

Legend® Series

Positive Displacement Blowers
& Vacuum Pumps



Experience Proven Results™

Sutorbilt Legend Series

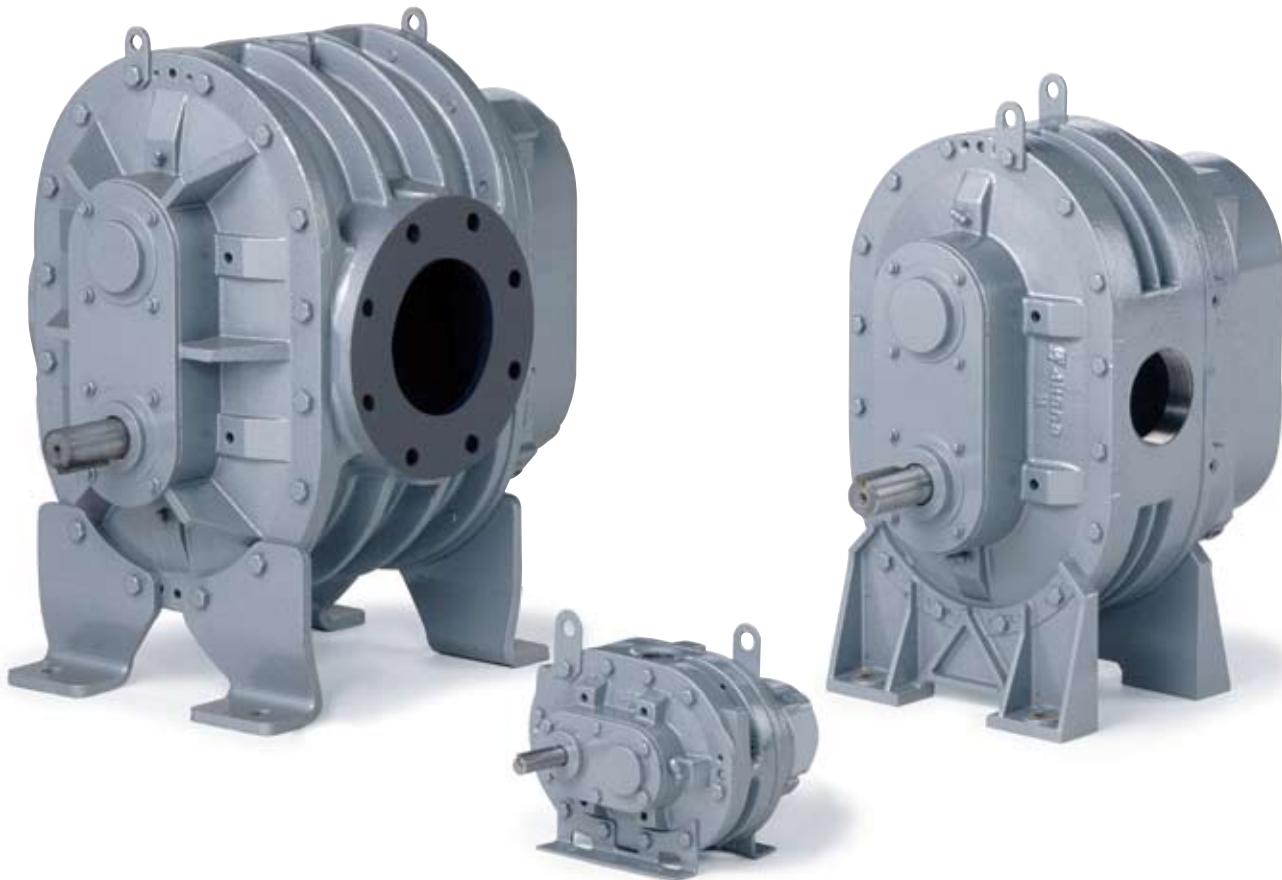
Setting the Industry Standard

The Gardner Denver Sutorbilt® Legend® line of rotary positive displacement lobe blowers and vacuum pumps are the result of more than 150 years experience in the design, manufacture and support of superior industrial equipment.

- Available in 20 sizes with 4 different configurations
- The Legend Series delivers
 - Pressure to 15 psig
 - Vacuum to 16" Hg
 - Flows to 3,015 cfm

Why the Sutorbilt line of blowers and vacuum pumps earned the name “Legend”

- Backed by the most experienced and trusted distributor network in the industry
- Every Sutorbilt Legend blower/vacuum pump is built under rigid ISO 9001:2000 quality standards
- Each Legend is individually tested to meet rigorous performance specifications
- Requested by leading Original Equipment Manufacturers (OEMs) worldwide for a wide range of applications, due to the ability to customize the Legend to their specifications while meeting strict performance requirements
- A Legend is at the heart of an ever-expanding variety of air solutions working every minute of every day around the globe
- Dual Splash Lubricated and Quiet Series (for up to 5 dBA reduction) are available

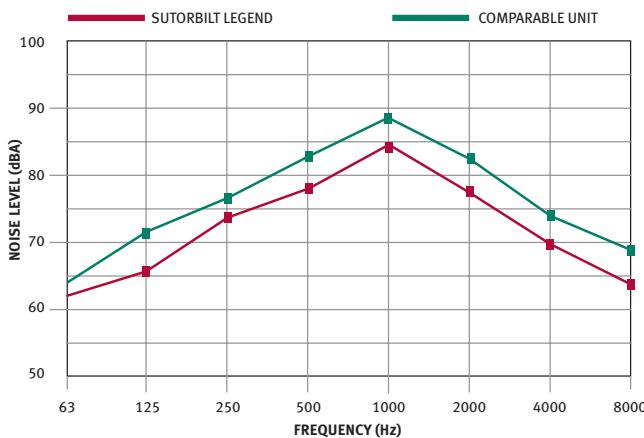


Proven Performance. Global Applications. Local Support.

QUIET OPERATION

The sound data shown below compares the Legend (red) and a comparably sized blower (green) operating at 3,275 rpm and 12 psig.

- Improved blower design reduces the sound pressure output of the Legend blower
- Typical reduction is 3 dBA which represents 50% less noise than the competition



SUPERIOR LOCAL SALES AND SERVICE

- Extensive network of authorized Gardner Denver/Sutorbilt distributors
- Offers the most convenient local sales and service support in the industry
- Factory trained professionals are experts in blower/vacuum pump technology
- Providing system installation guidance, troubleshooting and optimization recommendations for new or existing applications

EVEN A “LEGENDARY” WARRANTY

Every Sutorbilt Legend Series blower/vacuum pump is covered by a “Legendary” warranty:

- **24 months** from the date of shipment or
- **18 months** from the date of installation, whichever occurs first

INDUSTRY	APPLICATION
Aquaculture	Aeration
Cement & Lime	Fluidization & Conveying
Chemical	Vacuum Processing & Conveying
Coal Bed/Landfill	Methane Gas Recovery
Dairy	Automated Milking
Dry Bulk Hauling	Trailer Unloading & Aeration
Environmental Services	Sewer Cleaning & Portable Restroom Services
Industrial	Material Vacuuming
Milling & Baking	Blending & Conveying
Oil & Gas	Gas Collection & Sparging
Power Generation	Fly Ash Conveying & Aeration
Process Gas	Gas Boosting
Pulp & Paper	Chip Conveying & Process Vacuum
Resin & Plastic	Processing & Conveying
Soil Remediation	Vacuum Extraction & Sparging
Vacuum Excavation	Potholing & Slurry Recovery
Wastewater	Aeration & Backwashing

The above table illustrates industries which depend upon the Sutorbilt® Legend® to deliver clean, oil-free air to a wide range of global applications.

Legendary Design Features

1 High-strength impeller case is heavily ribbed and machined from a single piece of cast iron and features oversized dowel pins for precise mounting and alignment of head plates

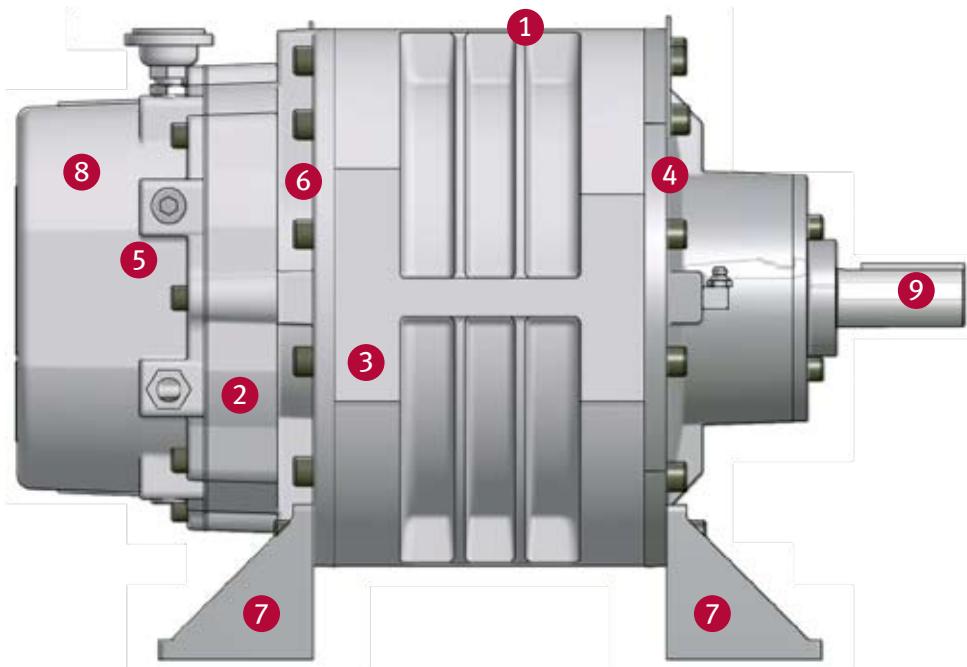
- *Results in reduced noise and more stable, vibration-free operation*

2 Head plates, machined from cast iron, are ground on the interior surface to precise operating tolerances. Bearing fits are machined into head plates to assure exact bearing positioning

- *Ensures accurate, fixed-dimension clearances through all blower operating conditions and temperature ranges*

3 Impellers are machined from cast iron to an exact profile and are permanently fastened to steel shafts. They are dynamically balanced for smooth operation in any assembled position

- *Provides extra strength and rigidity to handle continuous maximum loads without fatigue or deflection*



4 Anti-friction bearings are used exclusively (table at right)

- *Optimum bearing selection provides longer blower life and added overhung shaft load capacity*

Gear diameter	Single row ball	Double row ball	Cylindrical roller	Spherical roller
2"	•			
3–4"	•		•	
5"		•	•	
6–8"		•		•



2MP LHC

3MR RHC

4LVR BHC

5MR RHC

5 3–6" R versions feature improved timing and ease of teardown/rebuild through grip rings, which expand against the bore and compress on the shaft for a secure, mechanical shrink fit

2, 7 and 8" P versions feature precision machined alloy steel timing gears, permanently pinned to the shafts

- Assures non-slip timing even under the most strenuous loading conditions

6 High temperature Viton® oil seals

- Maximizes the seal life in continuous, severe-duty applications to provide leak-free operation

7 Flex-Mount™ design on 2, 7 and 8" blowers is adaptable to either vertical or horizontal installation, while 3–6" R-version blowers have universal feet

- The feet are precisely machined and match the footprints of many competitive units

8 Timing gears and gear end bearings are splash lubricated utilizing an abundant oil reservoir. A non-asbestos graphite gasketed, oil-tight housing encloses the timing gears. Drive end bearings are grease lubricated through fittings. Lip-type seals prevent oil and grease from entering the impeller chamber

- Superior gear and bearing lubrication is assured at all operating conditions with minimal maintenance

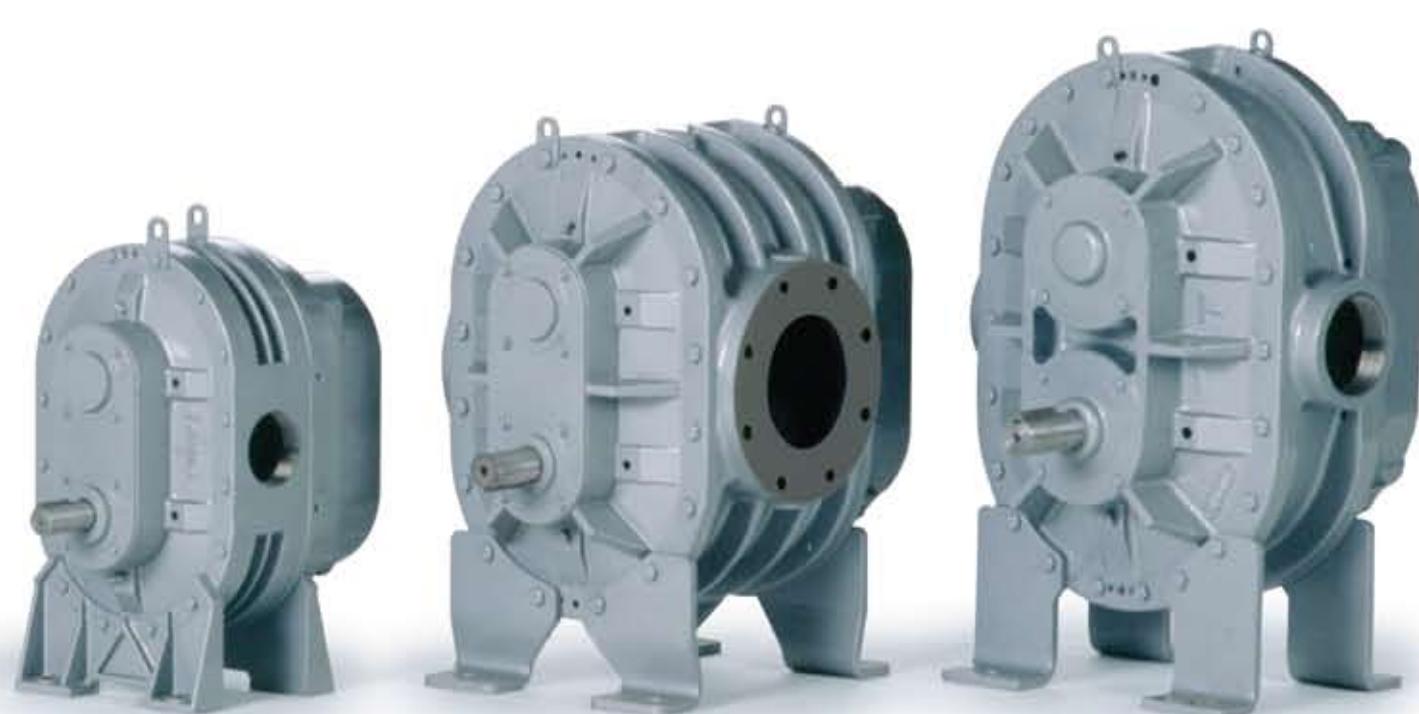
9 High strength steel drive shaft is extended for V-belt drive or direct connection

- Provides greater blower durability and installation flexibility

Available with Mechanical Gas Seals

The Legend design accommodates mechanical gas seals for critical gas applications with proven results based on a large installed base

- This field proven seal design allows trouble-free operation in critical gas applications

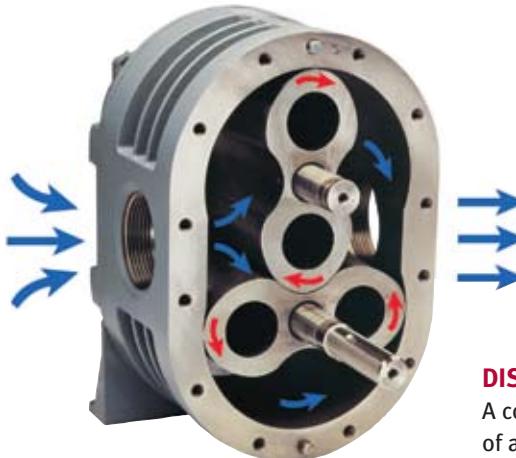


6HVR BHC

7MVP BHC

8HVP BHC

The Sutorbilt Legend Design



INTAKE

A constant volume of air or gas is drawn into the cylinder by the action of the turning impellers.

TRANSFER

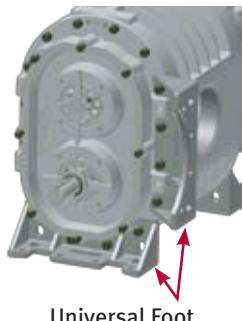
A constant volume of trapped air or gas is transferred around the cylinder to the discharge port.

DISCHARGE

A constant volume of air or gas is forced out through the discharge port.

Universal Foot & Flex-Mount™ Design Provides Maximum Installation Versatility

- 3–6" R versions feature the “universal” mounting feet which allow them to be mounted in vertical and horizontal configurations
- 2", 7" & 8" P versions feature Flex-Mount™ design creating interchangeability on existing and new applications



Universal Foot



Horizontal Configuration,
Right Hand Drive



Vertical Configuration,
Bottom Hand Drive



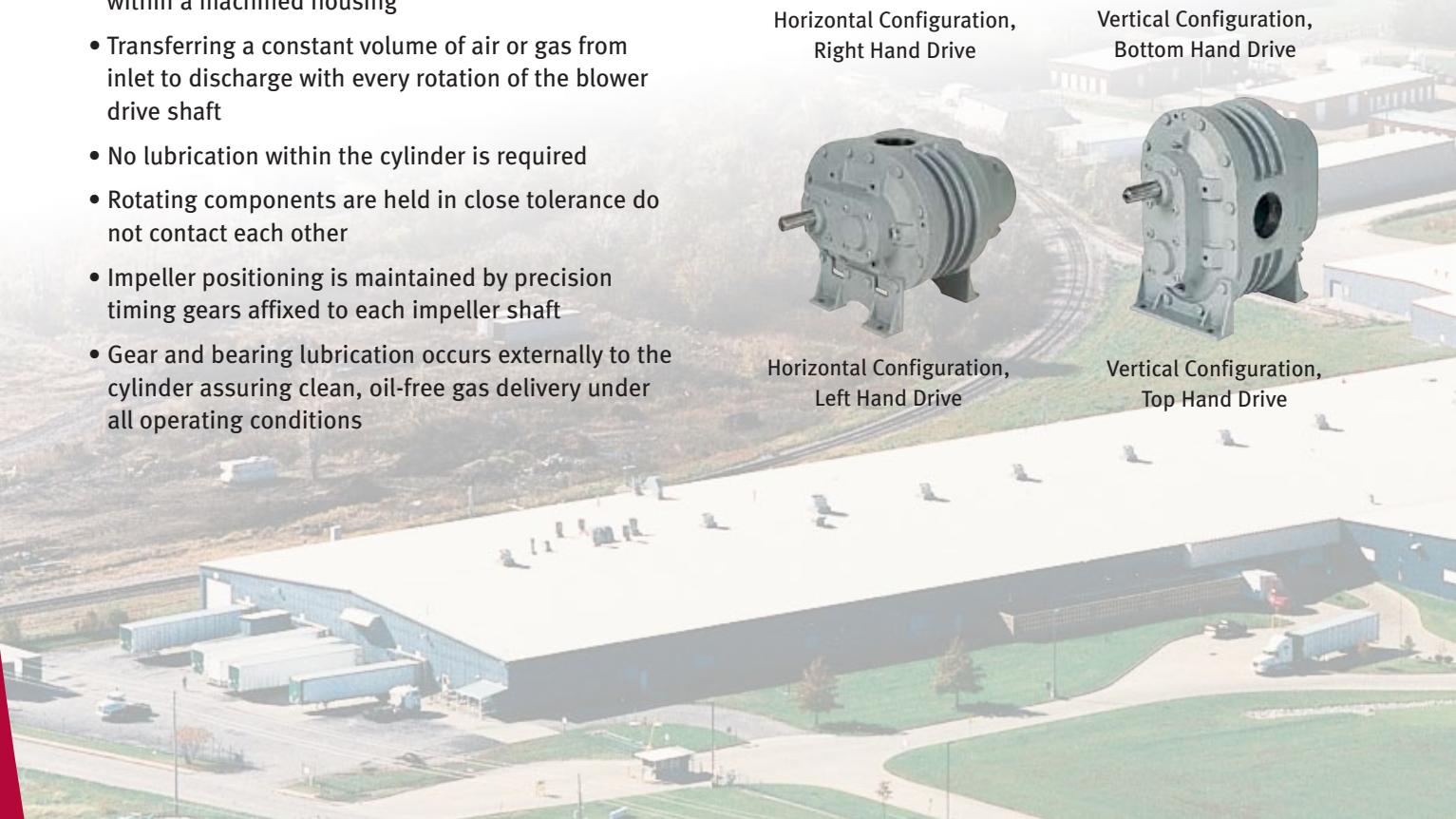
Horizontal Configuration,
Left Hand Drive



Vertical Configuration,
Top Hand Drive

The Sutorbilt PD Cycle

- Two figure-eight impellers turn in opposite directions within a machined housing
- Transferring a constant volume of air or gas from inlet to discharge with every rotation of the blower drive shaft
- No lubrication within the cylinder is required
- Rotating components are held in close tolerance do not contact each other
- Impeller positioning is maintained by precision timing gears affixed to each impeller shaft
- Gear and bearing lubrication occurs externally to the cylinder assuring clean, oil-free gas delivery under all operating conditions



State-of-the-Art Quality

The Gardner Denver line of Sutorbilt Legend blowers and vacuum pumps are engineered and manufactured under strict ISO 9001:2000 quality standards in our 330,000 square feet state-of-the-art facility in Sedalia, MO (photo below)

- Gardner Denver makes it a priority to invest in highly skilled people who take pride in producing quality products
- Our Flexible Machining System (FMS) assures consistent production of the highest quality Legend components
- Attention to detail is found throughout the manufacturing process such as utilizing advanced coordinate measuring equipment (photo A)
- Legend components are subjected to quality inspections before assembly
- Prior to shipment, every Legend is tested against rigid standards using our computer automated testing stations (photo B)

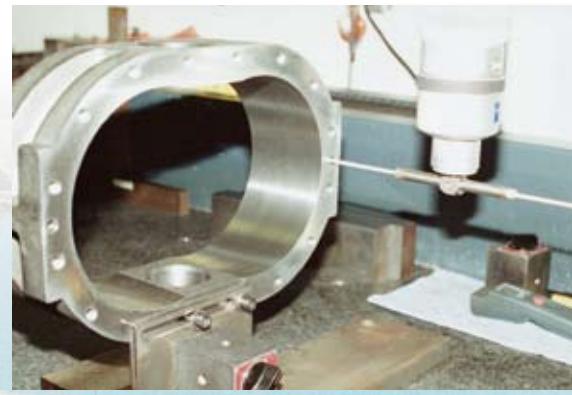
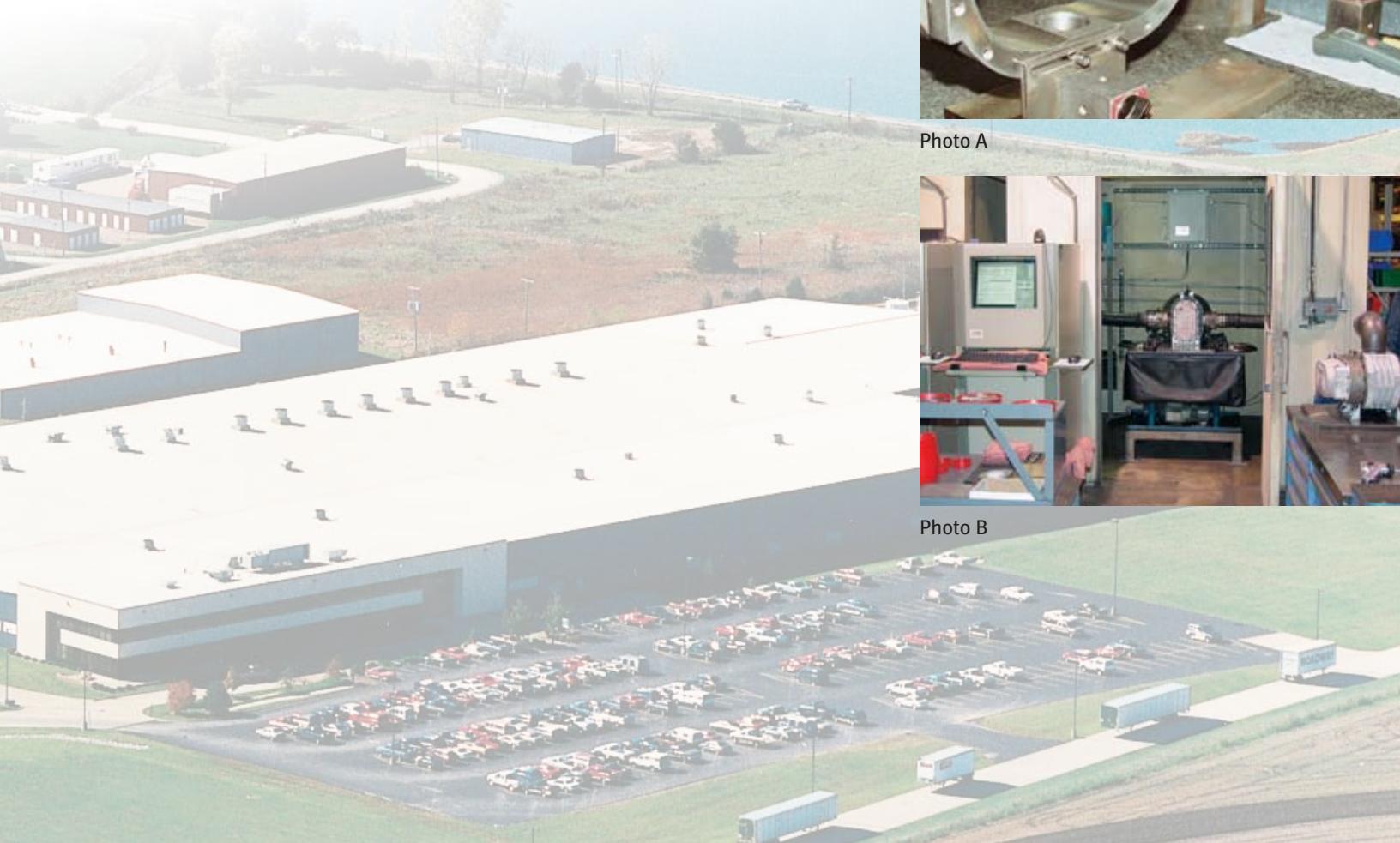


Photo A



Photo B

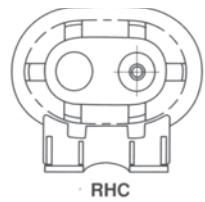
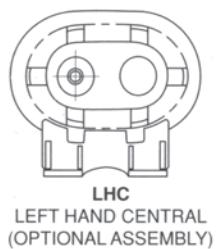
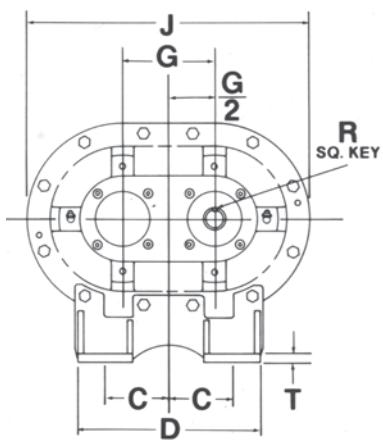
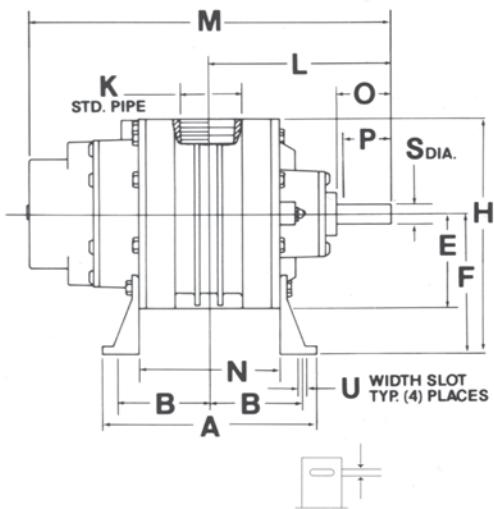


Sutorbilt Legend Dimensional Data

Horizontal Configurations

SIZE	WT.	CONN.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U
2M	72	S	5.00	2.00	2.00	6.36	3.25	3.75	2.75	7.00	9.25	1.00	5.16	10.00	2.76	1.97	1.62	0.19	0.620	0.13	0.44
2L	86	S	7.00	3.00	2.00	6.36	3.25	3.75	2.75	7.00	9.25	2.00	6.16	12.00	4.76	1.97	1.62	0.19	0.620	0.13	0.44
3H	88	S	6.75	2.69	2.68	7.75	3.88	5.00	3.50	8.88	11.26	1.25	5.86	12.05	3.50	2.05	1.62	0.19	0.750	0.25	0.62 x 1.12
3M	110	S	7.62	3.13	2.68	7.75	3.88	5.00	3.50	8.88	11.26	2.00	6.30	12.92	4.38	2.05	1.62	0.19	0.750	0.25	0.62 x 1.12
3L	132	S	10.25	4.44	2.68	7.75	3.88	5.00	3.50	8.88	11.26	2.50	7.61	15.55	7.00	2.05	1.62	0.19	0.750	0.25	0.62 x 1.13
4H	138	S	7.24	3.00	3.00	8.25	4.19	6.25	4.00	10.44	12.38	1.50	6.91	13.74	4.00	2.39	1.62	0.19	0.875	0.38	0.5 x 0.75
4M	160	S	9.49	4.13	3.00	8.25	4.19	6.25	4.00	10.44	12.38	2.50	8.04	15.99	6.26	2.39	1.62	0.19	0.875	0.38	0.5 x 0.75
4L	182	S	11.99	5.38	3.00	8.25	4.19	6.25	4.00	10.44	12.38	3.00	9.29	18.49	8.76	2.39	1.62	0.19	0.875	0.38	0.5 x 0.75
5H	210	S	10.85	3.50	3.50	9.00	5.19	7.00	5.00	12.19	15.38	2.50	8.19	16.38	4.86	2.50	2.00	0.25	1.125	0.38	0.56 x 0.75
5M	232	S	12.85	4.50	3.50	9.00	5.19	7.00	5.00	12.19	15.38	4.00	9.19	18.38	6.86	2.50	2.00	0.25	1.125	0.38	0.56 x 0.75
5L	306	S	16.85	6.50	3.50	9.00	5.19	7.00	5.00	12.19	15.38	4.00	11.19	22.38	10.86	2.50	2.00	0.25	1.125	0.38	0.56 x 0.75
6H	318	S	9.76	3.94	4.00	16.50	6.00	8.75	6.00	14.75	18.00	3.00	9.18	18.57	5.76	2.94	2.00	0.31	1.375	0.50	0.75 x 1
6M	366	S	13.00	5.56	4.00	16.50	6.19	8.75	6.00	14.94	18.00	5.00	10.80	21.81	9.00	2.94	2.00	0.31	1.375	0.50	0.75 x 1
6L	538	F	20.00	9.06	4.00	16.50	7.50	8.75	6.00	16.25	18.00	6.00	14.31	28.82	16.00	2.94	2.00	0.31	1.375	0.50	0.75 x 1
7H	482	S	12.00	4.63	5.50	15.00	9.69	11.00	7.00	20.69	22.00	4.00	10.00	21.03	5.74	3.21	2.50	0.38	1.562	0.50	0.75 x 1
7M	638	F	17.50	7.38	5.50	15.00	8.50	11.00	7.00	19.50	22.00	6.00	12.75	26.53	11.24	3.21	2.50	0.38	1.562	0.50	0.75 x 1
7L	770	F	24.50	10.88	5.50	15.00	8.50	11.00	7.00	19.50	22.00	8.00	16.25	33.53	18.24	3.21	2.50	0.38	1.562	0.50	0.75 x 1
8H	736	S	13.50	5.75	6.00	16.00	10.00	12.50	8.00	22.50	25.25	4.00	11.69	23.85	7.76	3.86	2.50	0.38	1.750	0.50	0.75 x 1
8M	938	F	19.00	8.50	6.00	16.00	10.00	12.50	8.00	22.50	25.25	8.00	14.44	29.35	13.26	3.86	2.50	0.38	1.750	0.50	0.75 x 1
8L	1,170	F	27.00	12.50	6.00	16.00	10.00	12.50	8.00	22.50	25.25	10.00	18.44	37.35	21.26	3.86	2.50	0.38	1.750	0.50	0.75 x 1

S=Threaded connections standard NPT. F=flange connections. Inlet and outlet connections are the same type and size.
Dimensions are in inches. Weights are in pounds and include shipping cartons or pallets and are approximate.



CENTER TIMED FOR ROTATION
IN EITHER DIRECTION

Vertical Configurations

SIZE	WT.	CONN.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U
2MV	72	S	5.00	2.00	1.50	5.60	3.50	4.88	6.25	9.50	6.50	1.00	5.16	10.00	2.76	1.97	1.62	0.19	0.6200	0.13	0.44
2LV	86	S	7.00	3.00	1.50	5.60	3.50	4.88	6.25	9.50	6.50	2.00	6.16	12.00	4.76	1.97	1.62	0.19	0.6200	0.13	0.44
3HV	88	S	6.75	2.69	2.68	7.75	4.50	6.25	8.00	11.88	7.76	1.25	5.86	12.05	3.50	2.05	1.62	0.19	0.7500	0.25	0.62 x 1.12
3MV	110	S	7.62	3.13	2.68	7.75	4.50	6.25	8.00	11.88	7.76	2.00	6.30	12.92	4.36	2.05	1.62	0.19	0.7500	0.25	0.62 x 1.12
3LV	132	S	10.25	4.44	2.68	7.75	4.50	6.25	8.00	11.88	7.76	2.50	7.61	15.55	7.00	2.05	1.62	0.19	0.7500	0.25	0.62 x 1.12
4HV	138	S	7.24	3.00	3.00	8.25	4.50	6.50	8.50	12.69	8.40	1.50	6.91	13.74	4.00	2.39	1.62	0.19	0.8750	0.38	0.5 x 0.75
4MV	160	S	9.49	4.13	3.00	8.25	4.50	6.50	8.50	12.69	8.40	2.50	8.04	15.99	6.26	2.39	1.62	0.19	0.8750	0.38	0.5 x 0.75
4LV	182	S	11.99	5.38	3.00	8.25	4.50	6.50	8.50	12.69	8.40	3.00	9.29	18.49	8.76	2.39	1.62	0.19	0.8750	0.38	0.5 x 0.75
5HV	210	S	10.85	3.50	3.50	9.00	5.50	8.00	10.50	15.85	10.38	2.50	8.19	16.38	4.86	2.50	2.00	0.25	1.1250	0.38	0.56 x 0.75
5MV	232	S	12.85	4.50	3.50	9.00	5.50	8.00	10.50	15.85	10.38	4.00	9.19	18.38	6.86	2.50	2.00	0.25	1.1250	0.38	0.56 x 0.75
5LV	306	S	16.85	6.50	3.50	9.00	5.50	8.00	10.50	15.85	10.38	4.00	11.19	22.38	10.86	2.50	2.00	0.25	1.1250	0.38	0.56 x 0.75
6HV	318	S	9.76	3.94	4.00	10.50	8.75	11.75	14.75	20.75	12.00	3.00	9.18	18.57	5.76	2.94	2.00	0.31	1.3750	0.50	0.75 x 1
6MV	366	S	13.00	5.56	4.00	10.50	8.75	11.75	14.75	20.80	12.38	5.00	10.80	21.81	9.00	2.94	2.00	0.31	1.3750	0.50	0.75 x 1
6LV	538	F	20.00	9.06	4.00	10.50	8.75	11.75	14.75	20.75	15.00	6.00	14.31	28.81	9.00	2.93	2.00	0.31	1.3750	0.50	0.75 x 1
7HV	482	S	12.00	4.62	5.50	14.04	11.00	14.50	18.00	25.50	19.38	4.00	10.00	21.03	5.74	3.21	2.50	0.38	1.5620	0.50	0.75 x 1
7MV	638	F	17.50	7.37	5.50	14.04	11.00	14.50	18.00	25.50	17.00	6.00	12.75	26.53	11.24	3.21	2.50	0.38	1.5620	0.50	0.75 x 1
7LV	770	F	24.50	10.87	5.50	14.04	11.00	14.50	18.00	25.50	17.00	8.00	16.25	33.53	18.24	3.21	2.50	0.38	1.5620	0.50	0.75 x 1
8HV	736	S	13.50	5.75	6.00	16.00	12.50	16.50	20.50	29.12	20.00	4.00	11.69	23.85	7.76	3.86	2.50	0.38	1.7500	0.50	0.75 x 1
8MV	938	F	19.00	8.50	6.00	16.00	12.50	16.50	20.50	29.12	20.00	8.00	14.44	29.35	13.26	3.86	2.50	0.38	1.7500	0.50	0.75 x 1
8LV	1,170	F	27.00	12.50	6.00	16.00	12.50	16.50	20.50	29.12	20.00	10.00	18.44	37.35	21.26	3.86	2.50	0.38	1.7500	0.50	0.75 x 1

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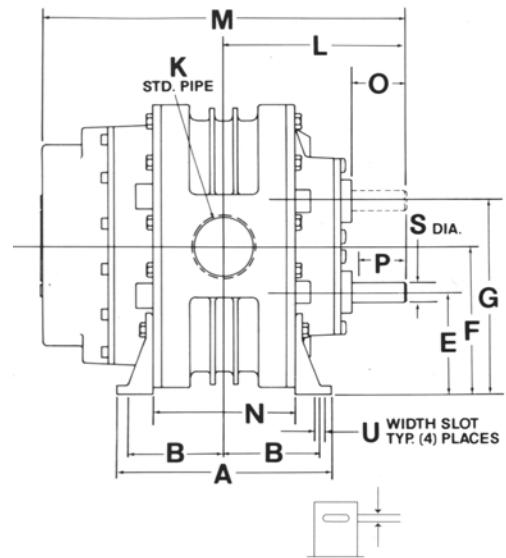
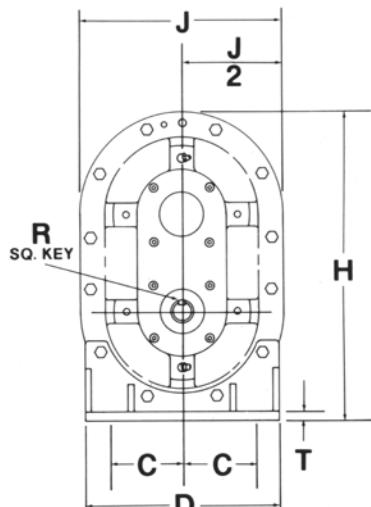


THC
TOP HAND CENTRAL
(OPTIONAL ASSEMBLY)



BHC
BOTTOM HAND CENTRAL
(STANDARD ASSEMBLY)

CENTER TIMED FOR ROTATION
IN EITHER DIRECTION



Genuine Gardner Denver Parts & Lubricants

- Maintain the Gardner Denver performance advantage and reliability with Genuine GD Replacement Parts available through authorized sales and service representatives
- Protect your Gardner Denver investment with AEON® PD, the only lubricant specially formulated for all blowers in any environment
 - Now available:
 - » AEON® PD-XD (eXtreme Duty)
 - » Designed specifically for high ambient and high discharge temperature applications
 - Also available:
 - » AEON® PD (standard applications)
 - » AEON® PD-FG (Food Grade)



Retain your Gardner Denver advantage with Genuine Replacement Parts

- Replacement parts incorporate the most recent design upgrades
- All parts meet original manufacturing specifications and tolerances for guaranteed fit and function
- Pre-packaged overhaul kits with detailed service manuals are available from your local authorized Gardner Denver distributor



Gardner
Denver®



Member

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