

Garden City High Temperature Fans

For the most demanding applications



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Over 100 years of experience in engineering, technical innovation and "designed to order" high temperature fans.

Howden offers over one hundred years of excellence in the design and engineering of high temperature fans with the Garden City brand of speciality fans.

These fans have set the standard by which other fans are measured in furnaces, kilns, ovens, and other demanding applications.

We offer a diverse selection of fans for operations up to 2000°F. For applications over 1400°F special enriched alloys such as Inconel[†], Monel[†], Incoloy[†], Hastelloy[†], and others are selected based on the customer's specifications and a variety

of computer based analytical techniques. Our engineering staff have many years of fan experience, as well as a thorough knowledge of materials and stress analysis to select the correct product for each application.

As a charter member of AMCA (Air Movement and Control Association) we have helped to establish many of the standards used throughout the industry today.

Quality through engineering

Our accredited AMCA Test Laboratory continually conducts performance tests, sound measurement, and stress analysis to meet our current needs, as well as developing future products.

Every Garden City high temperature fan supplied by Howden is thoroughly inspected and tested. This quality assurance is integral to our leadership in the industry. The Quality Assurance team works independently from our manufacturing group to ensure autonomy.

Non-destructive (NDE) test procedures such as magnetic, liquid dye penetrant, radiograph, and

ultrasonic testing are used to ensure the quality of the welds.

We can design a customised fan to meet your requirements. Our experienced design engineers will work with you to customise one of our fans to meet your exact requirements. Whether it be special orientations, unique material to withstand high temperatures or corrosive gas, custom construction for your size, or ducting requirements – Howden has a Garden City fan that can do the job.



We can do it

Our high temperature expertise can advise you on modifying your present equipment for new applications or temperatures, in addition we can design new equipment for your changing operation.

We have worked with many OEMs and research groups to design new equipment on the leading edge of energy research, oil refining, and other products and processes to meet the needs of the industry in the future.

[†] Registered trademark of Huntington Alloys

[‡] Registered trademark of Haynes International



Radial blade fans (RF2)

The most versatile centrifugal fan available, radial blade fans handle temperatures up to 2000°F. Rugged construction, adaptability to hostile atmospheres, and wide ranging capacity make this fan effective in a wide range of environments.

Processes: Air or gas recirculation, Incinerators, Glass furnaces, Exhausting, CCR

Technical data: Maximum volume: 105,000 CFM Maximum temperature: 2000 °F
Wheel diameters: 14" to 93 7/9" Plug units: Yes



Backward inclined fans (BF)

Backward inclined fans offer a full range of sizes for optimal fan selection to meet exact performance requirements. These non-overloading designed fans are suited for systems with fluctuating resistance. They are a popular choice for rugged, efficient service in a variety of industrial applications.

Processes: Recirculation, Exhausting, Drying/curing, Incinerators, Paint finishing/coil coaters

Technical data: Maximum volume: 182,000 CFM Maximum temperature: 1000 °F
Wheel diameters: 12" to 73" Plug units: Yes



Forward curved fans (FF2)

Forward curved fans offer a small package for high volume, high temperature applications. These fans operate at a slower speed, with less noise and relatively low stress – particularly good for high temperature uses. They are restricted to low dust environments because the curve blade tends to trap and retain dust and other particles.

Processes: Air recirculation, Homogenizing, Preheating, Annealing, Float furnaces

Technical data: Maximum volume: 459,195 CFM Maximum temperature: 2000 °F
Wheel diameters: 13.5" to 73" Plug units: Yes





For further information contact

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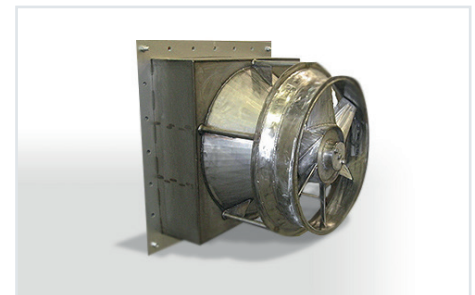
Email: haf.rfq@howden.com

Propeller Plug fans (PF2)

Propeller plug fan units feature six-bladed impellers, which can handle large volumes of gases at relatively low static pressures. These fans help eliminate costly ductwork in oven applications.

Processes: Air recirculation, Homogenizing, Preheating

Technical data: Maximum volume: 182,000 CFM Maximum static pressure: 4" WG
Maximum temperature: 2000 °F Wheel diameters: 24" to 72"
Plug units: Yes



Custom features ensure that your fan is perfect for you

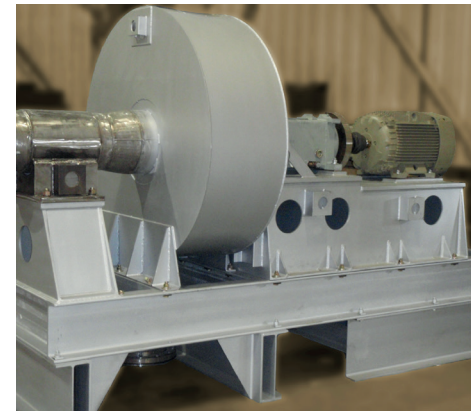
Howden can build the right fan for your needs. A diverse product line plus many optional features ensures that your fan is perfect for you. Garden City fans are the perfect choice when the temperature is high.

- Insulated or uninsulated housing
- Scroll or diffuser type housing
- Air or water cooled shaft
- Plug units or scroll housing
- Gastight and limited leakage designs
- Customised diffuser housing designs
- Complete fan package - fan, motor, and v-belt drive
- Direct drive



Accessories available to maximise the fans design and safety

- OSHA approved shaft, coupling and belt guards
- Damper and inlet control vanes
- Inspection doors
- Drains
- Shaft seals



Fan arrangements to custom fit your requirements

- Arrangements 1, 2, 2A, 3, 4, 7, 8 and 9
- Insulated or uninsulated housing