Screw blowers

Quiet and efficient

The DBS-series screw blowers promise big energy savings for wastewater treatment plants. With power ratings from 15 to 37 kW and flow rates from 4 to 22.5 m³/min, they are currently the most efficient screw blowers available.

Like the other Kaeser screw blower series, the DBS screw blowers deliver unparalleled efficiency. They are up to 35-percent more efficient than conventional rotary blowers and also provide energy savings in the double digit range compared with many commonly available screw and turbo blowers.

These benefits are made possible in no small part by the proven Sigma Profile rotor technology used in the rotary screw compressor sector. Another key factor is the innovative non-slip direct drive with speed transmission integrated into the airend, which delivers maximum speed with minimal transmission losses. The result: lower energy costs.

These screw blowers are especially well suited to municipal and industrial water treatment applications. Two different versions are available to meet the needs of water treatment plants requiring pressures up to 700 or up to 1100 mbar. The blowers are exceptionally quiet, with sound levels in primary applications not exceeding 72 dB, which is equivalent to a modern vacuum cleaner.

The low energy consumption of Kaeser screw blowers makes them the perfect choice for supplying compressed air to water treatment plants. They are designed for use over long duty cycles, including continuous operation, require little maintenance, and can be installed side by side. Upon request they can be delivered with an integrated frequency converter or a star-delta starter. The non-slip synchronous reluctance motors in versions equipped with a frequency converter also increase overall efficiency. On both versions, power transmission from the motor to the airend takes place via loss-free and maintenance-free gearing. The screw blowers are delivered as turnkey systems (including power electronics and the Sigma Control 2 controller) that are ready for commissioning straight “out of the box”.

**Intelligent control**

Also integrated into the DBS blowers is the Sigma Control 2 system controller, which provides extensive monitoring functionality and makes it easy to connect each individual piece of equipment to communications networks. Going forward, this integrated controller will also make it possible to integrate the blowers into a Sigma Network, if desired. This is now possible since the Sigma Air Manager 4.0 (SAM 4.0) master controller – so well-proven in the compressor segment – is now also available for blower systems.

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Images:



The DBS screw blowers are compact and efficient systems which deliver exceptional dependability for long duty cycles whilst keeping energy costs to an absolute minimum.