THE NEXT GENERATION LeviTurb New magnetic bearing drive system for turbo blowers

The increasing importance of turbo blower's life cycle costs and the technological limits of turbo systems with airfoil bearings lead to a significant trend towards magnetic bearing systems.

Based on KEBA's track record with an installed base of more than 800 magnetic bearing drive systems (wastewater aeration, yeast production) and the unique technology portfolio, KEBA launches the most compact and efficient magnetic bearing drive system for turbo blower applications for the power range of 150 – 300 kW (200 – 400 hp). All components of the drive and bearing train are from a single source.

The most simple & innovative magnetic bearing solution

The integration of magnetic bearing technology has never been so easy thanks to KEBAS's new magnetic bearing drive system. The radically reduced number of system components leads to a highly compact, cost-efficient and easy-to-install solution.

- // Motor-integrated magnetic bearing controller
- // No sinusoidal filter
- // VFD-integrated power supply for magnetic bearings
- // No UPS / battery
- // Only one PLC interface
- // No air cooling fans for magnetic bearings
- // Less wiring

The sensor technology of the magnetic bearing in the motor enables extensive condition monitoring of the drive unit and also of the process. The current condition of the machine is available at all times and this information is transmitted to the machine control via the central Ethernet-based field bus. System and process optimization is thus possible at any time.

Typical Multiple Vendor Solution - complex New KEBA Drive System - simple & innovative Fan 1 Fan 2 Motor **Smaller** Variable Speed Drive **Easier** Choke (VFD) More cost efficient Mains More reliable Magnetic Power Bearing Controller UPS 150 - 300 kW



smaller

LeviTurb

New magnetic bearing drive system for turbo blowers

Your benefits

Technologically leading

- Fewer components than in typical setups (no sinusoidal filter, motor-integrated magnetic bearing controller), less wiring
- Reduced space requirements of blower system
- High efficiency due to perfectly matched system components and most innovative drive technology
- No UPS needed in case of power failure

-30 %

Reduced system costs

- Better price-performance-ratio and fast and easy installation due to new system setup with fewer components
- Lower life-cycle costs (TCO) due to wear-free bearings and highly efficient operation
- Easier supplier management as all componets from a single source

more cost efficient -20 %\$ multiple suppliers, many components more cost efficient -20 %\$ one supplier, few components

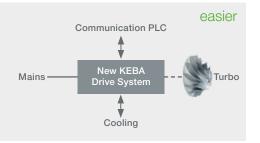
Reliable operation

- Extended condition monitoring for predictive maintenance due to various system sensors
- Safe operation in case of power failure without battery or UPS
- Resistance to pressure fluctuations and air impurities and possibilities for system adaption to process conditions

more reliable

Quick support & service

- Extended condition monitoring and data logging for failure analysis
- Easy parameterization via one communication interface
- Easy diagnosis by means of one tool for drive and AMB (locally and remote)



Fast time-to-market

- Fast blower design and commissioning due to pre-configured and system-tested components (plug & play)
- Design and installation support by experienced supplier

interested?

Ask for more information and test opportunities:

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» Focus on your core competencies! Every drive and bearing functionality is already assured by KEBA's perfectly matched components. «

Jörg Möglich-Hellhund / Manager Industry Solutions Turbo Systems

