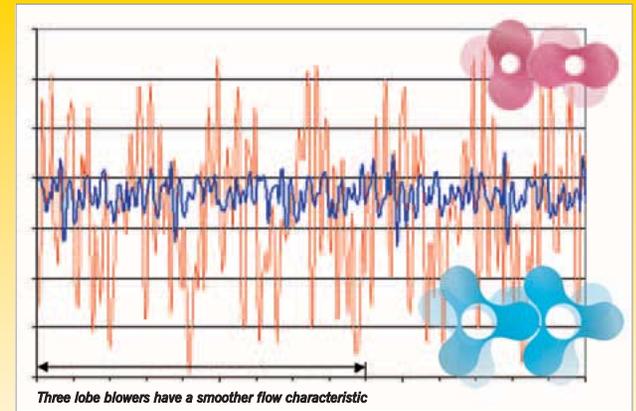
Application Hints

Two lobe or Tri-lobe?

With so many choices available, it helps to understand each blower advantages and benefits and how they apply to the specific application.

Two-lobe blowers are often the more energy efficient choice and are ideally suited for pneumatic and bulk conveying applications.

Tri-lobe blowers produce more pulses per revolution than their two-lobe counterparts, but each pulse is smaller and contains less energy. These higher frequency, lower energy pulses help protect downstream products and equipment.



Three lobe blowers have a smoother flow characteristic

Variable Speed Drive

Blower packages can be easily fitted with a variable frequency converter to seamlessly control the

blower's motor speed and regulate air flow.

Pressure can also be regulated when used in conjunction with a

transducer. This control scheme maximizes efficiency at all conditions of service.

Rigid rotors and sealing strips – One-piece, ductile iron rotors that are properly balanced will provide smoother more efficient operation at all speeds and pressures.

Noise Attenuation

Blowers are inherently noisy. There is pulsation noise from the pressure differential, and mechanical noise from the gears and the bearings. Tri-lobe blowers produce significantly less pulsation noise. Mechanical noise can be minimized by choosing a blower with high quality gears and bearings and can be significantly lowered by using high-quality sound enclosures. "Sound-

proofing" can bring dB(A) levels to the low 60's range.

Package Advantages

Factory built and backed packages are designed to provide the customer everything needed for a trouble free installation and a wide variety of applications.

Today's packages combine the standard rotary lobe blower with a sub-base, an inlet silencer, a discharge silencer, a relief valve with piped exhaust, automatic V-belt tensioning, a high-efficiency, totally enclosed, fan-cooled motors, and ball valves for draining the lubricant.

Service

Factory-built packages also have an advantage when it comes time for service. The manufacturer will likely back all components provided in the scope of supply. Maintenance agreements, local representation, parts stock and warranties are all factors to consider when evaluating a blower manufacturer.

for more info

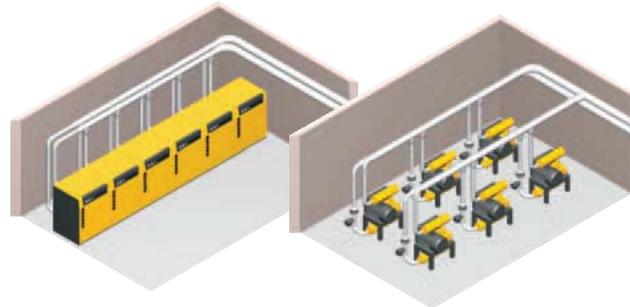
Installation

Kaeser's Com-paK Plus is uniquely designed to minimize space requirements and reduce installation costs by incorporating many accessory components. The fully enclosed package design and proprietary Omega Plus tri-lobe blower design serve to minimize pulsation and noise.

All routine maintenance points are accessible from the front while all utility connections are located in the back. This enables multiple units to be installed adjacent to each other without the need for additional clearance.

Blower Sizing Program

Kaeser Compressors, Inc. has developed PC based software to



assist both engineers and endusers in optimizing blower selection and producing the most efficient process application possible.

The Omega Blower Sizing Program is our proprietary development and is available free of charge by contacting your local authorized Kaeser distributor.

