

A close-up, high-contrast photograph of a turbocharger turbine wheel. The wheel is dark, possibly black or dark blue, with a central hub and several curved blades radiating outwards. The lighting creates strong highlights and shadows, emphasizing the metallic texture and the precision engineering of the component.

**DISCOVERING NEW FRONTIER WITH
TURBO BLOWER INNOVATIONS**

QT series Turbo blower

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QT series

Do you want to?

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QT series vs. **TB series**

QT series Turbo bower

QT series Turbo blower is economy type small turbo blower up to 50hp retaining the benefits of power savings, low noise and no vibration compared to conventional PD(Roots) blower.

High efficiency
No oil system
Low noise
No vibration



competitive
price

Turbo
blower



**QT
blower**

PD(Roots)
blower

Do you want to?

Pay less
maintenance
fee

Monitor your
blower in
office

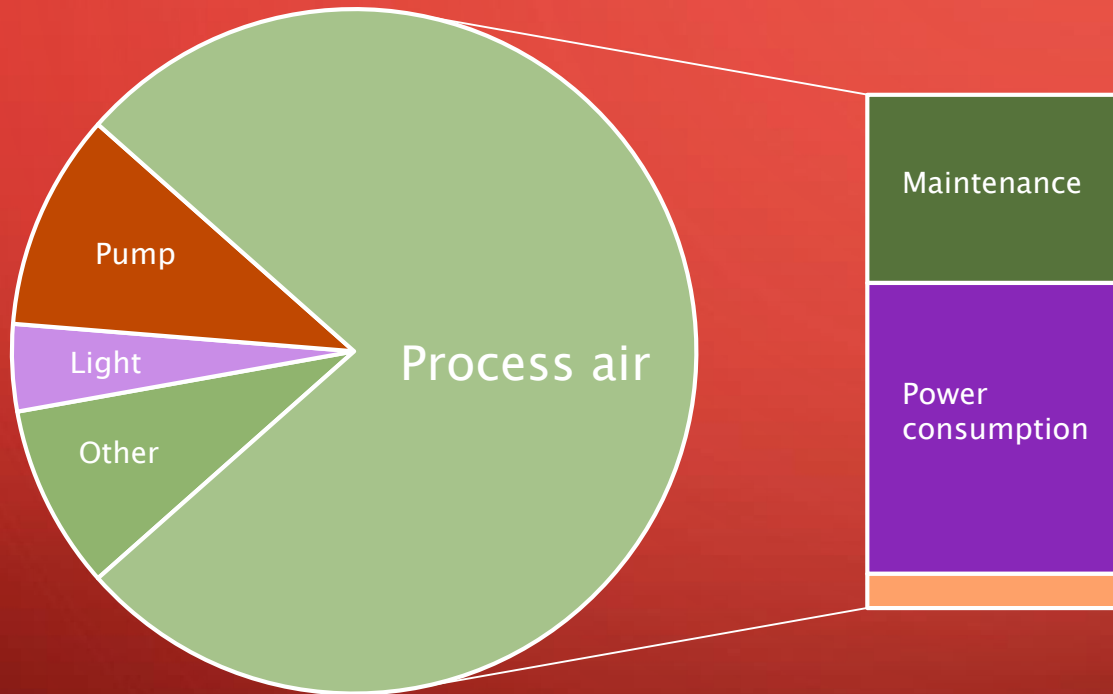
Pay less
electricity
fee

Buy turbo
blower at
roots blower's
price

QT
series
Turbo blower

Why QT series Turbo bower?

WWTP



In the wastewater treatment industry, process air is the biggest cost item and power consumption and maintenance cost the most.

Why QT series Turbo blower?



PD (Roots) blower

**SAVE
ENERGY!**





QT series Turbo blower

By replacing old PD blowers to **QT series** Turbo blowers can save up to **45%** of energy.

How is QT series better than PD blower?

Case Condition: Flow rate 35m³/min at 0.6bar

	Power consumption (kW)	Electricity cost (24hr*365days* USD0.1 /kW)	Maintenance cost (Year)	Lubricant	Noise	Vibration
	37	USD32,412	USD200	None	Very low (70dB)	None
	55	USD48,180	USD2,500	Grease	100dB or more	Severe

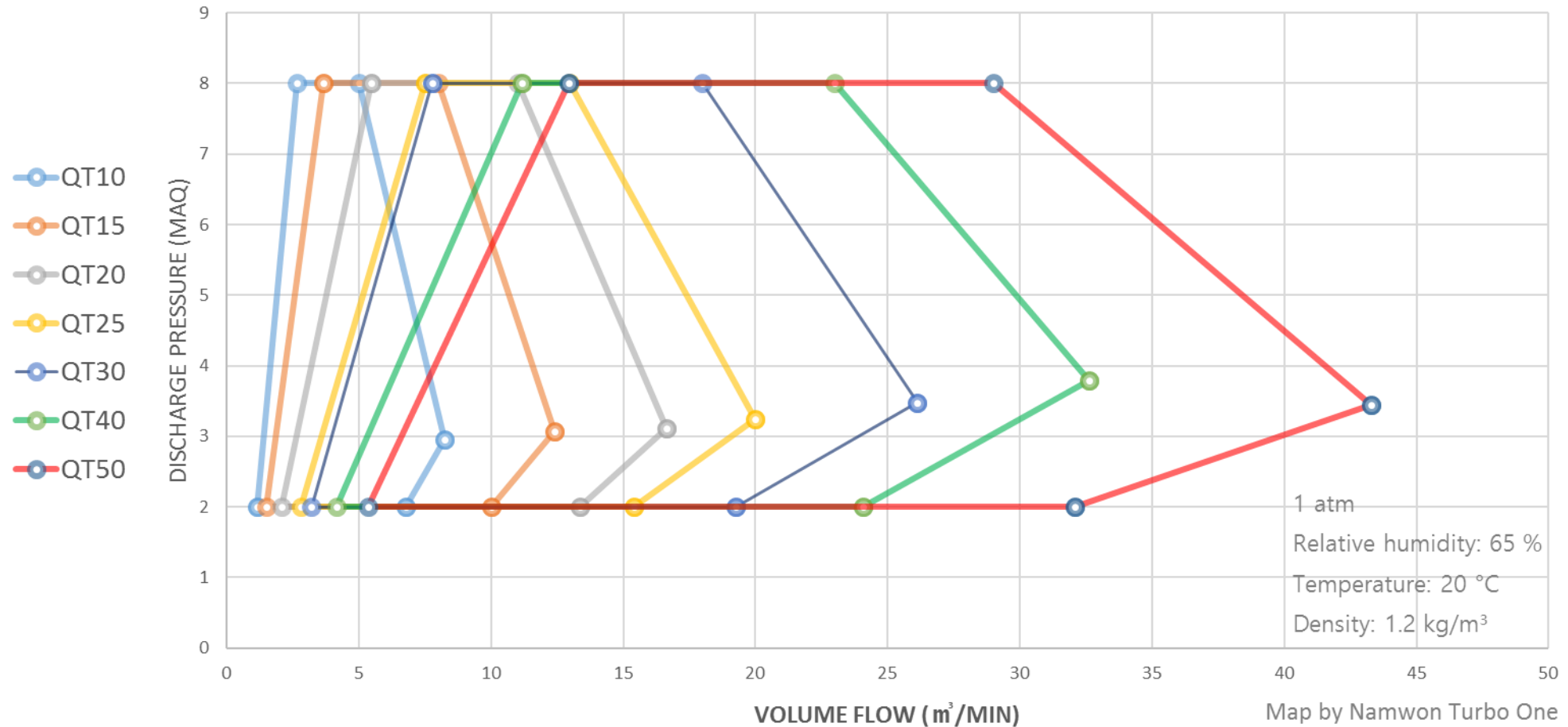
Save USD18,068/year
+ User friendly environment

Performance of QT series Turbo bower

Model	Flow rate range (m3/min)	Pressure range (bar)	Shaft power (HP)	Nose level (dB)
QT10	3~8	0.3~0.8	10	50
QT15	5~13	0.3~0.8	15	50
QT20	6~15	0.3~0.8	20	55
QT25	6~17	0.3~0.8	25	55
QT30	7~25	0.3~0.8	30	55
QT40	8~30	0.3~0.8	40	60
QT50	10~42	0.3~0.8	50	60

Curves of QT series Turbo bower

Performance Curve QT series



Standard scope of supply of QT series

No	Items
①	High efficient high speed Permanent Magnet motor
②	Air foil bearing
③	VFD(Inverter)
④	Micom
⑤	Blow-off valve
⑥	HMI
⑦	Pressure and Temp. sensors



Technical spec. of QT series Turbo bower-1

OVERALL CHARACTERISTICS	
Type of Blower	Turbo Blower / Direct Drive Centrifugal type
Stage	1 stage
Materials	
Casing	Aluminum Alloy
Impellers	A7075-T6
Casing Seal – Air	Labyrinth Seal
Shaft	Titanium Alloy
Bearing Type	Hydro dynamic Air Foil
Bearing Lubrication	Air (None oil)
VFD	
Manufacturer	Namwon Turbo One Inc.
Voltage & Frequency	380 ~ 480V, 50/60Hz
Phase	3 Phase
Power Factor	0.95
Cooling Designation	Air-Cooled
Efficiency	95%
Method of Starting	Soft Start

Technical spec. of QT series Turbo bower-2



Motor	
Manufacturer	Namwon Turbo One Inc.
Drive Type	PM (Permanent Magnet) driven by Inverter
Voltage & Frequency	Variable Voltage & Frequency (from VFD)
Phase	3 Phase
Starting Current	within 10% of rated value
Cooling Designation	Air-Cooled
Efficiency @ Design Point	97%
Insulation Class	H
Motor Winding Protection	YES (Thermal Switch)
CONTROL / INSTRUMENTATION	
Type of Controller	MICOM
Network to SCADA, MCP	MODBUS RTU and ETHERNET
Input	Analog : 4~20 mA / digital : Dry contact
output	Analog : 4~20 mA / digital : Relay (2A)
Temperature sensors (intake/discharge/motor)	Three RTD
Differential pressure sensor	Senor type
Pressure transmitter	Senor type
HMI (Human-Machine Interface)	7 inch Touch Panel

QT series vs. TB series

Item	TB series	QT series
Motor	PMS	PMS
Inverter	Namwon Turbo One	Namwon Turbo One
Controller	PLC(programmable logic controller)	Mi-Com
Control mode	Constant Power Mode	Constant Power Mode
	Constant Speed Mode	Constant Speed Mode
	Constant Pressure Mode	N/A
	Proportional Mode	N/A
	DO Link Mode	N/A
Communication	Hard Wiring	Hard Wiring
	Modbus RTU, Ethernet, Profinet(Optional)	Modbus RTU, Ethernet
Flow Measurement	Bell-mouth Type Flowmeter	Bell-mouth Type Flowmeter
Sensors	Temperature : Motor(1), Suction(1), Discharge(1)	Temperature : Motor(1), Suction(1), Discharge(1)
	Pressure : Suction(3), Discharge(1)	Pressure : Suction(3), Discharge(1)



THANK YOU!

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