

SěAH TURBO BLOWER

Eco-friendly, High Efficiency Turbo Blower



SěAH Engineering

Being a industry leader, High efficiency turbo blower for green future

The best turbo technology achieved by long-term, constant research and development realizes turbo blower corresponding to the needs of low-energy green future.

History since 1987

- 1987 Founded
- 1994 First turbo compressor development and manufacture in South Korea
- 2002 Started air bearing turbo blower business
- 2009 First MVR compressor manufacture in South Korea
- 2015 First acquired explosion-proof turbo blower certificate in the world

Certificates



ISO9001



ISO14001



Patent



Patent



CE



High Efficiency System



Explosion-Proof



Explosion-Proof



PROVEN TECHNOLOGY IN A LEADING DESIGN

The most cost effective technology for driving down your energy

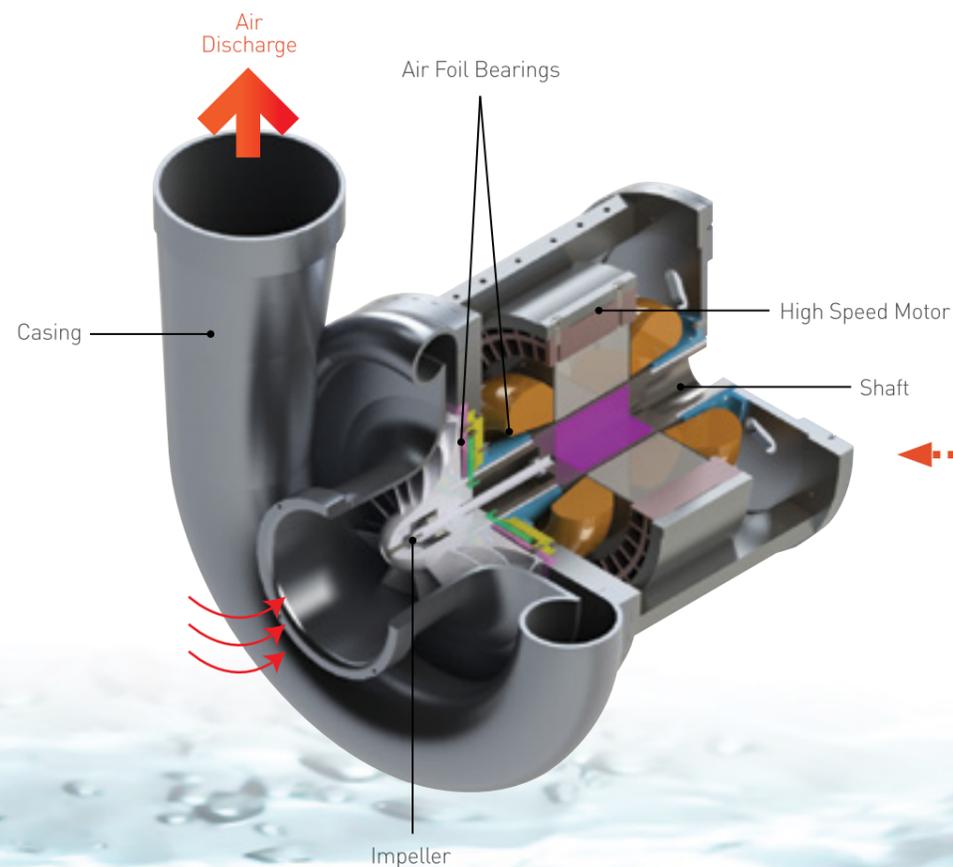
- Optimally integrated core technologies for air foil bearings, motors, impellers, etc. provide stability and reliability for operation.
- Optimized motor speed control technology using a variable frequency drive(VFD) makes it possible to maximize productivity with minimal energy consumption.

Providing all-in-one packages of what you want

- The turbo blower realizes single unit package integrating all functions such as programmable logic controller(PLC), variable frequency drive(VFD), etc.
- The state-of-the-art design ensures energy and time saving effects without auxiliaries.

Keeping working environment with your peace of mind

- 100% Oil-less system makes turbo blower free from the productivity losses and maintenance expenses due to oil permeation.
- Provides comfortable operation with low package vibration and noise less than 80 dB(A), not requiring additional foundation work.

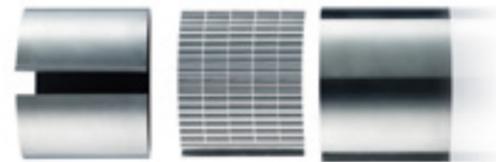


THE FULL FEATURE OF THE TURBO BLOWER



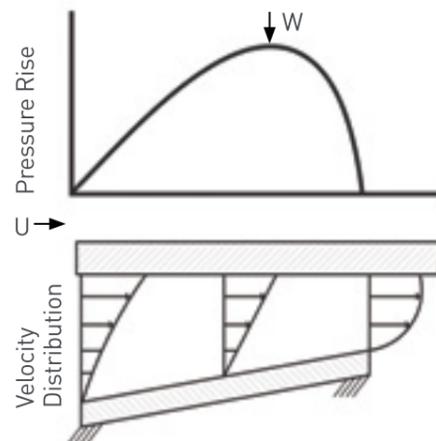
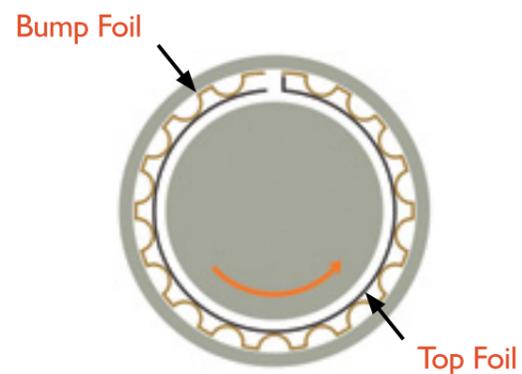
THE PERFECT HARMONY IN EVERY TECHNOLOGY DETAIL

High efficiency and eco-friendly turbo blowers by perfect combination between stability and efficiency.



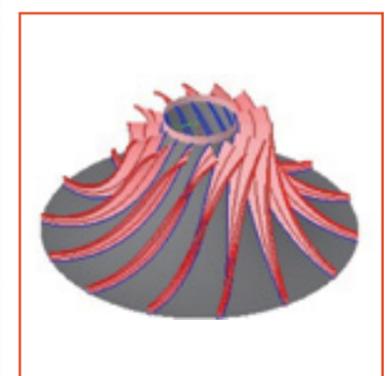
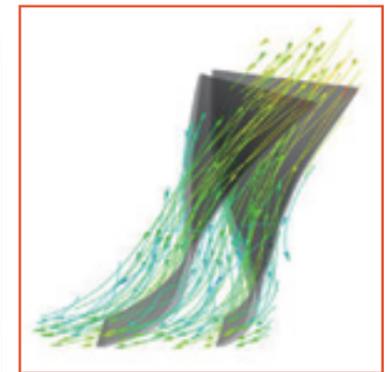
UNIQUE AIR FOIL BEARINGS

- Adoption of hydrodynamic design to use air film between shaft and bearings made by high speed rotors
- Non-contact bearings without friction with shafts during rotation maximizes energy efficiency
- 100% Oil-less & air lubricated system



HIGH EFFICIENT MILLED IMPELLER

- Backward leaning type impellers allow for high efficiency
- Optimized assembly technology increases efficiency and turndown range
- 5-Axis CNC machining provides greatly precise design shape and superb durability



THE PERFECT HARMONY IN EVERY TECHNOLOGY DETAIL

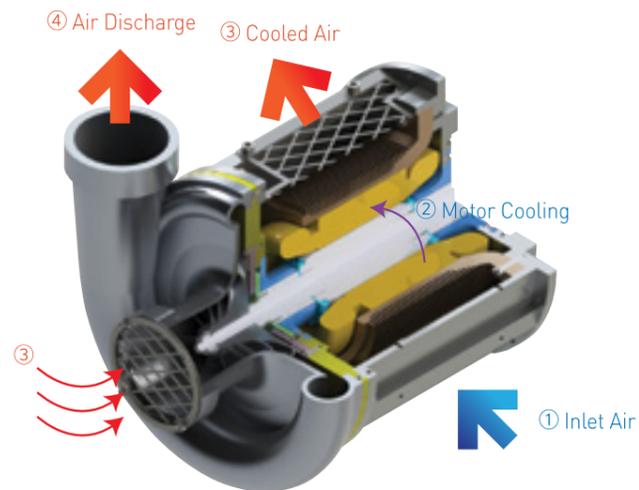
HIGHEST DURABILITY, HIGH SPEED MOTOR

- Patented self-cooling system provides high efficiency over whole working range during high speed rotation (Pat. No. : 10-0481600)
- Featuring a simple design, it also provides excellent durability in extreme conditions
- Supplied with high speed induction or permanent magnet synchronous motors



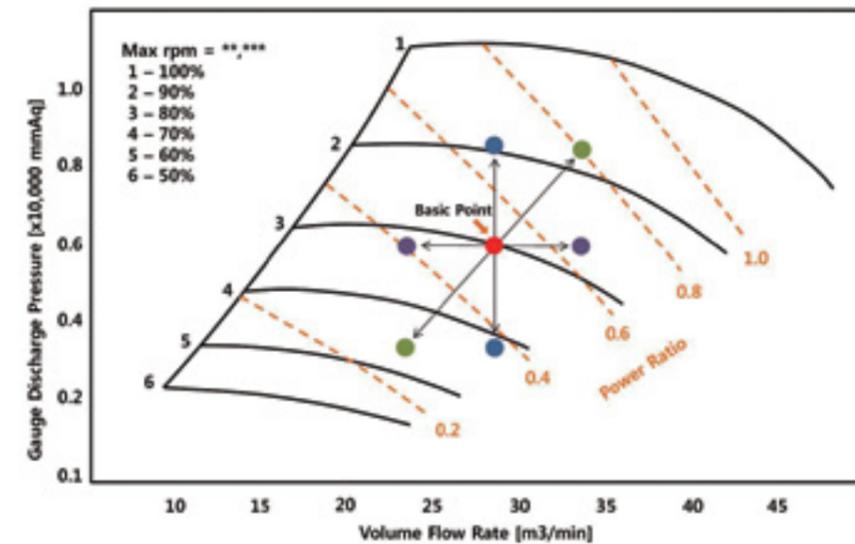
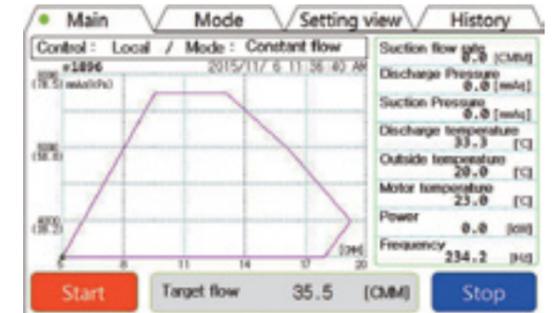
SIMPLE AND POWERFUL COOLING SYSTEM

- Simple and high efficiency cooling system without auxiliaries (air / liquid cooling type)
- Self-cooling system by inlet air for motor and electrical parts



ADVANCED CONTROL AND MONITORING

- User-friendly interface with graphical display
- Realization of Plug & Play solution enables quick installation with minimum preparation
- Programmable Logic Controller(PLC) provides more versatile and flexible operation against environmental changes
- Built-in various control modes and communications protocol



OPERATION MODE

- Constant Speed
- Constant Flow Rate
- Proportion
- Dissolved Oxygen
- Constant Power

MAXIMIZE YOUR BENEFITS

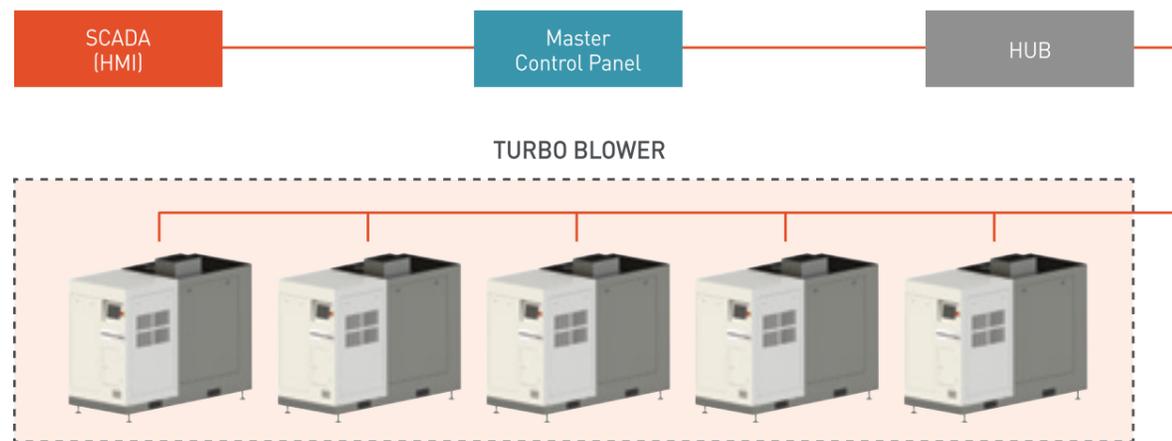
- Realization of low-noise system less than 80dB(A) with enclosure enables installation in residential area
- Cost reduction by space saving and easy installation
- 100% Oil-less system provides comfortable operation



FIND OUT HOW MUCH YOU CAN SAVE

PROVIDING TOTAL MANAGEMENT SOLUTION

- Realization of optimized operation solution by flexible controls.
- Computerized intelligent group control and monitoring system provide stability for operation.



EASY MAINTENANCE WITH REASONABLE COST

- Easy replacement process of components maximizes customer's convenience.
- Simple and easy maintenance process provides high efficiency operation by reducing maintenance expenses and hours.

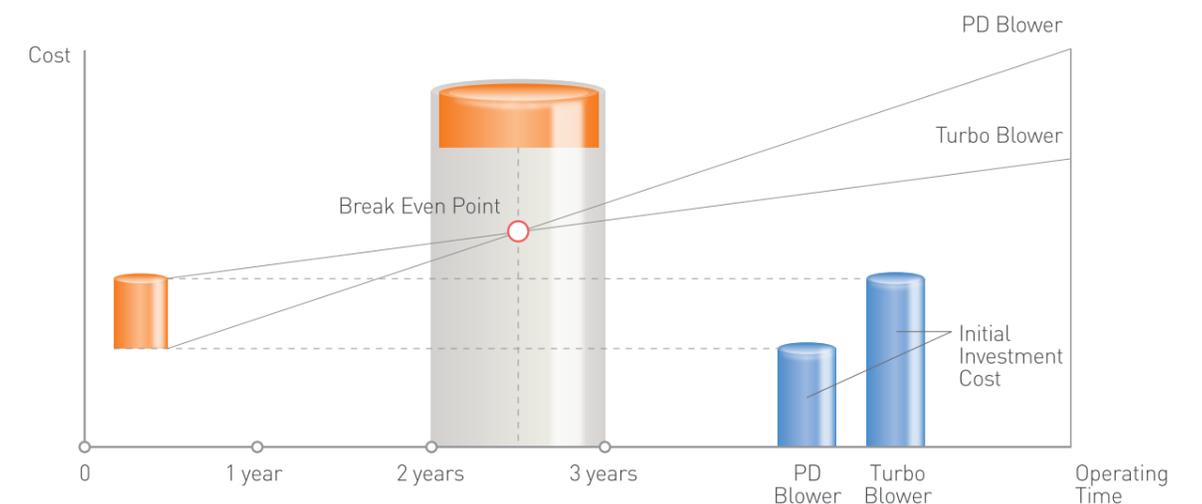
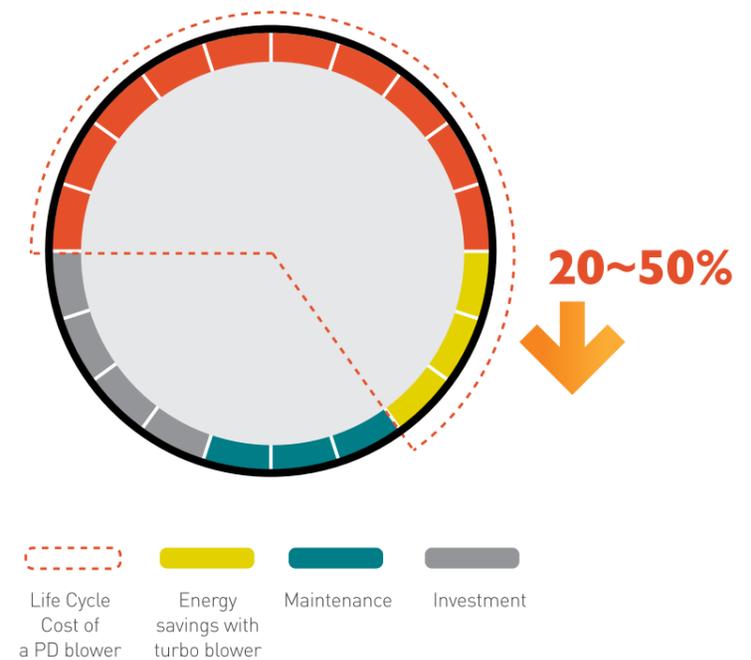


※Only applicable to high capacity models

ENERGY SAVINGS OF UP TO 20~50%

A turbo blower ensures customer's profit by greatly reducing operation costs compared to conventional blowers. These excellent energy saving technologies enable investment recovery within two or three years.

- Adoption of VFD
- Adjusting motor speeds precisely according to air demand
- Maximum 20~50% savings on energy costs for operation
- Focused on energy cost reduction and maximization of customer's profits

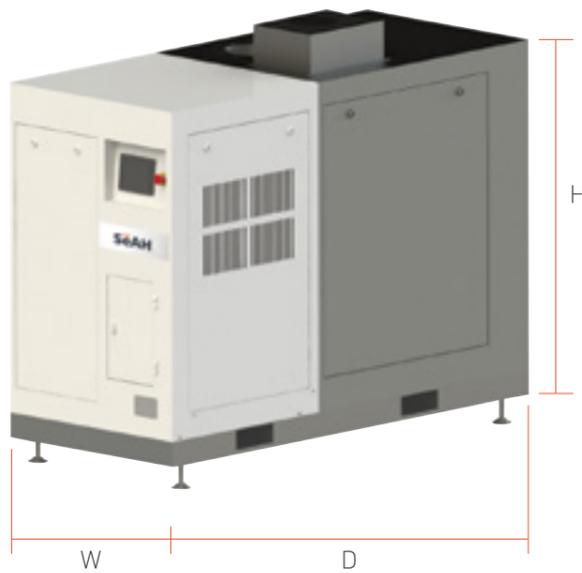


Economical effects compared to PD Blower

TECHNICAL DATA

APPLICATION

Front View



Rear View

※Optional Types



Standard Type



Duct(Flange) Type

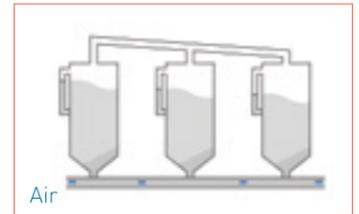
WATER AND WASTEWATER TREATMENT

- Supplies compressed air to water treatment facilities for wastewater treatment microorganism cultivation
- Increases the active oxygen with lower discharge temperature and maximizes productivity



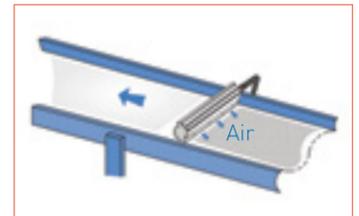
PNEUMATIC CONVEYING

- Conveys powder materials such as cement, pellet, etc. by feeding compressed air to transfer line
- Use a induction type motor in poor environment with impurities (Iron content)



OTHERS

- Utilized for various purposes such as dry, dehumidification, burner, desulfurization, etc. in industrial sites
- Increase in productivity by drying products using compressed air without heating equipment



MODEL SELECTION TABLE

MODEL	NGT5	NGT10	NGT20	NGT30	NGT50	NGT75	NGT100
Suction Flow (m ³ /min)	3.5~4.6	6.5~8	12~19	18~26	16~44	22~62	28~71
Dis. Pressure (kgf/cm ² G)	0.3~0.6		0.3~0.8		0.3~1.5		
Dimension	W (mm)	600	750	750	850		
	D (mm)	1000	1580	1650	2000		
	H (mm)	900	1150	1150	1370		

MODEL	NGT125	NGT150	NGT200	NGT250	NGT300	NGT400	NGT500
Suction Flow (m ³ /min)	46~98	63~120	86~162	90~193	130~255	172~324	186~376
Dis. Pressure (kgf/cm ² G)	0.3~1.0					0.3~1.2	
Dimension	W (mm)	950	950	950	1300	1600	1600
	D (mm)	2250	1950	2050	2000	2100	2310
	H (mm)	1500	1550	1550	1755	1810	1810

※Operation Conditions : 20°C, 1.033kgf/cm², 65%RH

※Tolerance : ± 5%

※As the above data may be revised and regarding special specifications, consult manufacturer.



EXPLOSION-PROOF BLOWER

High-efficiency explosion-proof turbo blowers for industrial applications



FEATURES

- 100% Oil Less with air foil bearings
- High efficiency Induction Motor, H Class Insulation
- Realizes high reliability and optimal performance
- Outdoor installation
- Explosion-Proof Class : Ex e IIC T3 Gb
- IP Rating: IP54

APPLICATIONS

- Pneumatic conveying of raw materials in chemical plants which oil, gas and liquid hydrogen are handled
- Chemical fiber, Semiconductor and cement industry
- For industrial processes such as dry, vacuum

Applications		NGT50-EX	NGT75-EX	NGT100-EX	NGT150-EX
Suction Flow Rate(m ³ /min)		20	30	41	59
Discharge Pressure(kgf/cm ² G)		3,000 ~ 10,000			
Dimension (WxLxH-mm)	Blower	850x1650x1150	900x1950x1350	900x1950x1350	1000x1950x1505
	Control Panel	1000 x 950 x 1720 (Non-hazardous area)			

※ For the control panel in hazardous area, consult manufacturer.

HIGH PRESSURE BLOWER

100% Oil-less high pressure blower with air foil bearings

- No lubricant, eco-friendly 100% Oil-Less air foil bearing technology
- Provides optimum pure air and maximize energy savings
- Minimize loss and maintenance cost compared to the conventional equipment such as screw compressor
- Built-in PLC and touch screen, User-friendly interface for control and monitoring
- Low noise and vibration, Simple maintenance
- Application : Chemical textile plant, Semiconductor industry, LCD/Glass industry, Power plant



Applications	NGP 150	NGP 200	NGP 300
Suction Flow Rate(m ³ /min)	35	45	68
Discharge Pressure(kgf/cm ² G)	1.5 / 2.0 / 2.5 / 3.0		



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