

## **14-22" 8000Q Series**

Positive Displacement Blowers  
& Vacuum Pumps



**GD**  
**GARDNER DENVER**

*Experience Proven Results*

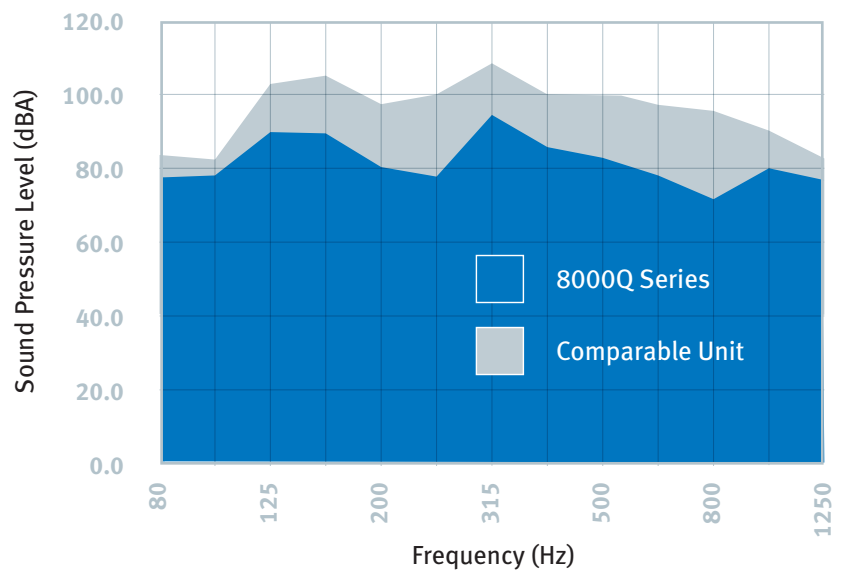


# 8000Q Series



Industry	Application
Milling and Baking	Blending and Conveying
Resin and Plastic	Processing and Conveying
Power Generation	Fly Ash Conveying and Aeration
Chemical	Vacuum Processing and Conveying
Wastewater	Aeration and Backwashing
Pulp and Paper	Chip Conveying and Process Vacuum
Cement and Lime	Fluidization and Conveying
Soil Remediation	Vacuum Extraction and Sparging
Air Separation	Gas Collection and Transportation
Coalbed/Landfill	Methane Gas Recovery
Process Gas	Gas Boosting
Oil & Gas	Gas Collection & Sparging

Operation at 12" Hg



All Sutorbilt 8000 blowers are manufactured in our state of the art facility in Sedalia, Missouri by skilled machinists. They are built to rigorous ISO 9001 quality standards and each blower is individually tested before it leaves our facilities. We support all of our customers before and after the sale with dedicated customer service, warranty, and engineering departments as well as an international network of experienced local distributors. In addition, many of our 8000 Series models are now available with significantly reduced lead times.



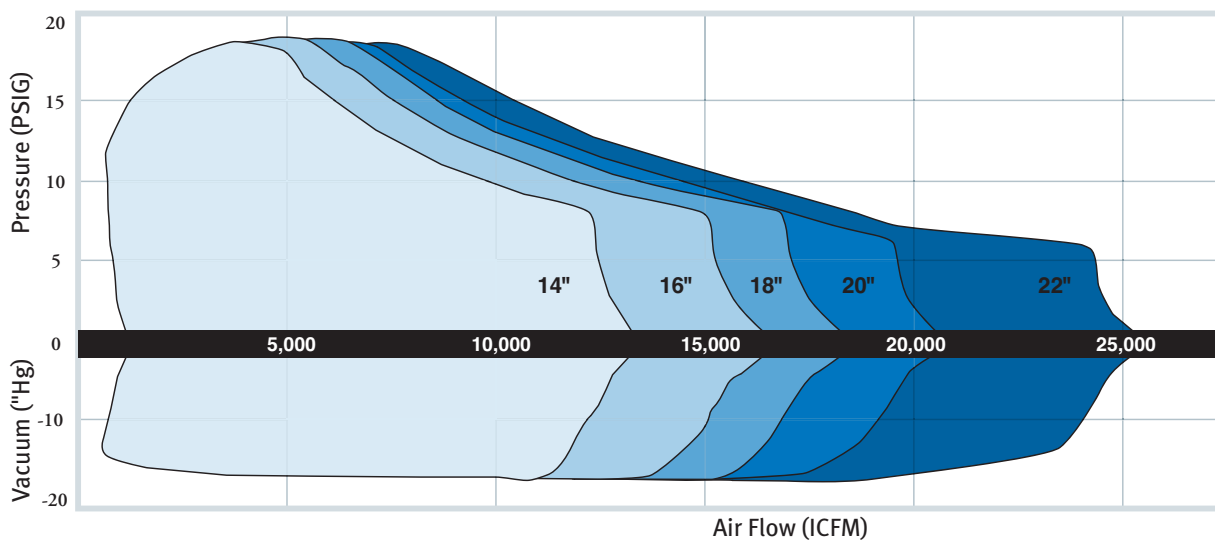
## Available Options

- Wet Vac
- Corrgard Coating
- Mechanical Seals
- Force Feed Lube
- Force Feed Lube w/Cooler

## Specific Model Selection

For specific air demands, performance data is available through **QuickPik**, a web-based blower sizing and selection software. It can be accessed 24/7 on [www.GDQuickPik.com](http://www.GDQuickPik.com) or [www.GardnerDenverProducts.com](http://www.GardnerDenverProducts.com).

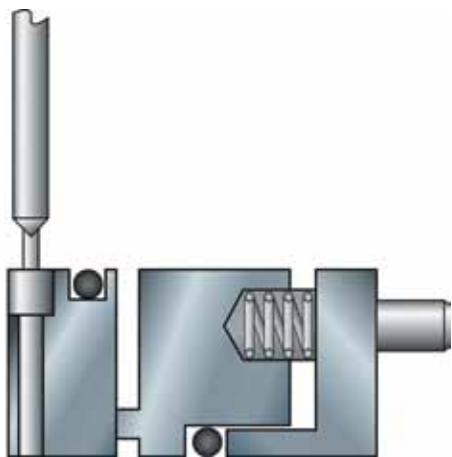
8000Q Series Map by Gear Diameter



# 8000Q Superior Features

## One-Piece Steel Shafts

- Constructed of chrome alloy
- Interference-fit through the impeller and flanged to the gear end
- Employ larger diameters to reduce torsional deflection
- Increased pressure ratings and efficiencies
- Allowing higher working loads for V-belt drives without additional bearings
- Competition utilizes bolt on shafts which transmit power through the cast rotor causing added stress loads

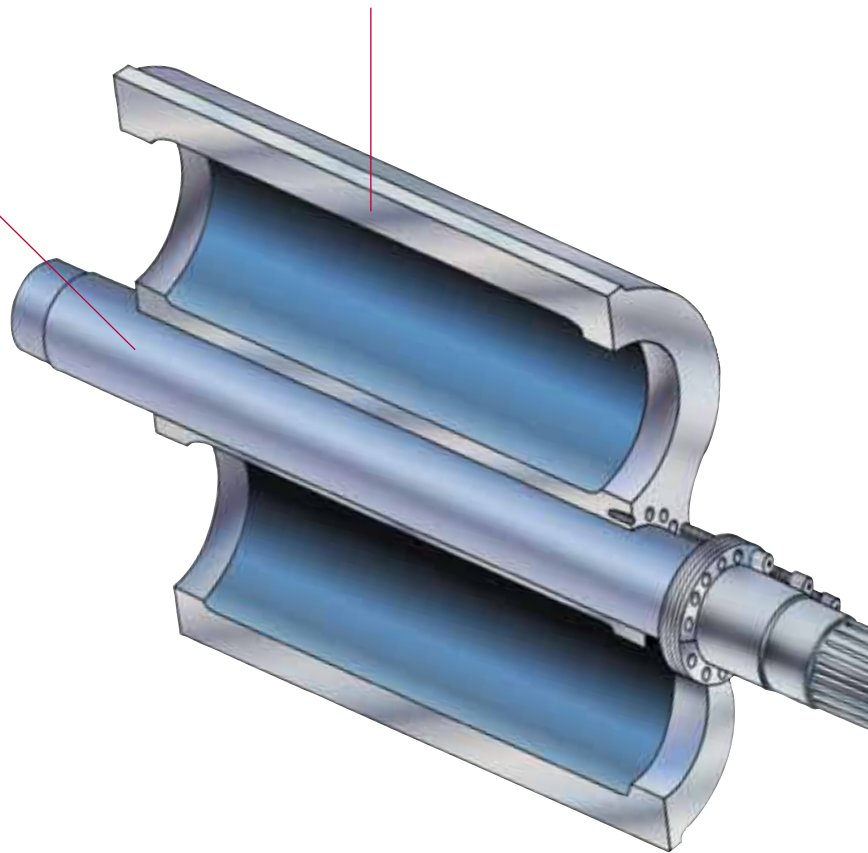


## Optional Mechanical Seals

- Prevent gas leaks
- Recommended for all gas-handling applications in pressure or vacuum

## Dynamically Balanced Impellers

- Constructed of high-density, ductile-iron
- Designed for smooth running and lower bearing loads



## Splash Lubrication

- Effective & efficient splash lubrication of all bearing and timing gears
- Optional pressure lubrication system and oil cooler (with a unidirectional, shaft-mounted pump to deliver oil to bearings and gears from a single sump)

## Heavy Duty Bearings

- Double-row, spherical roller bearings
- Contained by machine bearing cartridges to allow for easy field maintenance
- Gear end bearings fixed axially against shaft shoulder
- Controls thrust loads and maintains end clearances

## Viton Oil Seals and Labyrinth Air Seals

- Provide long life and reliable sealing at blower rated temperatures
- Optional mechanical seals

## Heat-Treated Timing Gears

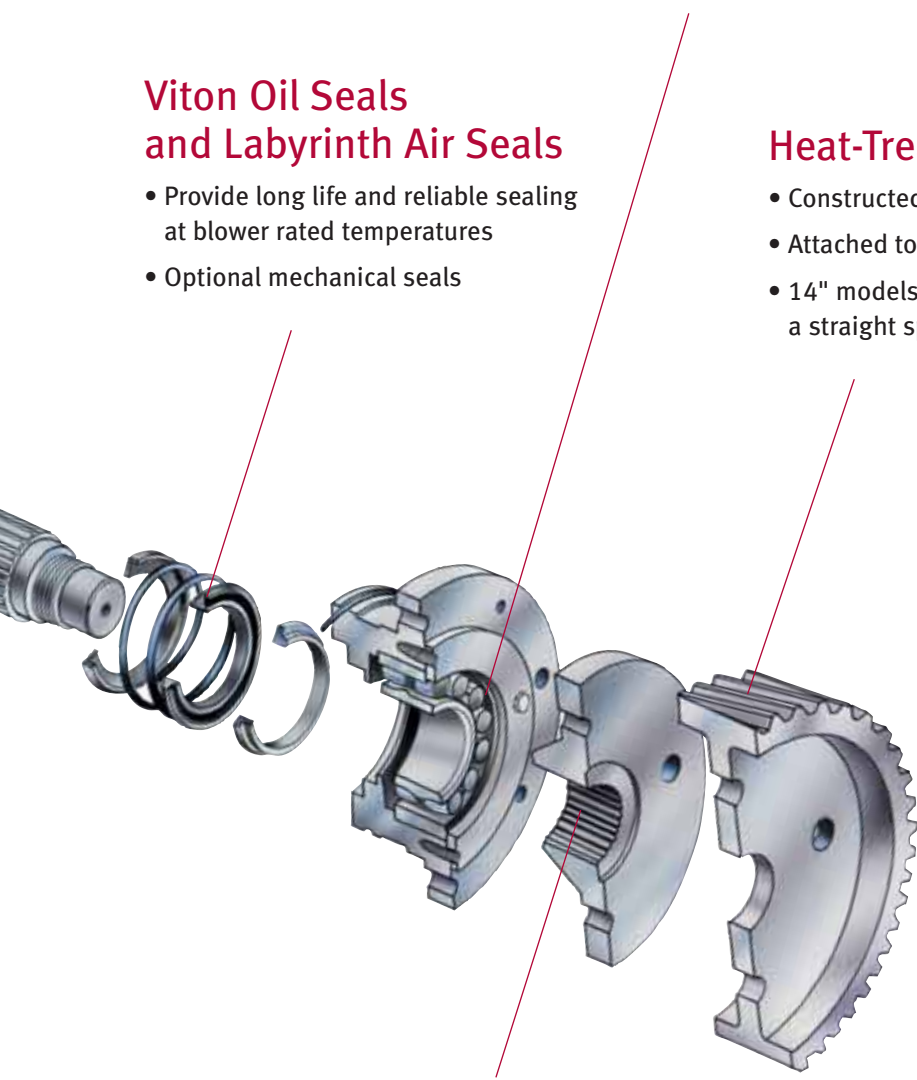
- Constructed of alloy steel
- Attached to timing hubs by high tensile strength bolts
- 14" models employ a helical gear and larger models use a straight spur gear

## Other 8000 Series Features

- High-tensile, cast-iron headplates keep all internals perfectly aligned
- Generous seal vent areas assure better sealing and longer life
- Large machined footpads offer excellent, permanent mounting surfaces
- Reinforced case design assures greater rigidity under pressure or vacuum
- Energy-saving ports with larger inlet and discharge ports allow for greater air flow and optimum air velocity

## Timing Hubs

- Accurately positioned by splines on the drive shaft
- Simplifies timing and serviceability

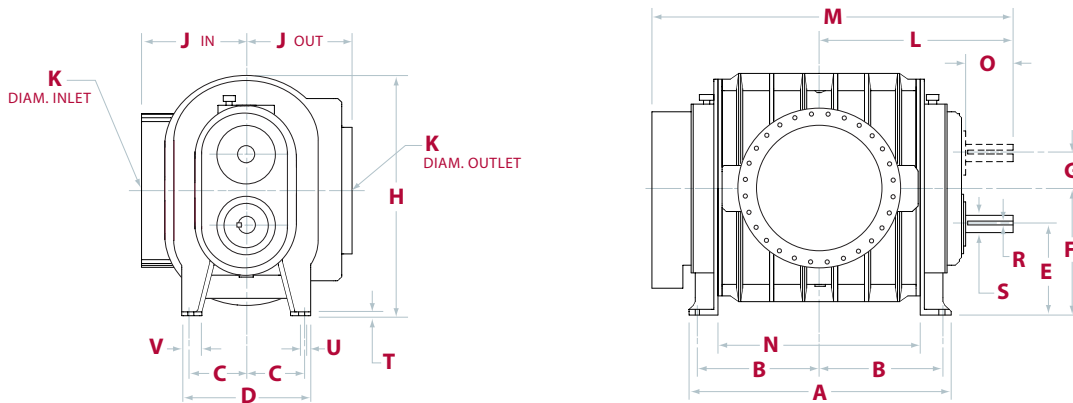


# Dimensional Data

SIZE	WT.	A	B	C	D	E	F	G	H	J <sub>In</sub>	J <sub>Out</sub>	K <sub>In</sub>	K <sub>Out</sub>	L	M	N	O	R	S	T	U	V
1421-Q	4172	31.50	14.50	11.00	26	19.00	26.00	7	48.50	19.25	19.25	16	14	29.25	54.13	21.00	9.88	0.75	3.25	1.25	0.88	4.38
1423-Q	4314	33.50	15.50	11.00	26	19.00	26.00	7	48.50	19.25	19.25	16	14	30.25	56.13	23.00	9.88	0.75	3.25	1.25	0.88	4.38
1426-Q	4695	36.50	17.00	11.00	26	19.00	26.00	7	48.50	19.25	19.25	18	16	31.75	59.12	26.00	9.88	0.75	3.25	1.25	0.88	4.38
1437-Q	5868	47.50	22.50	11.00	26	19.00	26.00	7	48.50	19.25	19.25	24	20	37.25	70.12	37.00	9.88	0.75	3.25	1.25	0.88	4.38
1442-Q	6517	52.50	25.00	11.00	26	19.00	26.00	7	48.50	19.25	19.25	24	20	39.75	75.12	42.00	9.88	0.75	3.25	1.25	0.88	4.38
1626-Q	6255	37.50	17.00	13.00	31	22.00	30.00	8	55.75	22.25	22.25	20	18	33.38	60.63	26.00	10.38	0.88	3.63	1.38	1.25	5.50
1630-Q	6636	41.50	19.00	13.00	31	22.00	30.00	8	55.75	22.25	22.25	20	18	35.38	64.63	30.00	10.38	0.88	3.63	1.38	1.25	5.50
1640-Q	8004	51.50	24.00	13.00	31	22.00	30.00	8	55.75	22.25	22.25	24	20	40.38	74.63	40.00	10.38	0.88	3.63	1.38	1.25	5.50
1648-Q	9618	59.50	28.00	13.00	31	22.00	30.00	8	55.75	22.25	22.25	30	24	44.38	82.63	48.00	10.38	0.88	3.63	1.38	1.25	5.50
1833-Q	9568	47.50	21.75	13.50	31.00	23.12	32.12	9	61.38	24.75	24.75	24	20	38.75	70.88	33.50	11.38	1.00	4.25	1.38	1.12	4.62
1845-Q	11160	59.00	27.50	13.50	31.00	23.12	32.12	9	61.38	24.75	24.75	30	24	44.50	82.38	45.00	11.38	1.00	4.25	1.38	1.12	4.62
2040-Q	11640	54.00	25.00	15.00	34.00	25.00	35.00	10	65.75	27.25	27.25	30	24	44.00	80.25	40.00	12.75	1.25	5.00	1.62	1.25	5.75
2048-Q	13125	62.00	29.00	15.00	34.00	25.00	35.00	10	65.75	27.25	27.25	30	24	48.00	88.25	48.00	12.75	1.25	5.00	1.62	1.25	5.75
2242-Q	16440	57.00	26.00	17.00	40.00	28.00	39.00	11	73.00	30.00	30.00	30	24	47.00	85.00	42.00	14.38	1.25	5.00	1.70	1.50	6.25
2254-Q	20000	69.00	32.00	17.00	40.00	28.00	39.00	11	73.00	30.00	30.00	36	30	53.00	97.00	54.00	14.38	1.25	5.00	1.70	1.50	6.25

Dimensions are in inches. Weights are in pounds and approximate.

## Vertical Model Dimensions





# Performance Data

## Sutorbilt® 8000 Series Vacuum

SIZE	DIA. INLET & OUTLET	DISPL. CU. FT./REV.	FULL RATED VACUUM	FULL RATED WET VACUUM	RPM	8" Hg		10" Hg		12" Hg		14" Hg		16" Hg	
						CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1421-Q	16/14	5.5	16	24	965	4807	101	4704	123	4595	146	4477	168	4159	191
					1250	6403	138	6300	167	6192	195	6073	223	5755	252
1423-Q	16/14	6.0	16	24	965	5251	111	5141	135	5025	159	4899	184	4581	208
					1250	6989	152	6879	183	6764	213	6637	244	6319	275
1426-Q	18/16	6.8	16	24	965	5971	126	5852	154	5727	181	5591	208	5238	236
					1250	7938	174	7819	208	7694	243	7557	278	7205	312
1437-Q	24/20	9.7	16	19	965	8590	179	8424	219	8248	258	8057	298		
					1250	11412	246	11245	296	11071	346	10879	396		
1442-Q	24/20	11.0	16	16	965	9718	204	9530	249	9331	294				
					1250	12910	282	12722	338	12524	394				
1626-Q	20/18	8.7	16	24	880	7021	151	6857	184	6686	217	6498	250	6027	282
					1100	9012	199	8848	239	8677	280	8489	320	8018	360
1630-Q	20/18	10.2	16	24	880	8147	176	7967	214	7778	251	7572	289	7082	327
					1100	10444	233	10264	279	10075	325	9869	371	9378	417
1640-Q	24/20	13.7	16	20.4	880	10936	232	10707	283	10466	333	10203	384		
					1100	14000	306	13771	368	13530	430	13268	491		
1648-Q	30/24	16.4	16	17	880	13118	276	12843	337	12554	398				
					1100	16794	362	16519	436	16230	511				
1833-Q	24/20	14.5	16	24	1000	13275	290	13075	348	12860	406				
1845-Q	30/24	19.4	16	20.4	1000	17900	387	17620	465	17359	544				
2040-Q	30/24	21.3	16	24	900	17950	379	17730	456	17537	534				
2048-Q	30/24	25.6	16	21.2	900	21550	446	21350	541	21093	635				
2242-Q	30/24	27.0	16	24	800	20225	433	20003	520	19770	608				
2254-Q	36/30	34.9	16	20.7	800	26175	549	25900	663	25611	776				

## Sutorbilt® 8000 Series Pressure

SIZE	DIA. INLET & OUTLET	DISPL. CU. FT./REV.	FULL RATED PRESSURE	RPM	6 PSIG		8 PSIG		10 PSIG		12 PSIG		15 PSIG		18 PSIG	
					CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1421-Q	16/14	5.5	16.7	965	4773	153	4676	200	4590	247	4512	294	4407	365		
				1250	6369	208	6272	269	6186	330	6108	391	6003	483		
1423-Q	16/14	6.0	15.2	965	5215	167	5111	219	5019	270	4936	321	4824	398		
				1250	6953	228	6849	295	6758	361	6675	428	6563	528		
1426-Q	18/16	6.8	13.5	965	5932	190	5820	249	5721	307	5631	365				
				1250	7899	261	7786	336	7687	412	7598	487				
1437-Q	24/20	9.7	9.5	965	8536	271	8378	355								
				1250	11357	370	11200	478								
1442-Q	24/20	11.0	8.3	965	9656	309	9478	403								
				1250	12848	423	12670	545								
1626-Q	20/18	8.7	15.4	880	6967	229	6013	298	6677	367	6554	437	6388	541		
				1100	8958	300	8804	387	8668	473	8545	560	8379	690		
1630-Q	20/18	10.2	13.3	880	8088	266	7918	346	7768	426	7633	506				
				1100	10385	350	10215	450	10065	550	9930	651				
1640-Q	24/20	13.7	10.0	880	10860	351	10644	458	10453	565						
				1100	13925	460	13709	594	13518	728						
1648-Q	30/24	16.4	8.3	880	13028	417	12768	545								
				1100	16704	544	16444	705								
1833-Q	24/20	14.5	13.4	1000	13175	434	13015	562	12850	688	12700	814				
1845-Q	30/24	19.4	10.0	1000	17816	582	17566	752	17345	921						
2040-Q	30/24	21.3	12.5	900	17890	571	17697	738	17526	905	17372	1072				
2048-Q	30/24	25.6	10.4	900	21517	674	21285	875	21080	1076						
2242-Q	30/24	27.0	13.1	800	20160	651	19950	840	19750	1029	19580	1218				
2254-Q	36/30	34.9	10.2	800	26117	828	25839	1071	25595	1315						

Performance based on inlet air at standard temperature of 68° F, an ambient pressure of 14.7 psia and 36% relative humidity. For performance at non-standard conditions, contact your authorized Gardner Denver representative.

**Protect your Gardner Denver investment with AEON® PD, the only lubricant specially formulated for all blowers in any environment**

- 100% synthetic for matchless service life
- Retains its superior lubricating properties a minimum of four times longer than a premium grade mineral oil at most operating conditions
- Eliminates seasonal oil viscosity grade changes
- Superior lubrication in severe, high temperature applications
- Available from your local authorized Gardner Denver distributor in convenient sizes to meet your needs
- Food grade lubricant available



**Retain your 8000Q advantage with genuine Gardner Denver replacement parts**

- Gardner Denver guarantees to supply the proper parts for your specific blower every time. Replacement parts incorporate the most recent design upgrades.
- All parts meet Gardner Denver 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.




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[www.GardnerDenverProducts.com](http://www.GardnerDenverProducts.com)

Gardner Denver, Inc. 1800 Gardner Expressway, Quincy, IL 62305  
[www.contactgd.com/blowers](http://www.contactgd.com/blowers)  
866-428-4890



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