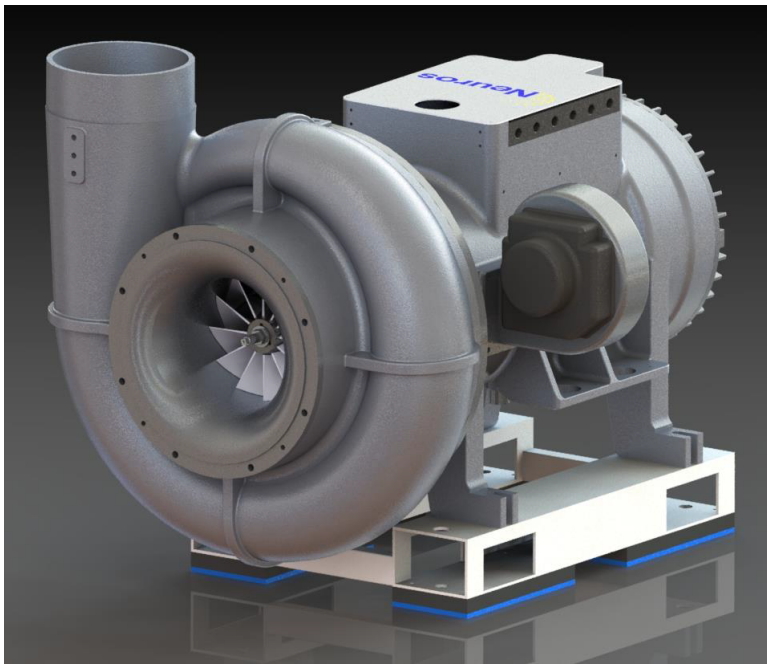
APGN500 SERIES TURBO BLOWER

FACT SHEET

1. up to 40% more energy efficient*
2. excellent reliability with SKF magnetic bearing
3. wide turndown ratio
4. remarkable reduction in energy/ maintenance/installation costs
5. low noise and vibration
6. “plug & play” turbo blower low cost easy installation
7. user-friendly control system
8. minimal maintenance and downtime



UP TO	OVER	UP TO	BELOW
40%	50%	80%	80 dBA
Energy Savings	Smaller Footprint	Turndown	Low Noise

* than other blower technologies

APGN500 SERIES TURBO BLOWER - Performance Data

Overview

Series	APGN
Blower Installation Location	Indoor/outdoor (canopy)
Working Fluid	Air
Number of stages	Single stage

Operating Conditions

Performance Testing	ASME PTC 10
	ASME PTC 13
	ISO 5389

Turbo Blower Design Specifications

Design pressure range	5 - 15 psig
Design suction flow rate	4000 - 13000 SCFM
Operating speed range	12,900 - 21,000 RPM
Motor rating (horsepower)	470 - 940 HP
Casing design pressure	284 psig
Casing design temperature	302 °F

Technical Specifications

Bearing	**Active Magnetic Bearing**
Motor	**Permanent Magnet Synchronous Motor**
Winding Insulation class	Class F
Winding temperature rise	Class B
Coupling	Direct coupling
Motor starter	Variable Frequency Drive
Harmonic filter	Outside or integrated inside the blower enclosure
Power supply	380 - 500V, 3 phase, 50/60 Hz *
Inlet configuration	Louver/flange
Discharge configuration	Vertical/cone extension from KS to ANSI
Noise	< 80 dBA
Motor/VFD cooling	Water/air cooling - fully enclosed
Product design life	30 years

* Medium voltage is available upon request

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Controls and Monitoring

Control panel	**PLC based (Allen Bradley, Siemens, Modicon, GE, Mitsubishi)**
Control method	**Flow/speed/pressure/dissolved oxygen**
Integrated pressure sensors	Ambient, discharge, filter pressure drop
Integrated temperature sensors	Suction, discharge, motor, bearing
Vibration monitoring	Active Magnetic Bearing

Material of Construction

Blower casing	Aluminum Alloy
Impeller	Forged aluminum alloy (AL7075)
Active Magnetic Bearing	Mix of copper, Silicon Steel Lamination
Shaft	STS Steel
Blow-off valve	Carbon steel electro pneumatic
Blower enclosure	Powder coated steel with sound dampening material
Blower enclosure skid	Structural steel construction with fork lift access ports
Electrical components coating	IEC 60721-3-3 class 3C3 Conformal Coating

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