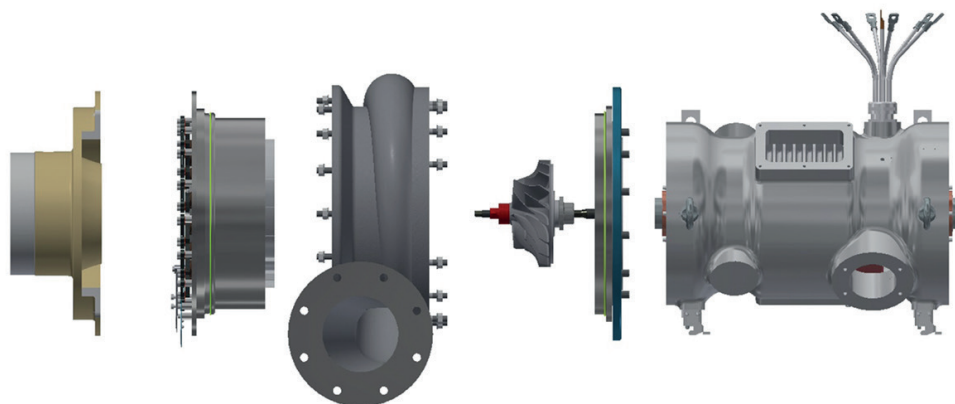


# EasyAir™ Turbo



Howden EasyAir Turbo, combining leading aerodynamic technology, magnetic bearings and permanent magnetic motor technology to deliver a reliable, compact, highly efficient, single stage blower for the waste water treatment industry.

## Performance

\* For 0.8 bar  $\Delta p$  \*\*Nm<sup>3</sup>/hr defined at 0°C, 0% RH

Machine Size	EasyAir Turbo 175	EasyAir Turbo 210
Max Capacity* [Nm <sup>3</sup> /hr]**	900 -4200	6,295
Max Pressure Rise [bar]	1.1	1.1
Max Operating Speed [rpm]	34,400	29,500
Rated Shaft Power [kW]	91	130
Maximum Grid Power [kW]	105	143
Power Supply [V]	3 x 380/400 VAC	3 x 380/400 VAC
Cooling Medium	Air	Air
Discharge Flange (ANSI CL.150)	DN200	DN200
Noise Level (DB)	85	85
Package Dimensions LxWxH [mm]	2151 x 1651 x 1753	2200 x 1850 x 2030

## Efficiency by Control

The high efficiency and wide volumetric turn down capability is achieved through a combination of **Variable Vane Diffuser** and **Variable Speed Drive** technology:

### Variable Vane Diffuser

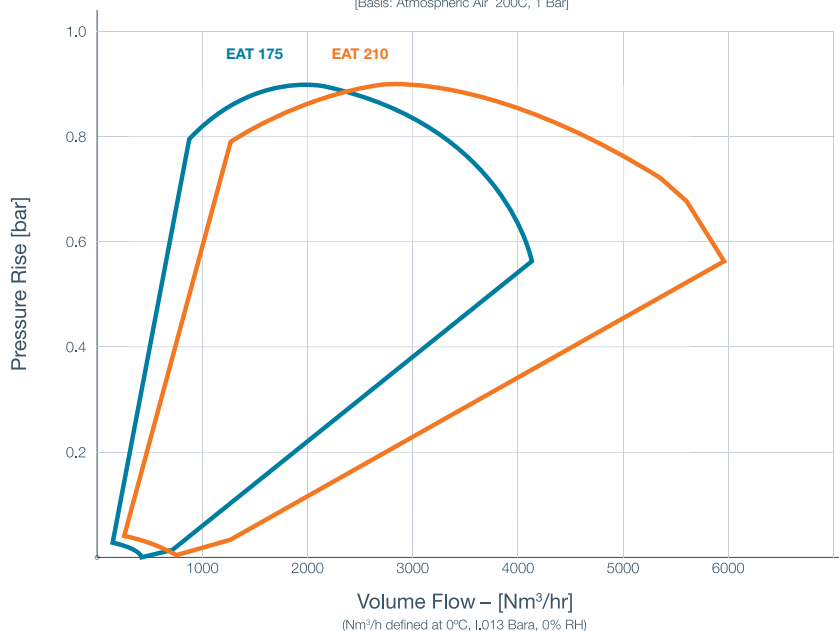
The Variable Vane Diffusers are located downstream of the impeller in the blower casing. The vanes optimise the machine performance envelope to keep efficiency at an maximum value for a wide range of ambient and operating conditions. By adjusting the diffuser vanes, compression ratios can be maintained at reduced flow rates without the risk of surge.

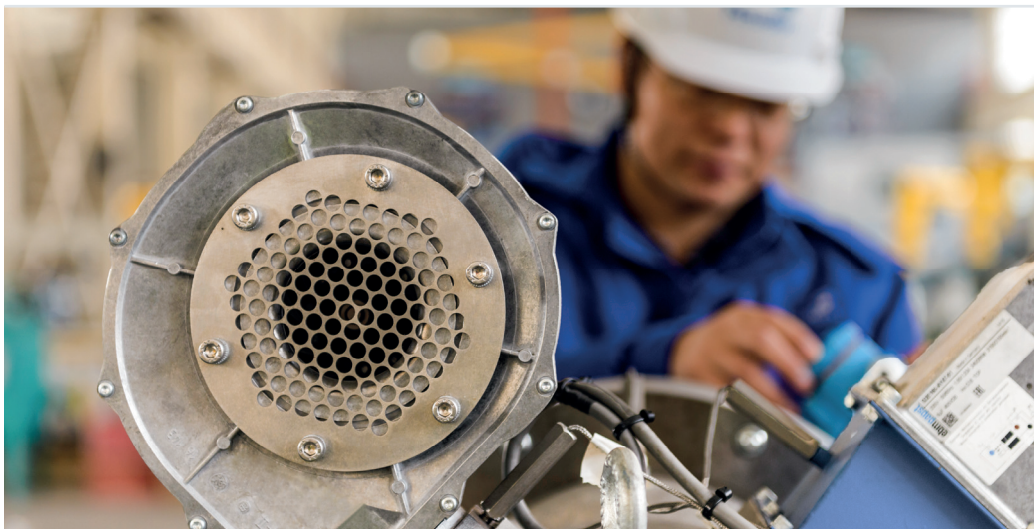
### Variable Speed Drive

The Variable Speed Drive combined with the Variable Vane Diffusers, provide the EasyAir Turbo with a greatly increased turndown range whilst maintaining high aerodynamic and electrical efficiency.

## Performance Envelope

[Basis: Atmospheric Air 200C, 1 Bar]





For information about other Howden air & gas handling products/services please contact:

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## Features and benefits

### EasyAir™ Maintenance

The EasyAir™ Turbo uses state-of-the-art Magnetic Bearing Technology eliminating the need for lubrication oils – resulting in ease of maintenance.

### EasyAir™ Installation

Simply place the enclosure in it's final location, connect the power supply, discharge pipework and you are ready to go.

### Aluminium Impeller

Fully machined from solid high grade aluminium forging, by multi axis digital machining centre.

Backward Curve Profile with High Rise to Surge.

### Integrated Package Solution

All components are fully integrated into a standardised enclosure creating a truly plug-and-play system, resulting in reduced package footprint and installation time.

Multiple blowers can be connected via the Modbus TCP (Ethernet) Connection to achieve high plant efficiency.

### Main Drive Motor

High Efficiency Permanent Magnet Motor with Active Magnetic Bearings providing friction and lubrication free operation.

## Highlights

100% Oil Free

High Rise to Surge giving high operational stability

Dual Point Control leading to highly efficient operation

High Turndown Range

Low TOTEX (Total Expenditure – Long term Operation and Capital costs)

Multi Blower Operation Available

Ethernet Connection to Plant DCS Available

Small Foot Print



## Key markets / Fields of application



### Wastewater Treatment

Municipal Sewage

Industrial Sewage



### Aftermarket

Howden offers Worldwide Service Support, which means the products are supported throughout their lifetime.