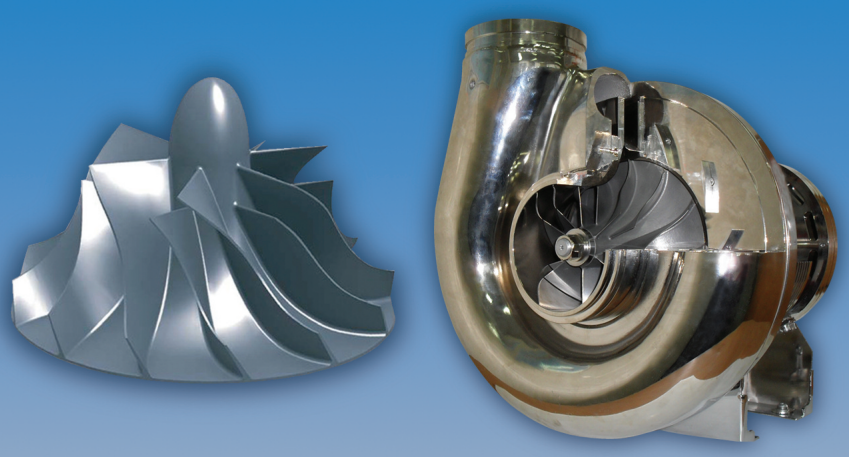
AERZEN

One step ahead.

Aerzen AT Turbo

Packages

Energy-efficient
Compact
Quiet



Aerzen AT Turbo Blowers

Aerzen AT Turbo blowers are single stage high-speed turbo blowers designed for lowest energy usage over a wide range of varying air flows and pressures. This modern frequency-controlled, gearless driven machine, along with lubricant-free aerodynamic bearings, guarantees an economical, reliable and maintenance-free compressor operation.

The high energy efficiency and the superior rise-to-surge characteristics of the AT Blowers result from the optimal integration of its core components: the permanent magnet motor, the Aerzen Turbo Inverter, the impeller design and the inherent control system. At the top of its class in energy efficiency, with rotating speeds of up to 60,000 RPM and drive power to 400HP, these industrial machines perform reliably in such applications as wastewater aeration systems, pneumatic conveying, and flue gas desulphurization.

High-frequency Permanent Magnet Motor

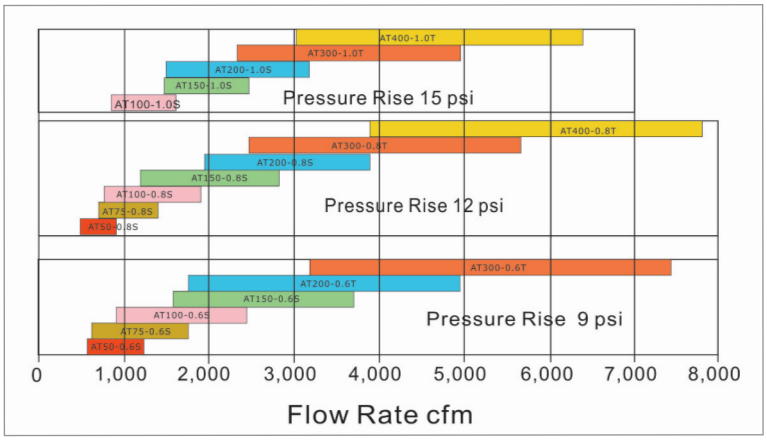
The motor is specifically designed for high frequency applications; it steadily maintains its high efficiency over a wide range of operating speeds and loads. The motor is entirely air-cooled. The motor is maintenance free. Its integration with the Aerzen Turbo proprietary high frequency inverter helps reduce heat generation and the system's high speed response provides for a wider operating range with a high rise-to-surge. To maintain the high overall efficiency, the cooling air management aims at separating the cooling air from the processed air streams, therefore avoiding pre-heating the compressor inlet air.

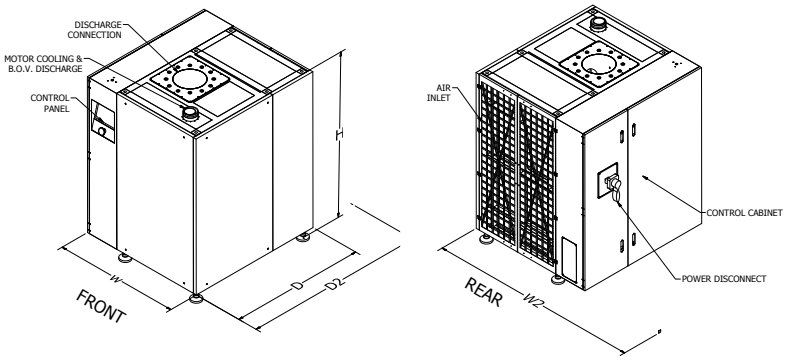
High-frequency Turbo Inverter

The Aerzen Turbo Inverter is a high frequency inverter designed for highest efficiency in conjunction with the Aerzen permanent magnet motor. A DC choke and RFI filter are standard and integrated in the blower package. Other types of optional harmonic filters can be supplied for separate installation.

Impeller Design

The impeller is made of 17-4PH stainless steel (X5CrNiCuNb174 or 1.4542) sourced in the USA. Before being inspected, machined and dynamically balanced by Aerzen Turbo to ISO 1940 Q 1.0, the impeller has been produced in an expert high accuracy investment casting process. The high yield strength gives the design engineer the flexibility needed for optimizing the impeller for efficiency and very high safety factors.





	W = Width		D = Depth		H = Height		W2 = Width with Maintenance Access		D2 = Depth with Maintenance Access	
	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
AT 100	1150	45.28	1236	48.66	1530	60.24	1930	75.98	1657	65.24
AT 200	1423	56.02	1616	63.62	1900	74.80	2177	85.71	2175	85.63
AT 400	1616	63.62	1913	75.31	2210	87.01	2410	94.88	2575	101.38

Air-foil Bearings: Absolutely Oil-free Operation

The high frequency direct drive does not require any speed increasing gear. The bearings of the motor and impeller shaft are aerodynamic radial and thrust bearings. There is no oil in the machines and therefore no risk of oil leakage or disposal problems.

Easy Installation at Minimal Cost

The Aerzen Turbo AT Blower is a compact, factory tested, ready-to-install sound dampened unit. It is lightweight and designed to be easily moved to its final location by forklift truck. There is no need for any special foundation.

Minimum Maintenance

The entire adjustment and operating system is electronically controlled. Only the air filters need to be exchanged regularly. No oil or oil filters need to be changed.

Integrated Control System and Surge Protection

The control panel is mounted in a panel of the blower enclosure. It features a display with a water and dust-proof touch-screen interface (HMI) as well as pushbuttons for start, stop and emergency shutdown. Fastest surge protection, achieved with the Aerzen CPU-based control system, combined with the Turbo Inverter characteristic provides the Aerzen Turbo its unique high-rise-to-surge capability.

Accessories such as harmonic filter, discharge silencer, check valve, expansion joint can be provided.

AERZEN
One step ahead.

Aerzen USA
108 Independence Way
Coatesville, PA 19320
Phone: (610) 380-0244
Fax: (610) 380-0278
Service Hotline: (800) 444-1692
www.aerzenusa.com
E-mail: inquires@aerzenusa.com

Aerzen Canada
Phone: (450) 424-3966
www.aerzen.ca
E-mail: info@aerzen.ca

Aerzen Mexico
Phone: (728) 282-5508
E-mail: ventosa@aerzen.com.mx