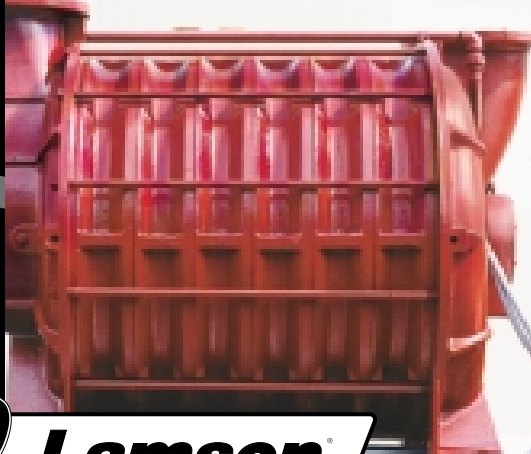


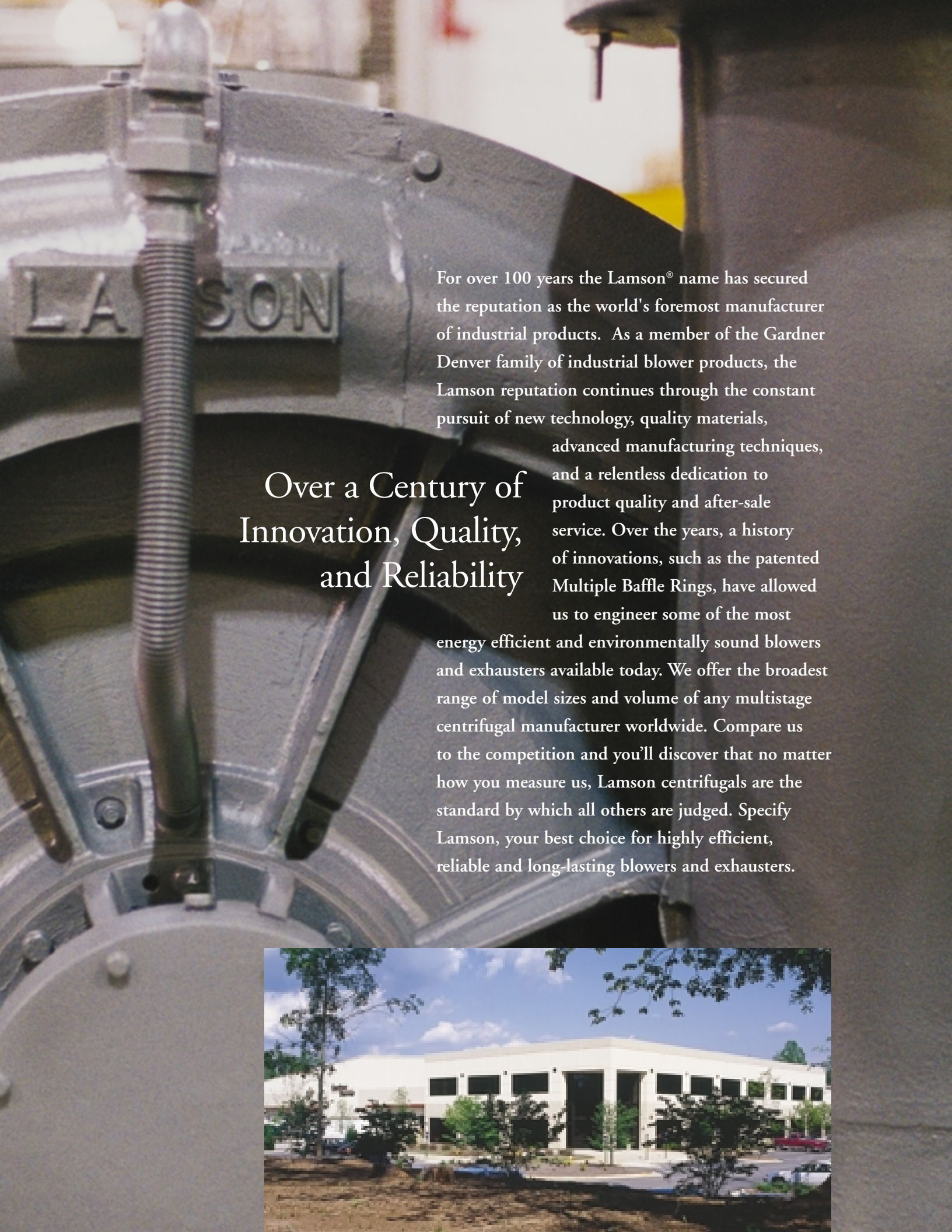


Lamson



**Multistage
Centrifugal
Blowers/
Exhausters**

CAST SERIES



Over a Century of Innovation, Quality, and Reliability

For over 100 years the Lamson® name has secured the reputation as the world's foremost manufacturer of industrial products. As a member of the Gardner Denver family of industrial blower products, the Lamson reputation continues through the constant pursuit of new technology, quality materials, advanced manufacturing techniques, and a relentless dedication to product quality and after-sale service. Over the years, a history of innovations, such as the patented Multiple Baffle Rings, have allowed us to engineer some of the most energy efficient and environmentally sound blowers and exhausters available today. We offer the broadest range of model sizes and volume of any multistage centrifugal manufacturer worldwide. Compare us to the competition and you'll discover that no matter how you measure us, Lamson centrifugals are the standard by which all others are judged. Specify Lamson, your best choice for highly efficient, reliable and long-lasting blowers and exhausters.



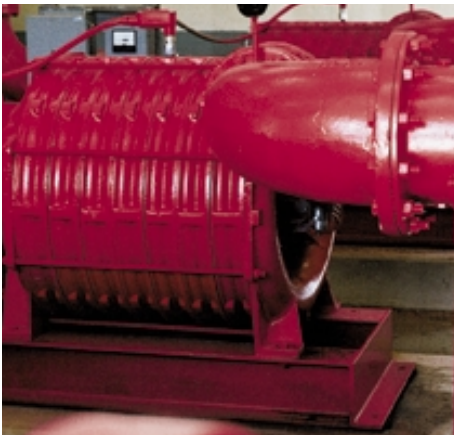
Blowers and Exhausters That Serve A Wide Range Of Applications

The range of applications for Lamson® products is ever expanding and is firmly illustrated with over 100,000 machines in operation. In the water treatment market, air is provided to water and wastewater aeration systems and air scouring/filter backwashing. Lamson blowers can be specified for coarse/fine bubble diffuser systems, reactor batch supplemental air, digester gas boosters, grit channels, sludge and digestion applications. In the industrial market, our

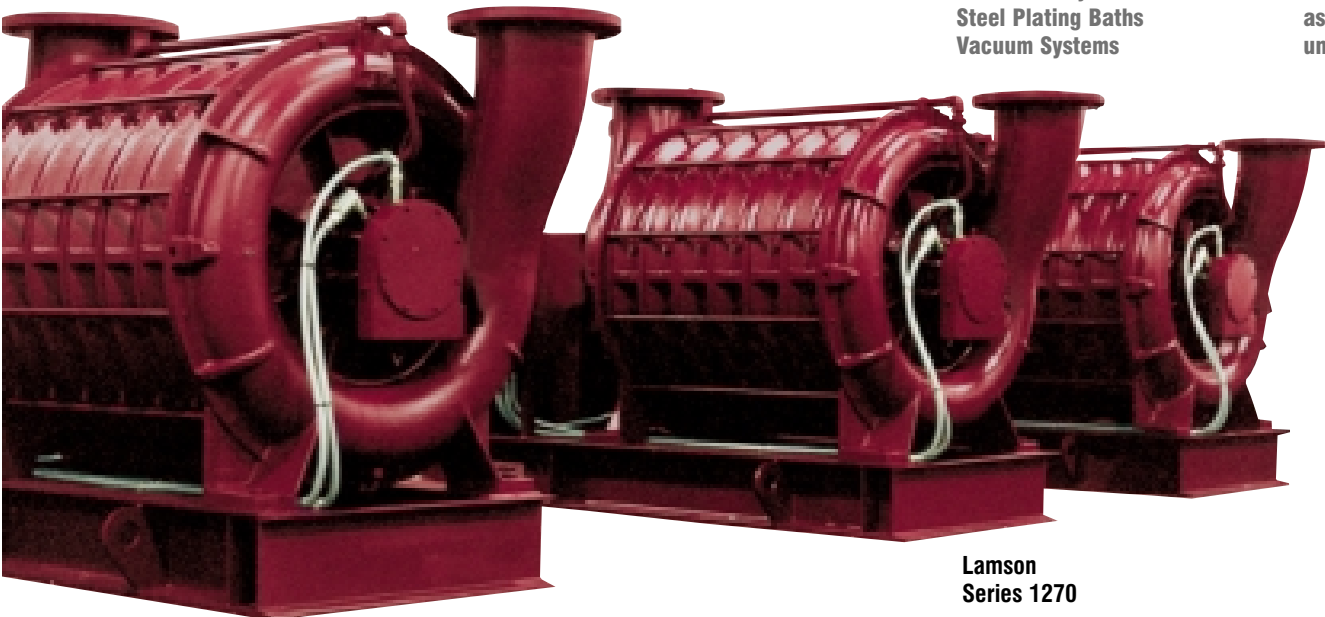
blowers provide air or gas for sulfur recovery, combustion air, process gas boosting, coal mine venting, fluidized bed combustion systems, vapor and gas extraction, composting, sludge incineration and printing systems, to name a few.

In the particulate handling market, Lamson systems are used to pick up, convey and capture a myriad of materials

ranging from aluminum granules to corn flakes. The experienced Gardner Denver team, backed by years of research and development, provides effective, affordable solutions for a variety of application needs.



Lamson
Series 550



Lamson
Series 1270



INDUSTRIAL PROCESSING

- Aeration Basins
- Air Drying
- Air Flotation and Sliding
- Air Knife Stripping
- Blow-off Systems
- Carbon Black
- Coal Gasification
- Coke Oven Gas
- Combustion Air Blowers
- Drying
- Gas Boosting
- Sulfur Recovery
- Printing Operations
 - Turning Bars
 - Dryers
 - Binding Applications
- Gas Recovery
- Steel Plating Baths
- Vacuum Systems

WATER TREATMENT

- Aeration
- Air Scouring
- Digester Gas Boosters
- Filter Backwashing
- Grit Chambers
- Pond Aeration
- Wastewater Treatment
 - Municipal or Industrial

PARTICULATE HANDLING

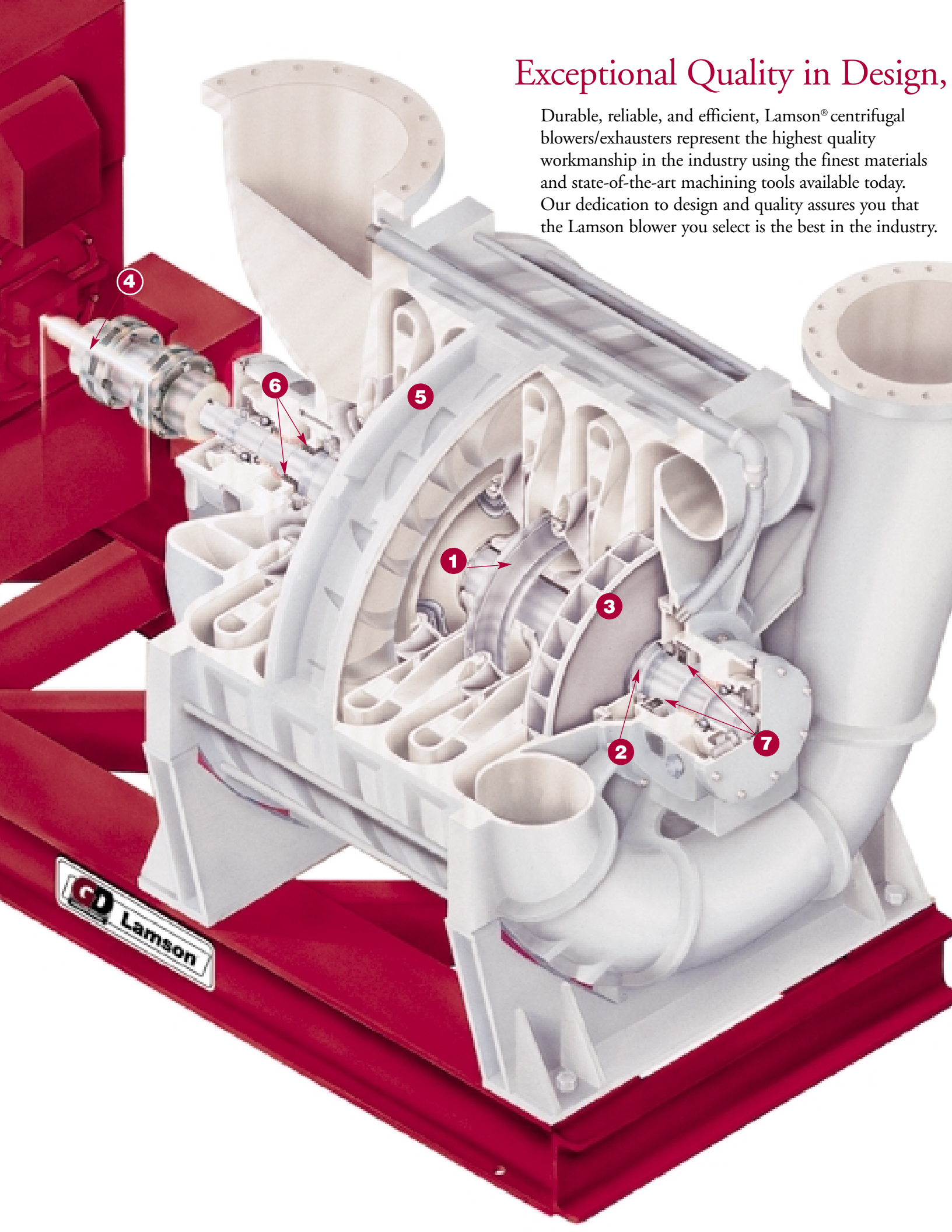
- Clean Rooms
- Clean-Up
- Pneumatic Conveying
- Source Capture

YOUR APPLICATION

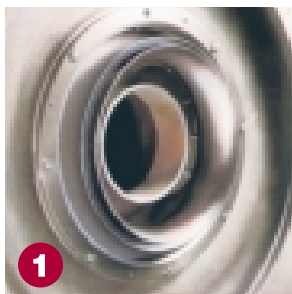
Contact us for design assistance for your unique application.

Exceptional Quality in Design,

Durable, reliable, and efficient, Lamson® centrifugal blowers/exhausters represent the highest quality workmanship in the industry using the finest materials and state-of-the-art machining tools available today. Our dedication to design and quality assures you that the Lamson blower you select is the best in the industry.



Materials and Workmanship



1

MULTIPLE BAFFLE RINGS

Most models feature our patented Multiple Baffle Rings (MBR™) which help turn airflow smoothly into the eye of the impeller, dramatically reducing inlet passage losses. MBR combined with the two-dimensional impeller design increases blower efficiency and pressure/vacuum capability.



2

BALANCE PISTON

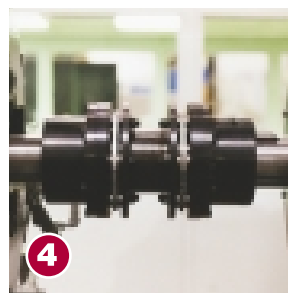
A balance piston is located at the outlet end of the rotating impeller assembly to compensate for the axial force of the impellers on the inlet bearing. This greatly increases bearing life for longer, trouble-free operation.



3

MULTISTAGE SHROUDED IMPELLERS

Two-dimensional shrouded cast aluminum impellers are balanced individually and keyed onto the shaft. The complete assembly is then balanced to achieve smooth operation with low vibration levels. Lamson rotor assemblies are designed to operate well below first critical speeds for added reliability.



4

FLEXIBLE COUPLING

Blowers/exhausters connect directly to the power source with a precision aligned flexible coupling. This optimizes power transfer and minimizes bearing loads for longer life.



5

CAST HOUSING

Lamson blower housings are precision machined from high-grade cast iron. Models 200 and 250 are cast aluminum. The intermediate blower sections are assembled together using high strength steel tie rods. The blower and its driver are mounted together on a single steel baseplate. This assures long lasting performance and durability.



6

LABYRINTH SEAL

Non-contact, non-wearing labyrinth air seals are standard. This no-maintenance seal is used in most air and some gas applications (purge option available).



7

CARBON RING SEAL

For special air and gas applications requiring superior sealing, optional non-contact carbon ring seals are available with purge option.

Lamson Performance Testing Lab

Lamson blowers and exhausters are tested in our state-of-the-art test facility in Peachtree City, Georgia. Using the most sophisticated testing equipment available in the industry, we test units up to 3,000 horsepower in accordance with the latest edition of the ASME test code PTC-10, ISO and all other applicable international standards. Units are brought into this two-story laboratory and connected to a specialized power unit and precision monitoring equipment. The blower/exhauster is then tested and evaluated for performance characteristics, noise level and vibration. Overall performance data is captured in real time for performance curve evaluation and documentation. We frequently host performance testing for customers and inspectors from all over the world.





Models to 41,000 cfm

Gardner Denver offers the most complete range of multistage centrifugal blower/exhauster models to meet your needs. Each base model presents its own unique performance characteristics and design features that are illustrated in the chart below and the air maps to the right.

SmartPik™ Precision Sizing Service

To help customers select the optimal blower or exhauster for their operation, Lamson® engineers use SmartPik, a computerized sizing service. SmartPik software can create an infinite number of performance curves for pressure, efficiency, temperature and power consumption. Based on the specific gas mixture, inlet conditions, flow and pressure/vacuum requirements, SmartPik selects the most appropriate model, impeller design, operating speeds or throttling options.

Lamson Performance Specifications

☐ Standard Series

■ High Performance Series

	200	250	260	310	400	510	550	600	650	850
BLOWER/EXHAUSTER CAPACITY										
Minimum Flow (cfm)	10	100	100	60	70	150	200	400	500	550
Maximum Flow (cfm)	250	440	440	450	1,050	1,300	1,300	2,300	3,500	3,200
Minimum Flow (m ³ /h)	16.9	170	170	102	119	255	340	680	850	935
Maximum Flow (m ³ /h)	425	680	680	765	1,784	2,210	2,210	3,910	6,000	5,440
Maximum Pressure (psig)	2.3	8.6	8.6	7.4	7.2	11.8	11.8	11.4	15.0	14.7
Maximum Pressure (bar)	0.16	0.60	0.60	0.60	0.51	0.81	0.81	0.79	1.28	1.01
Maximum Vacuum ("Hg)	4.1	11.2	11.2	11.2	9.9	13.7	13.7	13.1	15.0	15.2
Maximum Vacuum (mm Hg)	104	284	284	284	251	348	348	333	381	386
NUMBER OF STAGES										
	2	2-5	3-5	1-11	1-10	1-10	1-10	1-9	1-9	1-9
DESIGN FEATURES										
Single Baffle Ring							■	■		■
Multiple Baffle Rings (MBR™)									■	
Balance Piston									■	
Lubrication	Grease	Grease	Grease	Grease	Grease	Gr/Oil	Gr/Oil	Gr/Oil	Gr/Oil	Gr/Oil
Labyrinth Seal	■	■	■	■	■	■	■	■	■	■
Carbon Ring Seal						○	○	○	○	○
CONNECTIONS										
Inlet (125# ANSI)	2" *	2-1/2" **	2-1/2" **	3"	5"	5"	6"	6"	8"	8"
Outlet (125# ANSI)	2" *	2-1/2" **	2-1/2" **	3"	5"	5"	5"	6"	6"	8"

	860	870	1250	1260	1270	1400	1600	1870	2000	2400
BLOWER/EXHAUSTER CAPACITY										
Minimum Flow (cfm)	1,000	1,000	1,250	1,650	1,175	2,300	3,000	3,000	5,000	10,000
Maximum Flow (cfm)	5,500	5,500	8,000	8,000	8,500	14,500	12,000	15,000	24,000	40,000
Minimum Flow (m ³ /h)	1,700	1,700	2,125	2,805	2,000	3,910	5,100	5,100	8,500	17,000
Maximum Flow (m ³ /h)	9,350	9,350	13,600	13,600	14,440	24,650	20,400	25,500	40,800	68,000
Maximum Pressure (psig)	14.2	17.0	10.3	14.3	17.3	12.6	17.0	19.0	19.0	22.0
Maximum Pressure (bar)	0.98	1.17	0.71	0.99	1.20	0.87	1.17	1.31	1.31	1.52
Maximum Vacuum ("Hg)	14.7	16.0	12.3	14.8	16.2	13.8	16.0	17.0	17.0	17.6
Maximum Vacuum (mm Hg)	373	406	312	375	412	351	406	432	432	447
NUMBER OF STAGES										
	1-10	1-10	1-6	4-8	1-9	1-8	1-8	1-7	1-8	1-6
DESIGN FEATURES										
Single Baffle Ring	■	■	■	■		■				■
Multiple Baffle Rings (MBR™)					■		■	■	■	■
Balance Piston		■			■		■	■	■	■
Lubrication	Gr/Oil	Gr/Oil	Gr/Oil	Gr/Oil	Gr/Oil	Oil	Oil	Oil	Oil	Oil
Labyrinth Seals	■	■	■	■	■	■	■	■	■	■
Carbon Ring Seal	○	○	○	○	○	○	○	○	○	○
CONNECTIONS										
Inlet (125# ANSI)	10"	10"	12"	12"	14"	18"	16"	20"	20"	24"
Outlet (125# ANSI)	8"	8"	12"	12"	12"	14/16"	14"	18"	18"	20"

Air map data for Series 200 to 400 represents standard conditions at maximum speed allowed. Air map data for Series 510 to 2400 represents standard conditions at 60 Hz.

For data representing conditions other than these specifications, contact your Gardner Denver representative.

*2" male N.P.T. or 2 3/8" smooth O.D. **2 1/2" male N.P.T. or 2 7/8" smooth O.D.

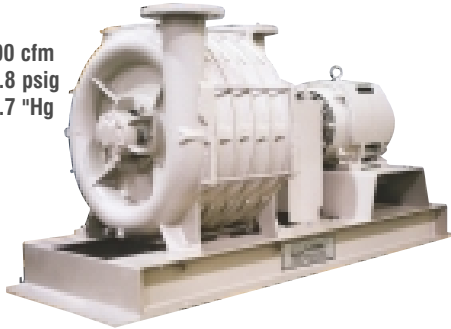
■ Standard equipment ○ Optional equipment

Series 310
60-450 cfm
Up to 7.4 psig
Up to 11.2 "Hg

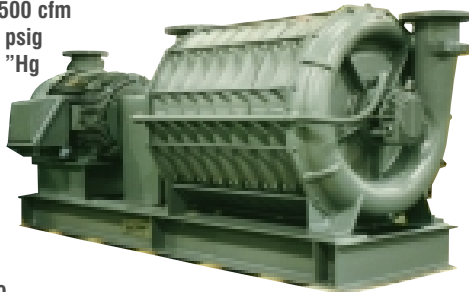


Size and Performance To Fit Your Application

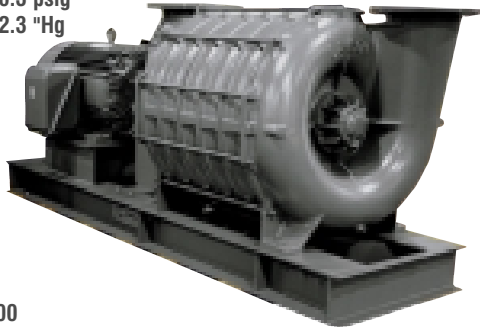
Series 550
200-1,300 cfm
Up to 11.8 psig
Up to 13.7 "Hg



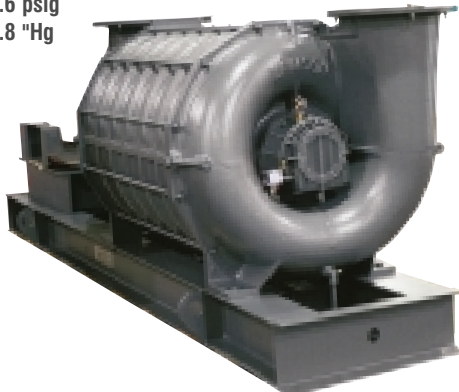
Series 870
1,000-5,500 cfm
Up to 17 psig
Up to 16 "Hg



Series 1250
1,650-8,000 cfm
Up to 10.3 psig
Up to 12.3 "Hg



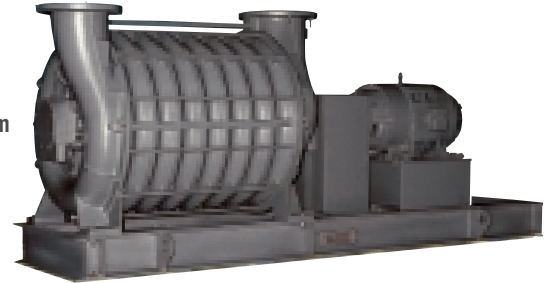
Series 1400
2300-14,500 cfm
Up to 12.6 psig
Up to 13.8 "Hg



With 20 models to choose from and the ability to specify a variety of manufacturing options, you can be assured that the blower or exhauster you order will deliver the performance you expect. In addition to the base models available, customers can choose from a variety of design options such as special coatings, alternative component materials, oil or grease lubrication, special seals, drive couplings and power sources. The Lamson® blower/exhauster you specify is then manufactured according to your unique application and requirements.

Series 1270
With Electric
Drive

1,175-8,500 cfm
Up to 17.3 psig
Up to 16.2 "Hg



Series 2400
With Turbine
Drive

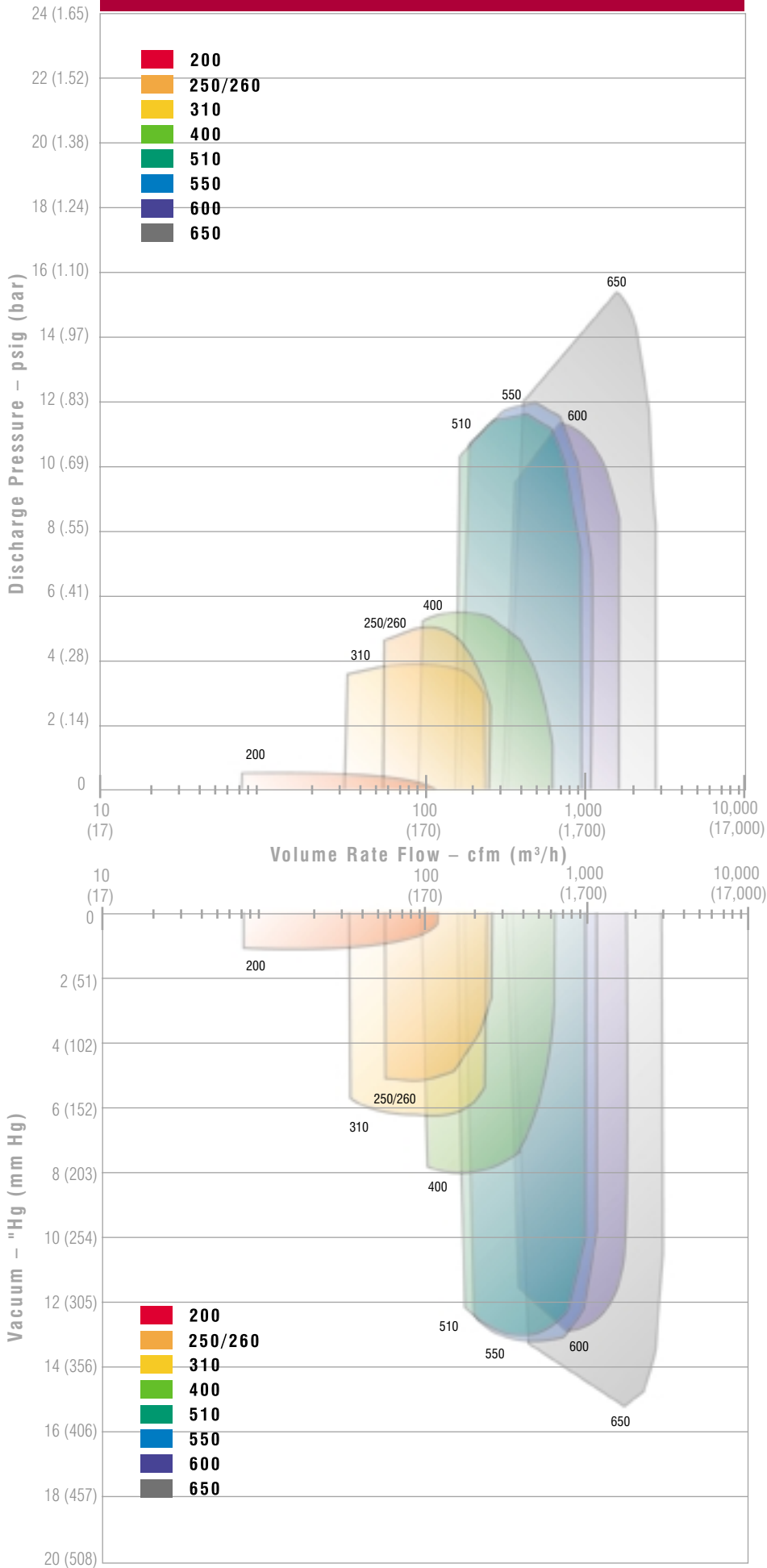
10,000-40,000 cfm
Up to 22 psig
Up to 17.6 "Hg



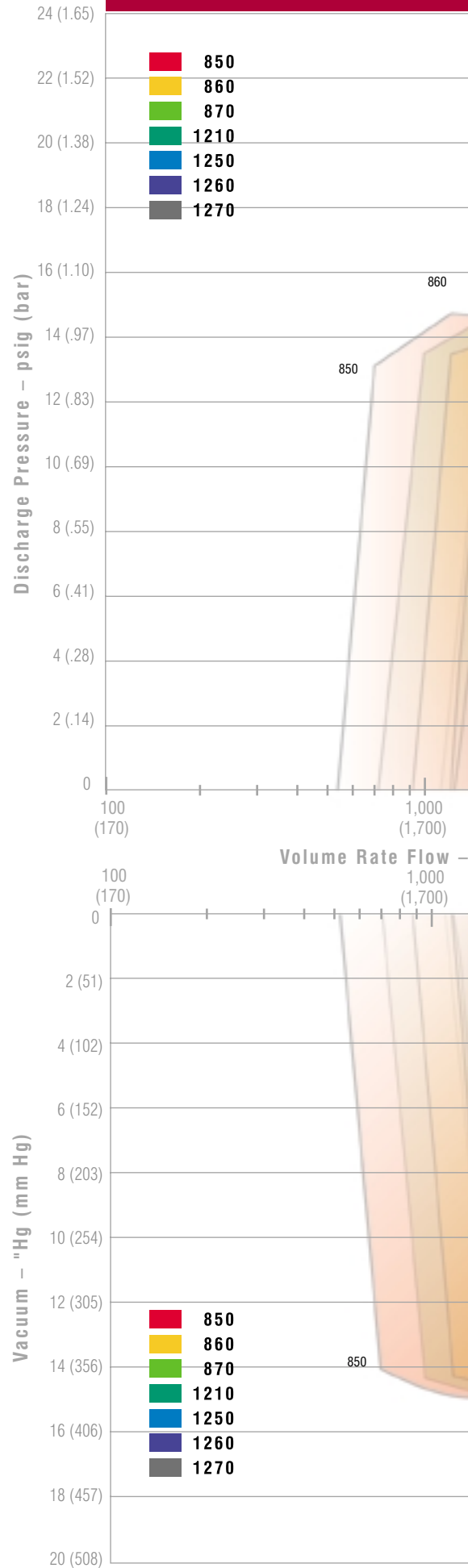
Multiple Drive Options To Choose From

Lamson blowers and exhausters may be direct driven, V-belt driven or gearbox driven with an electric motor. Alternative drivers include steam turbines, diesel engines, gasoline engines, and liquid petroleum or methane gas engines. Also available is the Lamson ESP™ (Energy Saving Performance), variable frequency drive system. The ESP system automatically adjusts airflow output to match the actual airflow demand. The blower/exhauster power requirement adjusts automatically resulting in energy savings. Your Lamson representative can work with you to determine the best driver option and configuration to match your application.

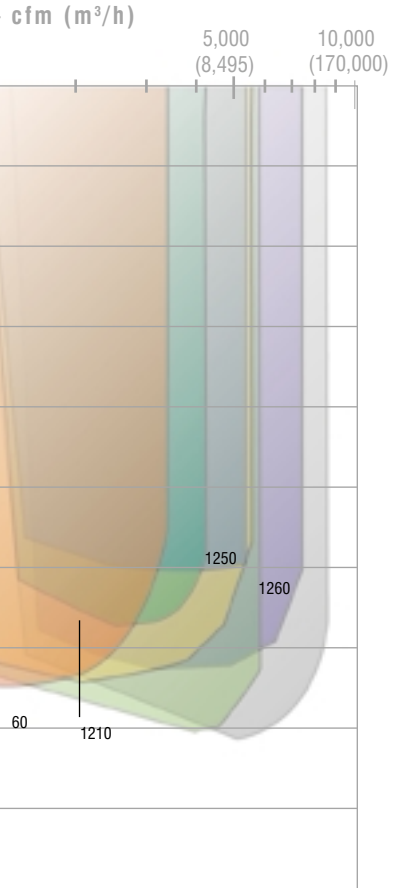
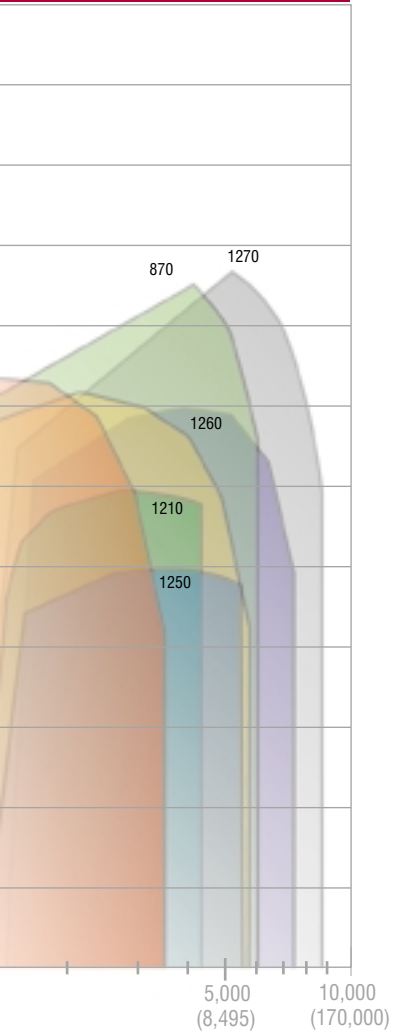
Lamson Models 200-650



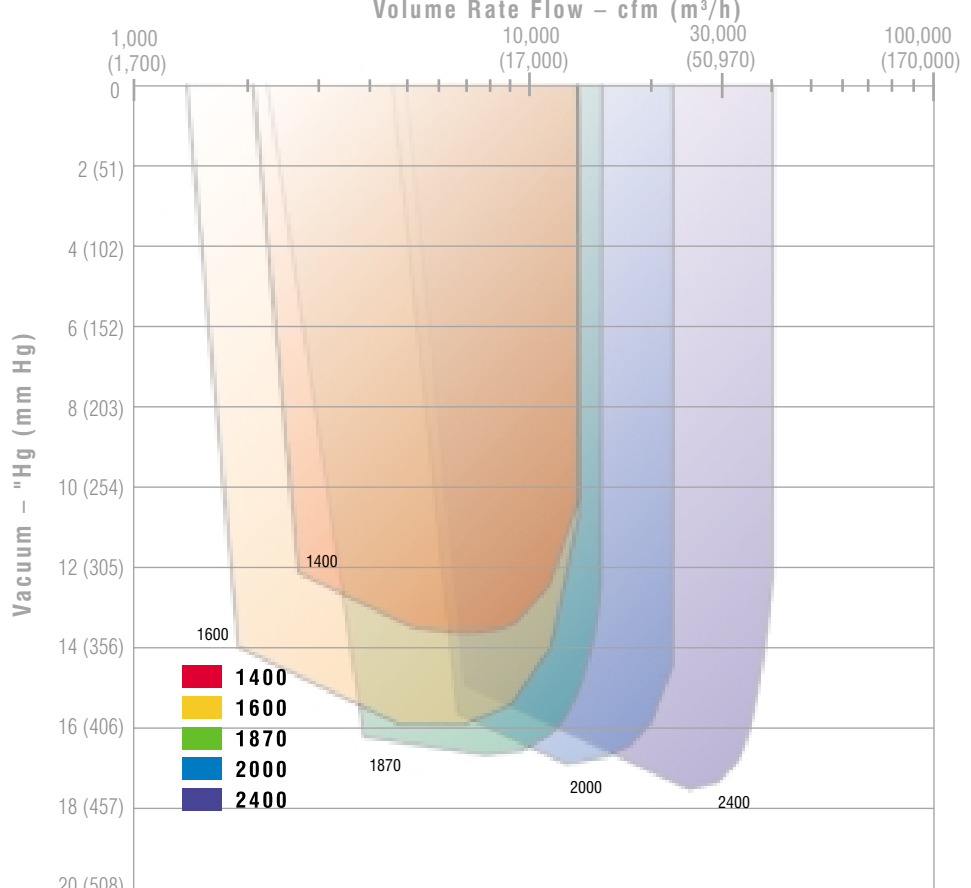
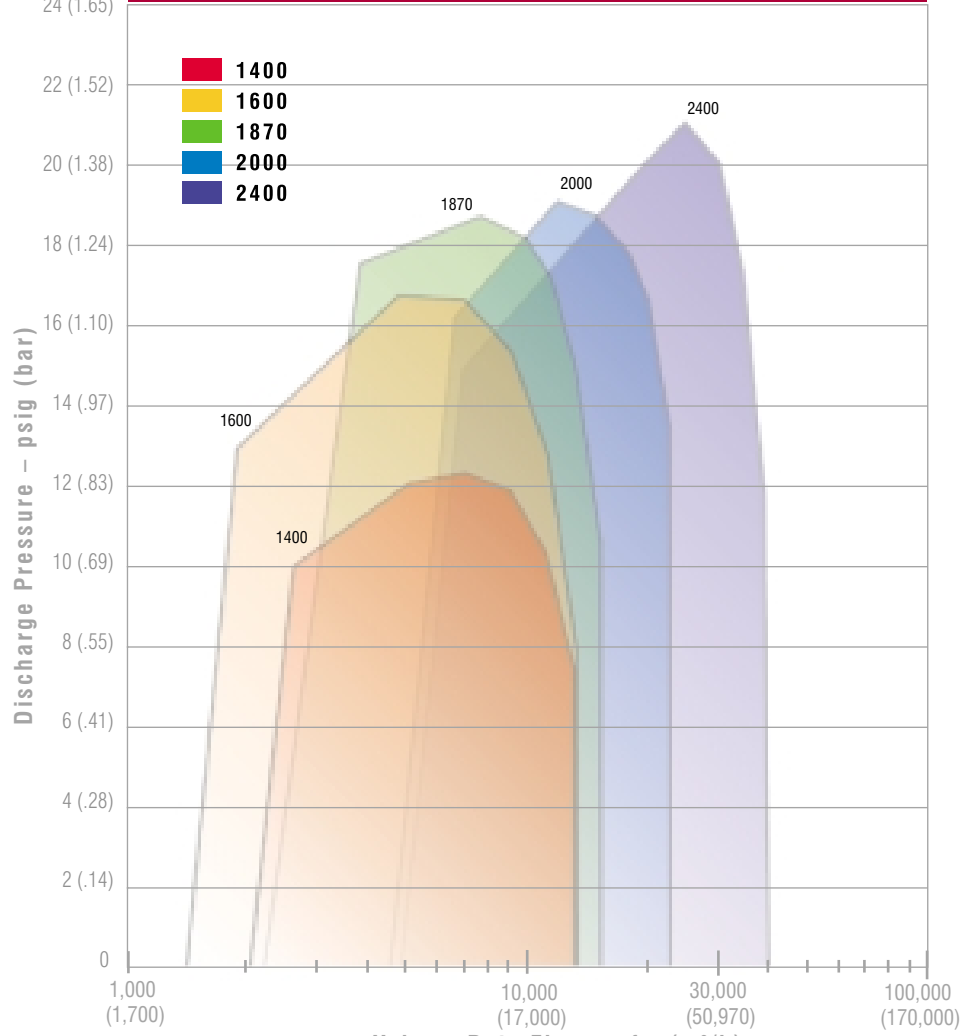
Lamson Models

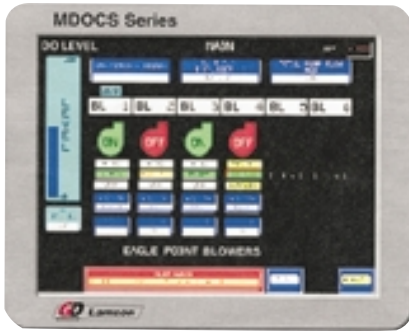


850-1270



Lamson Models 1400-2400





Lamson® Monitoring and Control Systems

Whether you're responsible for a wastewater treatment plant, the smelting operation at a foundry or the precise material handling needs of a manufacturing facility, Lamson offers control systems to properly operate your blowers and exhausters and protect them from conditions that may lead to catastrophic mechanical failure, a void warranty and costly downtime. At Gardner Denver we engineer a variety of control systems and monitors capable of providing you the protection and information you need to keep your operation running at its best. Our control systems can monitor a variety of conditions that include motor current, motor temperature, blower vibration, bearing temperature, bearing oil level, discharge temperature, inlet vacuum and outlet pressure.



Lamson Service and Parts

- Factory Trained Service Professionals
- On-site, On-Demand Service
- System Optimization
- Blower Remanufacturing
- Training, Troubleshooting and Consulting
- Warranty Renewal Programs
- Genuine GD Quality Replacement Parts
- Highest Quality Lubricants
 - Lamson Number 5 Lubricating Grease
 - AEON™ CF Centrifugal Blower Oil



Accessories

- Engines
- Motors
- Turbines
- Variable Frequency Drives
- Butterfly Valves
- Check Valves
- Filters
- Silencers
- Expansion Joints
- Gauges

Contact Your Lamson Representative

Other Gardner Denver Products Available



For additional information, contact your local representative or

Gardner Denver Blower Division

100 Gardner Park, Peachtree City, GA 30269

Toll Free 800-543-7736 ext. 459

Phone 770-632-5000 • Fax 770-486-5629

E-mail: blowersmktg@gardnerdenver.com

Visit our web site: www.gardnerdenver.com

For Parts Information, Contact:

Toll Free 800-982-3009

Gardner Denver Blower Division Customer Service

Phone 770-632-5000 • Fax 770-631-0765

Gardner Denver