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Are proud to represent and support from our Teesside branch



Totally Oil Free Air



HP9000 and HP4000 Turbo Blowers

PILL Aerator

Magnetic Bearing Turbo Blowers The undisputed master of process air

150 kW and 300 kW Flow rate up to 267 m³/min, 16,000 m³/h, Pressure differential 0.3 to 1.3 bar



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KAESER the undisputed master of process air

Efficient, reliable and flexible – Pill Aerator turbo blowers from KAESER are compact Plug and play units developed specifically with aeration applications in mind. Equipped with contact-free magnetic maintenance free bearings that require no lubrication, They guarantee a completely wear-free operation which renders oil and bearing changes unnecessary. Turbo blowers are used wherever process air is required in the low pressure range – such as wastewater treatment, aerobic fermentation and flue gas desulphurization applications.



Simple installation Pill Aerator turbo blowers are delivered from the factory as connection-ready complete systems, pre-prepared for integration into Industry 4.0 environments, therefore guaranteeing quick and simple installation for the operator. Simply plug and play!

Oil-free and quiet With a sound pressure level below 80 dB(A), making it incredibly quiet.

Contact-free magnetic bearings for a completely vibration-free operation.

An optional silencer reduces the sound pressure level in the compressed air lines even further.

It is remarkably simple to operate and almost completely maintenance free. An integrated cooling system with internal water circuit ensures a smooth, trouble-free operation. The canned motor with its magnetic bearings – is kept free from any particulates. The combination of an air/ water and a water/water-cooler means that accumulated heat is reliably removed, even under the toughest of conditions. The optional climate control guarantees safe operation in ambient temperatures as high as +55°C.



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Energy and efficiency

The direct-drive magnetic bearing canned motor, With the intelligent controller, ensures remarkably efficient operation. Operating at a polytropic efficiency level of 84 %, these state-of-the-art machines can save up to 25 % of the energy costs associated with conventional technologies.

During intermittent operation, magnetic bearing turbos offer the advantage that they do not negatively affect frequent start /stop operations. Combine this with an uncommonly broad control range, serves to avoid the expensive blow-off functions in an enforced idle operation that are often a feature of machines equipped with pneumatic bearings.

Economical operation

The integrated controller ensures reliable and efficient operation, whilst the standard -equipped frequency converter adjusts blower speed to match the flow rate to the actual air demand of the process.

Furthermore, a fully automated anti-surge System prevents the machine from operating in unfavorable control ranges.



State-of-the-art process air with turbo blowers

Kaeser Intelligent control and communication

An advanced plc controls the operation and monitors machine conditions and performance levels. This data can be accessed (and the machine can be controlled remotely) in real time using a variety of industrial automation protocols for SCADA integration including ethernet/ip (Allen Bradley compatible), modbus tcp, profibus and others. The data is also stored and can be extracted and analyzed. The hmi with multiple human language options allows for operation around the globe. Up to 10 turbo blowers can be connected and controlled using the turbo blower controller.

The following values are constantly monitored to make for a safe and efficient operation:

flow rate, pressure increase, shaft power, temperatures, operating hours counter, pressure differential at inlet filter, full System check



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Save energy - protect the environment Life-cycle

When it comes to technical applications, high energy consumption means that process air is always a significant cost factor. However, installing KAESER magnetic bearing turbo blowers can reduce both a company's energy consumption and its CO2 emissions. Efficient, low-maintenance and quiet. They guarantee a reliable supply of compressed air flow for a wide variety of applications.

In addition to efficient omega rotary lobe blowers and energy-saving sigma rotary screw blowers.

KAESER has expanded its product portfolio to include the magnetic bearing high-performance turbo blowers.

By using turbo blowers in place of conventional low-pressure compressors. The life-cycle costs of a typical process air application can be reduced enormously. Boasting a polytropic efficiency of 84 %, pill aerator turbo blowers are especially efficient. As a replacement for an old rotary lobe blower, the associated energy savings alone mean that the investment can pay for itself in a short period of time. Whether for water treatment applications, yeast production or for use in bio-reactors. Kaeser stand out on account of their reliability, efficiency and ease of maintenance. Their total absence of oil also makes these robust turbos suitable for use in sensitive processes, such as in the food industry.

Applications pill aerator magnetic bearing turbo blowers example:

The difference in total costs over a 7-year life-cycle assuming an energy consumption of 120 kW, 20 hours' daily operation and an electricity cost of € 0.12 – amounts to over € 200,000 Life-cycle costs.

Pill aerator turbo blower € 960,000,

Rotary lobe blower € 1,170,000.

The associated energy cost savings include not only a reduction in a company's electricity costs, but also a reduction in its CO2 footprint





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Model	Permissible gauge working pressure BAR	Flow rate complete system at gauge working pressure M3/min	Flow rate *) Complete system at gauge working pressure M3/h	Speed RPM	Drive motor rated power KW	Compressed air connection .	Maximum sound pressure level * db(A)
HP 4000	0.4—1.3	16—83	950—5000	30,000	150	DN200/PN10	74
MP 6000	0.3—1.1	25—108	1500—6500	30,000	150	DN200/PN10	75
LP 8000	0.3—0.9	25—133	1500—8000	30,000	150	DN200/PN10	76
HP 9000	0.4—1.3	42—183	2500—11,000	22,000	300	DN400/PN10	75
MP 12000	0.3—1.1	50—233	3000—14,000	22,000	300	DN400/PN10	75
LP 14000	0.3—0.9	75—267	4500—16,000	22,000	300	DN400/PN10	75

For all your KAESER compressor and vacuum needs
 contact: www.ptc360solutions.co.uk

We are here to help

KAESER COMPRESSORS

PillAerator

HP 4000

See other side ->