ABS HIGH SPEED TURBOCOMPRESSOR

Advanced high flow low pressure turbocompressors for wastewater aeration and industrial application.

abs
We know how water works

ABS HIGH SPEED TURBOCOMPRESSOR - SO ECONOMIC, IT COULD PAY FOR ITSELF IN TWO YEARS.

With its non-contact electromagnetic bearings, the high speed rotor of the ABS High Speed Turbocompressor operates entirely without lubrication.
No contact also means no friction or wear and variable speed control keeps the machine at its optimal operating efficiency at all times to maximise energy utilization. The result is a quieter, vibration free and superbly energy-efficient compressor.

Small footprint
Means smaller blower buildings and less construction cost

Compact size

Modular design
Operates in parallel in groups of up to 16 machines

Compatible
Can operate in parallel with all types of conventional compressors

Self diagnostic capability
Alarm and fault codes stored to enable problem diagnosis

Real time condition monitoring
Allows instant check of system performance

Magnetic bearings
No need for lubrication or maintenance and no energy lost to friction

Variable speed control
Duty constantly matched by the machine meaning optimum efficiency

No vibration
Means less stress for pipework and no need for antivibration measures

Flexible control
Local/remote control capability and serial interface available

Consistent airflow
No pulsation allows finer air bubbles for more efficient aeration

Oil-free air
No oil in the machine ensures oil-free air

Quiet operation
High efficiency acoustic enclosure in-built, no need for additional soundproofing

Protected
In-built generator back-up in case of power failure

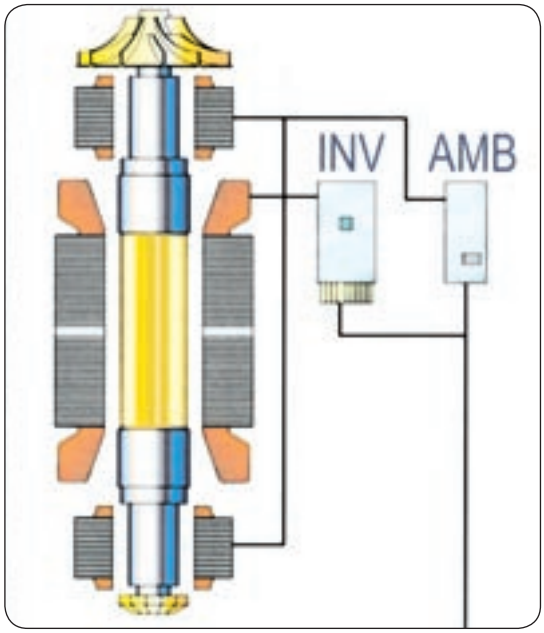
Minimal maintenance
the only scheduled task to change the air filters

Possibility to use internal PI controller

Integral design
Compressor, motor, frequency converter and control panel all built-in

Local or remote control monitoring

Operation of the ABS High Speed Turbocompressor is simplicity itself, with full control of flow and pressure, accessible both locally and remotely, while the real-time condition monitoring will confirm that these machines require virtually no maintenance.



No friction, No wear

The advanced technology employed in the magnetic bearing units keeps the moving surfaces just 1.5 mm apart and ensures there is no contact at any time whilst running at speeds of up to up to 50.000 rpm. Because the surfaces never touch there is no friction, no wear and no need for lubrication. Optimum efficiency is maintained at all times

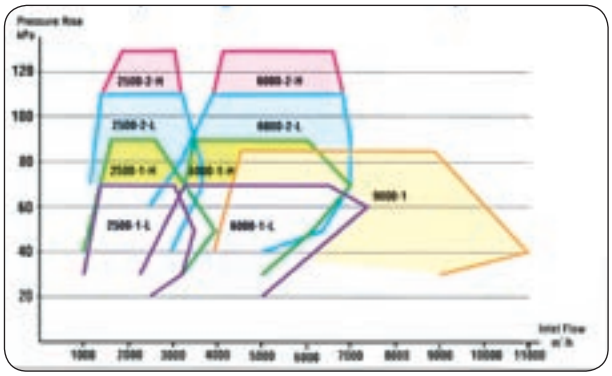
Minimal maintenance

The complete control system of the ABS High Speed Turbocompressor is electronic and with only one moving part in the whole machine, which is contact-free, the only maintenance task is to periodically change the air filters.

Configurable to your changing requirements

The compressors of the High Speed Turbocompressor can be can be flexibly configured in groups to suit your aeration requirement. The group controller optimizes compressor operation to match the desired output and controls the group just as you would control a single unit. This optimizes the operation of the whole group in terms of output and energy consumption. You can even configure High Speed Turbocompressor units to operate in parallel with conventional compressors and blowers.

Output Range of High Speed Turbocompressor



THE ABS HIGH SPEED TURBOCOMPRESSOR

technical data

Output

Unit flow _____ 1,000 m³/h – 11,000 m³/h
Tank depth _____ from 3 – 12 metres

Noise level

65 – 79 dB

Module system – configuration

Up to 16 units connected in parallel

Dimensions

Height _____ 1910 mm – 2220 mm
Width _____ 1200 mm – 1600 mm
Depth _____ 1470 mm – 2045 mm
Weight _____ 770 kg – 1800 kg

Main connections

Power supply _____ 400V / 50/60 Hz
Power supply _____ 500V / 50/60 Hz
Power supply _____ 690V / 50/60 Hz

Control connections

Analogue inputs _____ 4-20 mA
Binary inputs _____ 24 Vdc
Analogue output _____ 4-20 mA
Binary outputs _____ 48 V ac/dc
Profibus _____ Optional
Modbus _____ Optional

Piping connections

Air inlet _____ DN 200/250/350
Air outlet _____ DN 125/200/250

All machines bear the European Standard's C.E. mark
and are in conformity with the provisions of:
EU Machinery Directive 98/37/EC
EU Low-Voltage Directive 73/23/EEC and as amended by 93/68/EEC and EN 60439-1:2000
EU Electromagnetic Compatibility Directive 89/336/EEC and as amended by 92/31/EEC and by 93/68/EEC and has been designed and manufactured in accordance with the EN61800-3 standard. (EMC product standard for adjustable speed electrical power drive system).
Performance test according to ISO 5389.

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| ABS Group | Tel. +46 40 35 04 70 | Fax +46 40 30 50 45 | info@absgroup.com | www.absgroup.com |