# SmarTurbo | Turbo Compressor



Qingdao SmarTurbo Blower Co., Ltd www.SmarTurbo.com.cn



#### **About SmarTurbo**

SmarTurbo is a group company focused on R&D, manufacturing and sales of high speed turbo blower, turbo compressor and turbo blower aerator. We have built the most comprehensive research and development system of high speed permanent-magnet synchronous motor, air bearing and magnetic bearing and aerodynamics for mass-production of turbo blower, turbo compressor and turbo blower aerator.

SmarTurbo has mastered high speed motor manufacturing technology of integrated rotor magnetization and detection, magnet assembly and high speed dynamic balance. We own world-leading automation equipment for coil wiring, coil expanding and insulation wrapping. We are equipped with CNC boring and milling machining center, 5-axis machining center and CNC grinding machine.

SmarTurbo has professional air bearing and magnetic bearing design and production team. Air bearing and magnetic bearing designed for complex operating conditions of high speed, extreme temperature, large loading, strong vibration and special lubricating medium is achieved in our own laboratory. Air bearing and magnetic bearing performance of load capacity, rigidity and damping coefficients can be precisely predicted by the self-developed simulation software.

SmarTurbo has followed standard product testing process for each set of oil-free high speed centrifugal turbo blower, turbo compressor and turbo blower aerator, which includes aerodynamic performance test, vibration test, temperature rise test, noise test and so on.

SmarTurbo has the most comprehensive environmental laboratories, including noise laboratory, shock & vibration laboratory, high & low temperature laboratory, salt spray laboratory, etc. our laboratories meet the environmental test requirements of turbo blower, turbo compressor and turbo blower aerator, which further verify the product performance and ensure manufacture quality in a multi-layer way.

Adhering to the strategic goal of "Leading Turbo Blower Development and Saving Your Electricity Bill", SmarTurbo will keep investing in turbo blower, turbo compressor and turbo blower aerator to better service our partner.

## $\rightarrow$

### **SmarTurbo Factory**



# $\Rightarrow$

#### **SmarTurbo R&D Center**



Laboratory



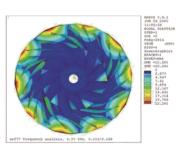
three-coordinates measuring



material analysis



3D Contour Measuring



three-dimensional flow design



high temperature measuring

#### SmarTurbo Test Center



dynamic balancing bench



bearing test bench



rotor test bench



durability test bench



dynamic test bench



vibration test bench



#### **SmarTurbo Production Line**













## $\rightarrow$

# **SmarTurbo Assembly**















### **SmarTurbo Test-Run**

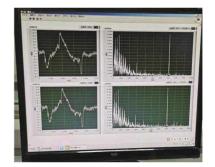














#### **SmarTurbo Core Technology**

Turbo compressor is high speed centrifugal compressor, which is specially designed and developed for sewage treatment and waste water treatment, shrimp farming and fish farming in aquaculture industry, air knife blower system and drying system, cement industry, etc



High Speed Impeller

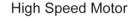


Touch Screen Control Panel



Turbo Compressor Engine







Air Bearing



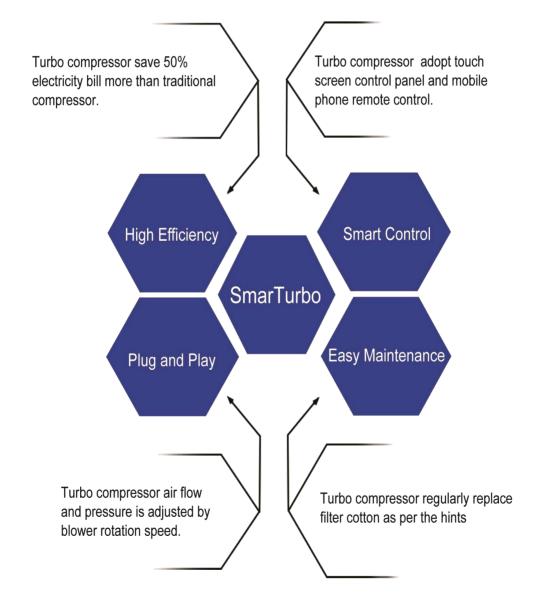
Mobile Phone Remote Control



High Speed VFD



### SmarTurbo Advantage



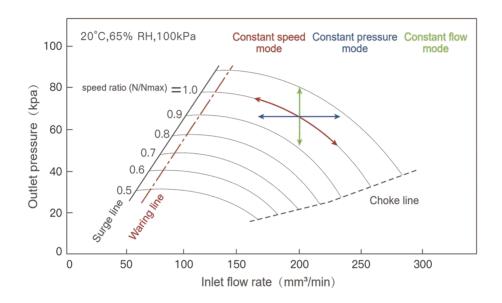


### SmarTurbo Parameter Table

| Model                     | 100HP                                  | 125HP | 150HP | 200HP | 250HP | 300HP | 400HP |
|---------------------------|--|-------|-------|-------|-------|-------|-------|
| Discharge Pressure<br>kpa | Air Flow(m³/min),20℃,Humidity60%, 1atm |       |       |       |       |       |       |
| 150                       | 32                                     | 48    | 60    | 69    | 81    | 121   | 1     |
| 200                       | 25                                     | 1     | 37    | 65    | 71    | 75    | 100   |
| 300                       | 1                                      | 1     | 1     | 1     | 1     | 105   | /     |
| 350                       | 20                                     | 1     | 1     | 37    | 1     | 1     | 1     |
| 400                       | 1                                      | /     | 1     | 36    | 1     | 55    | 1     |
| 500                       | 1                                      | 1     | 1     | 1     | 1     | 46    | 58    |



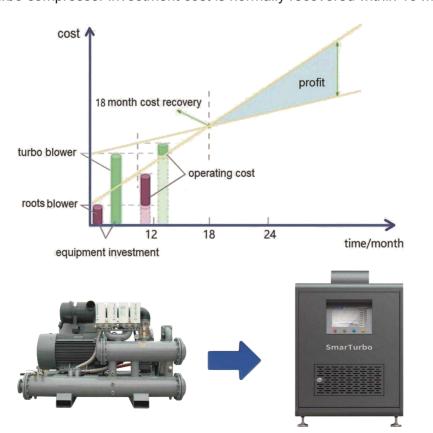
#### **SmarTurbo Operation Mode**



# $\rightarrow$

#### **Return on Investment**

Turbo compressor investment cost is normally recovered within 18 month.



#### **SmarTurbo Application Field**



Sewage Treatment Industry



Leather Manufacturing Industry



Petrochemical Industry



Pulp and Paper Industry



Thermoelectric Industry



Metallurgy Industry



Pharmaceutical Industry



Coal Chemical Industry



Textile Industry



Printing and Dyeing Industry



Food Industry



Cement Industry

# SmarTurbo Site Application













# SmarTurbo | Turbo Compressor

#### Qingdao SmarTurbo Blower Co., Ltd

Add: No.669, RongHe Road, Huangdao District, Qingdao City, Shandong, China.

M: +8615621046960 (whatsapp/wechat)

Email: info@smarturbo.com.cn

Website: www.SmarTurbo.com.cn