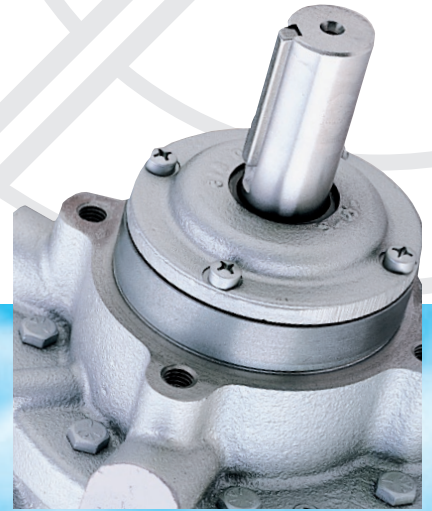
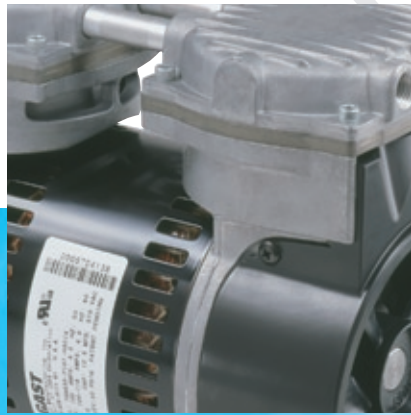


# excellence in air technology



## full line overview



# full line overview



World headquarters Benton Harbor, Michigan, USA



Asian sales office, Gast, Hong Kong



Manufacturing facility Benton Harbor, Michigan, USA



European headquarters and manufacturing facility, Noerresundby, Denmark

## Worldwide excellence in air technology

### - dedicated to the success of your pneumatic applications

Since its founding in 1921, Gast Manufacturing Incorporated has developed into a worldwide leader in the design and manufacture of air-moving products. We offer cost-effective solutions to pneumatic problems for both OEM and end-users. Currently we produce over 100 basic models of quality pneumatic pumps designed and built to meet the changing needs of industry.

Our success has come from a dedication to quality products,

innovation, and service - commitments through which we pledge to continue to maintain a leadership position.

#### **Mission statement**

We will provide the best pneumatic solutions to our customers and markets.

We will respond to customers and market needs quickly, deliver quality products on time at fair prices, and support them with prompt, reliable

service to make Gast products the best value in the marketplace. Currently, we have sales and technical service centers in 76 countries worldwide, and we maintain technical service offices throughout the U.S., Canada, Europe, and the Far East.

Gast Manufacturing Inc., A Unit of IDEX Corporation,  
Benton Harbor, MI USA • ph 269-926-6171 • fx 269-925-8288  
www.gastmfg.com  
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**Products for almost any application – worldwide**

We offer an extensive and versatile line of air-moving products, including vacuum pumps, compressors, air motors, gearmotors, vacuum generators, and regenerative blowers. We design and build these components for original equipment manufacturers worldwide.

To ensure fast, efficient delivery of products, Gast has a vast network of representatives/distributors throughout the United States and the world. Plus, we maintain a manufacturing and service facility in Denmark to serve the European Community, sales offices in England, The Netherlands, France, Sweden, Hong Kong and Shanghai, China, and Certified Service Centers® throughout the world.

**Unparalleled design expertise**

Unlike other manufacturers, who might expect you to modify your pneumatic system to fit their available product(s), Gast is committed to finding the right product to meet your specific needs. Chances are excellent we'll have a

high-quality, off-the-shelf product to fit your existing application or meet your anticipated needs. If not, we'll propose customized cost-effective design options that will serve your special requirements.

Our experienced Research and Development engineers and Product engineers work together to analyse the customers' needs and use computer-aided design to generate timely solutions to their air-handling problems. The design team has one goal: to create problem-solving products that capitalize on the latest available technology, meet all application requirements, and benefit from cost-effective production methods.

The end result: products that are the best value in the marketplace for our customers.

**A lasting commitment to quality**

We invest heavily in both equipment and people to maintain the consistent quality for which our products are known worldwide – and we have done so since day one.

As early as 1983, we implemented a total quality process designed to ensure the quality of our products.

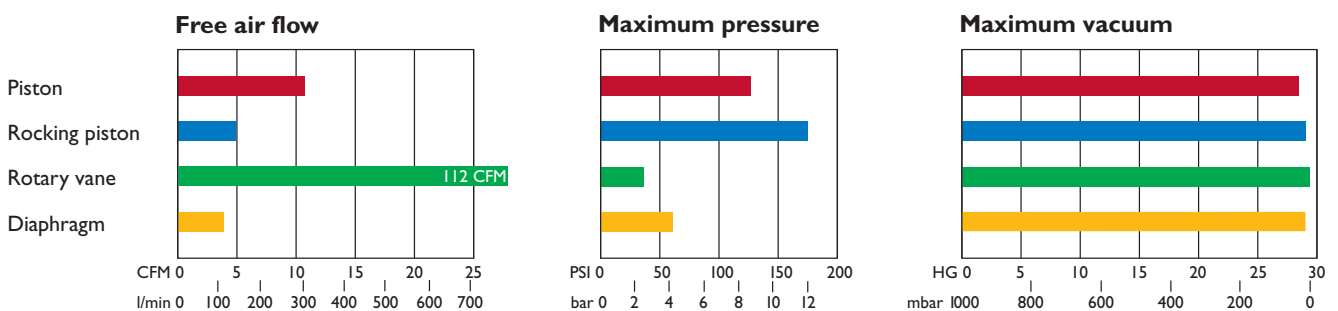
In keeping with that tradition, Gast has achieved ISO 9001 and 14001 certification, thus becoming a member of an elite group of the manufacturing companies of the world receiving that certification, the international symbol of world-class excellence. ISO 9001 and 14001 is the most stringent of the three ISO quality standards.

**European Community directives CE**

Given its international perspective, Gast has pledged to conform to the European Community directives. These directives contain essential requirements concerning health, safety, environment, and consumer protection for all products targeted for the European Community market.

Currently, all Gast products available for sale in the European Community are in compliance with the Machinery, Low Voltage, and Electromagnetic Compatibility Directives.

**Compressors and vacuum pumps performance overview\***



\* Shown here are performance ranges of our positive displacement models. Review sections inside for performance of our regenerative blowers, vacuum generators, and air motors/gearmotors.  
 Note: Performance shown on inside charts is for continuous operation. Higher performance is possible on an intermittent basis (10 min. on/10 min. off) for some of the models listed. Consult Gast.



# rotary vane

## Performance

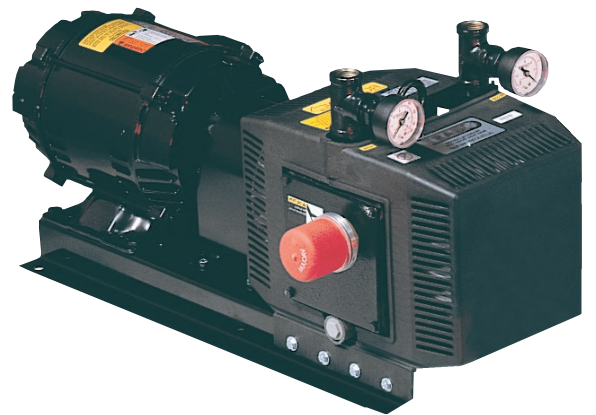
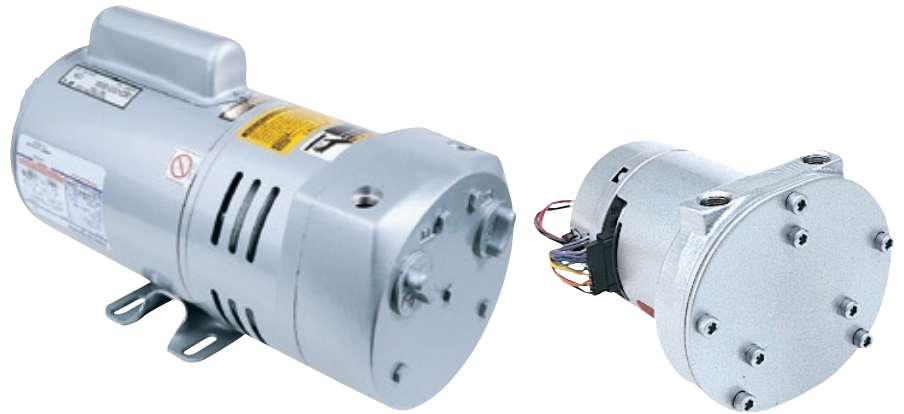
- Pressure to 1.7 bar (25 psi)
- Vacuum to 65 mbar (28" Hg)
- Air flow to 3171 l/min (112 cfm)

## Features

- Oil-less or lubricated models
- Easy serviceability
- Low vibration
- Pulse-free air delivery
- Extra quiet AT Series
- Long, service-free life

## Typical applications

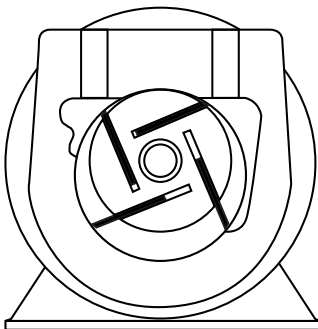
- Breathing air supply
- Circulation therapy
- Packaging
- Graphic arts
- Pond aeration
- Vacuum hold-down
- Air sampling
- Office/business machines
- Food processing equipment
- Laboratory use
- Soil sparging
- Vacuum forming
- Air bearings



## Air compressors - Vacuum pumps

Gast rotary vane air compressors and vacuum pumps are used in thousands of applications worldwide. Available in oil-less, lubricated, motor-mounted, and separate drive styles, they offer a wide choice of capabilities including air flow from 8.2 to 3171 l/min (0.29 to 112 cfm), vacuum up to 65 mbar (28" Hg), and pressure up to 1.7 bar (25 psi), also available are dual function styles. Electric motors are dual frequency, multi-voltage AC for worldwide applications, with smallest models rated 12 and 24 Volt DC. Horsepowers range from 1/45 to 15 HP (0.02 to 11 kW). AT Series sound level is up to 8 dB(A) below 23 series quiet sound level.

A complete line of recommended accessories is also available.



Sliding, flat vanes in an eccentric-mounted rotor are flung outward against the bore of the pump to generate pressure and vacuum in a rotary vane pump.



# specifications

Model/Series	Power rating @ 50Hz		Power rating @ 60Hz		Free air flow				Maximum pressure		Maximum vacuum	
	hp	kW	hp	kW	l/min		cfm		bar	psi	mbar	”Hg
					50Hz	60Hz	50Hz	60Hz				
<b>Motor mounted</b>												
I531 24V BLDC	-	-	1/10	0.07	48		1.7		0.7	10	167	25
I531	0.08	0.06	1/10	0.07	35	42	1.25	1.5	1.0	15	335	20
O532	0.05	0.04	1/15	0.05	8.2	17	0.29	0.6	1.0	15	335	20
I032	0.07	0.05	1/15	0.05	26	32	0.92	1.1	0.7	10	335	20
I532	0.08	0.06	1/10	0.07	37	42	1.3	1.5	0.7	10	335	20
2032	0.115	0.09	1/8	0.09	57	68	2.0	2.4	0.7	10	133	26
3032	0.032	0.02	1/6	0.12	68	73	2.4	2.6	0.7	10	116	26.5
O211	0.16	0.12	1/6	0.12	32	37	1.1	1.3	1.4	20	335	20
O323-1423 (5 models)	0.2-0.8	0.15-0.6	1/4-1	0.19-0.56	77-325	90-367	2.7-11.5	3.2-13	0.7	10	116	26.5
AT Series	0.13	0.10	1/6	0.12	-	-	3.8-4.8	6.5-8.2	0.4	5	150	24
2070	1.6	1.19	2	1.5	450	567	16	20	1.0	15	167	25
<b>Separate drive</b>												
O533	0.05	0.04	1/15	0.05	14	17	0.5	0.6	1.0	15	335	20
I033	0.07	0.05	1/10	0.07	26	32	0.9	1.1	1.0	15	335	20
I034	0.07	0.05	0.18	0.13	-	45	-	1.6	0.7	10	335	20
I534	0.08	0.06	0.18	0.13	-	62	-	2.2	0.7	10	335	20
O240-0740	0.085-0.29	0.06-0.21	1/4-1/3	0.19-0.25	42-138	53-170	1.5-4.9	1.9-6.0	0.7	10	335	20
O465	0.41	0.31	1/4	0.19	97	113	3.4	4.0	-	-	65	28
O765	0.39	0.29	1/3	0.25	142	170	5.0	6.0	-	-	65	28
I550	0.82	0.61	3/4	0.56	325	412	11.5	14.5	1.0	15	335	20
I065-2565	1.22-2.0	0.90-1.49	0.5-1.5	0.37-1.1	200-467	240-595	7.3-16.5	8.5-21	1.7	25	65	28
2067-2567	1.6-1.8	1.19-1.34	1-1.5	0.75-1.1	400-483	483-595	14-17	17-21	1.0	15	65	28
2080-4080	1.6-4.0	1.19-2.98	2-5	1.5-3.7	567-1050	707-1274	20-37	25-45	1.0	15	167	25
3040	3.0	2.24	2	1.5	877	1133	31	40	0.7	10	335	20
4565	4.5	3.36	3	2.2	1017	1345	36	47.5	1.0	15	167	25
5565	4.6	3.43	3	2.2	1274	1558	45	55	-	-	335	20
6066	5.2	3.88	5	3.7	1274	1558	45	55	1.0	15*	167	25
I290	9.6	7.16	10	7.5	-	3171	-	112	1.4	20	-	-
I290	10.4	7.76	7.5	5.6	-	3171	-	112	-	-	167	25

# diaphragm/miniature plastic

## Performance

- Pressure to 4.2 bar (60 psi)
- Vacuum to 31 mbar (29" Hg)
- Air flow to 108 l/min (3.8 cfm)

## Features

- Oil-less
- Rugged construction
- Quiet
- Cooler air output
- Easy maintenance
- Compact, lightweight
- Corrosion resistant
- Low power consumption

## Typical applications

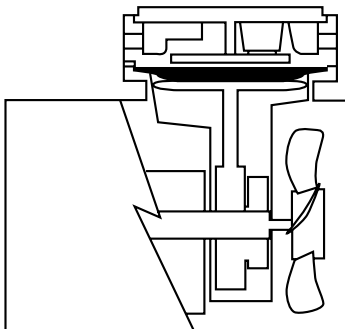
- Blood analysis
- Respirators/nebulizers
- Vacuum pad hold-down
- Dental/surgical
- Automobile cruise controls
- Graphic arts equipment
- Air and gas analysis
- Breast pumps
- Sterilizers
- Air brushes
- Agricultural foam markers
- Oil atomizers
- Lab equipment



## Air compressors - Vacuum pumps

If you need a small, quiet source of vacuum or pressure, you'll find the unit for your application in the Gast line of oil-less diaphragm air compressors and vacuum pumps, which come in standard, twin, and miniature styles. Plastic component construction on the miniature pumps makes them especially compact and lightweight - ideal for light-duty applications. Air flow capabilities for the entire line range from 0.65 up to 108 l/min, vacuum up to 31 mbar (29 in. Hg), and pressure up to 4.2 bar (60 psi). Electric motors are available in dual frequency, shaded pole, and permanent split capacitor (psc) versions as well as AC multi voltages for worldwide applications, plus 4-24 Volt DC options on the miniature styles. Horsepowers range from 1/16 to 1/2 HP (0.05 to 0.37 kW) on the standard size models.

A full line of recommended accessories are also available.



In reciprocating motion, with a short stroke, the diaphragm at the top of the connecting rod flexes up and down in a closed chamber, creating pressure or vacuum.



# specifications

## Standard diaphragm models

Model/Series	Power rating @ 50Hz		Power rating @ 60Hz		Free air flow				Maximum pressure		Maximum vacuum	
	hp	kW	hp	kW	l/min		cfm		bar	psi	mbar	"Hg
					50Hz	60Hz	50Hz	60Hz				
MOA (AC/DC)	0.1	0.07	1/8	0.09	18	23	0.65	0.80	3.5	50	200	24
MAA (AC)	0.1	0.07	1/8	0.09	40	45	1.40	1.58	3.5	50	48	28.5
DOA (AC/DC)	0.26	0.19	1/3	0.25	44	54	1.55	1.90	4.2	60	150	25.5
DAA (AC)	0.4	0.30	1/2	0.37	92	108	3.25	3.80	4.2	60	31	29

## Miniature plastic models

Model/Series	Power rating @ 50Hz		Power rating @ 60Hz		Free air flow		Maximum pressure		Maximum vacuum	
	hp	kW	hp	kW	50Hz	60Hz	bar	psi	mbar	"Hg
2D (DC)	-	-	-	-	0.65 l/min		0.38	5.5	641	11
3D (DC)	-	-	-	-	1.18 l/min		0.49	7.1	631	11.3
5D (DC)	-	-	-	-	1.5 l/min		0.76	11	573	13
5D (DC) Twin	-	-	-	-	1.6-2.6 l/min		0.34	5	268	22
10D (AC)	-	-	-	-	-	3.8 l/min	1.0	15	505	15
10D (DC)	-	-	-	-	4.3 l/min		1.0	15	526	14
15D (AC)	-	-	-	-	5.2 l/min	7.0 l/min	1.9	24	335	20
15D (DC)	-	-	-	-	7.0 l/min		2.0	20	335	20
15D (DC) Twin	-	-	-	-	6-13 l/min		1.9	25	99	25
22D (AC)	0.04	0.03	1/20	0.04	-	0.7 / 1.2 m <sup>3</sup> /h	1.7	25	234	23
22D (DC)	-	-	1/8	0.09	1.3 cfm / 2.2 m <sup>3</sup> /h		1.7	25	251	22.5

# piston

## Performance

- Pressure to 8.8 bar (125 psi)
- Vacuum to 48 mbar (28.5" Hg)
- Air flow to 311 l/min (11 cfm)

## Features

- Oil-less
- Rugged construction
- Long service-free life
- Corrosion resistant

## Typical applications

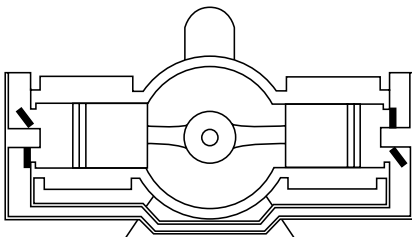
- Cable pressurization
- Tire inflators
- Air suspension
- Beverage dispensing
- Pneumatic temperature controls
- Door closures
- Power spraying
- Spray painting
- Medical/dental clinics



## Air compressors - Vacuum pumps

Gast piston air compressors and vacuum pumps are built to withstand the most rugged operating conditions with corrosion-resistant materials used for critical internal parts. Ring design provides consistent flows throughout the service life of the unit. All models are oil-less and come in motor-mounted or separate drive styles. Air flow capacities range from 37 to 311 l/min (1.3 to 11 cfm), with vacuum to 48 mbar (28.5" Hg) and pressure to 8.8 bar (125 psi). Dual frequency, AC multi-voltage electric motors accommodate worldwide applications; 12 and 24 Volt DC options are also available. Horsepowers range from 1/6 to 2 HP (0.12 to 1.5 kW).

A complete line of recommended accessories is also available.



In reciprocating motion, the piston moves up and down or back and forth inside a cylinder creating pressure or vacuum.



# specifications

Model/Series	Power rating @ 50Hz		Power rating @ 60Hz		Free air flow				Maximum pressure		Maximum vacuum	
	hp	kW	hp	kW	l/min		cfm		bar	psi	mbar	”Hg
					50Hz	60Hz	50Hz	60Hz				
1L	0.128	0.1	1/6	0.12	42	42	1.5	1.5	3.5	50	-	-
2L	0.2	0.15	1/4	0.19	68	68	2.4	2.4	3.5	50	-	-
3L	0.26	0.2	1/3	0.25	88	88	3.1	3.1	3.5	50	-	-
4L	0.4	0.3	1/2	0.37	127	127	4.5	4.5	3.5	50	-	-
5L	0.6	0.45	3/4	0.56	153	153	5.4	5.4	3.5	50	-	-
6L	0.8	0.6	1	0.74	178	178	6.3	6.3	3.5	50	-	-
7L	1.2-1.6	0.89-1.19	1.5-2	1.1-1.5	289	289	10.2	10.2	3.5	50	-	-
8L	1.6	1.19	2	1.5	258	351	9.1	12.4	3.5	50	-	-
1H	0.128	0.1	1/6	0.12	37	37	1.3	1.3	7.0	100	-	-
2H	0.2	0.15	1/4	0.19	59	59	2.1	2.1	7.0	100	-	-
3H	0.26	0.2	1/3	0.25	68	68	2.4	2.4	7.0	100	-	-
4H	0.4	0.3	1/2	0.37	99	99	3.5	3.5	7.0	100	-	-
5H	0.6	0.45	3/4	0.56	133	133	4.7	4.7	7.0	100	-	-
6H	0.8	0.6	1	0.74	153	153	5.4	5.4	7.0	100	-	-
7H	1.2-1.6	0.89-1.19	1.5-2	1.1-1.5	258	258	9.1	9.1	7.0	100	-	-
8H	1.6	1.19	2	1.5	311	311	11	11	7.0	100	-	-
•PAB	-	-	0.3	0.22	37		1.3		7.0	100	-	-
•PBB	-	-	0.6	0.45	71		2.5		7.0	100	-	-
•PCA	-	-	1.7	1.27	173		6.1		8.8	125	-	-
•PCD	-	-	1.1	0.82	133		4.7		7.0	100	-	-
IVAF	-	-	1/6	0.12	42	51	1.49	1.80	-	-	82	27.5
IVSF	-	-	1/6	0.12	71	85	2.49	3.00	-	-	48	28.5
IVBF	-	-	1/6	0.12	75	91	2.66	3.20	-	-	82	27.5
4VSF	-	-	1/2	0.37	96	119	3.38	4.2	-	-	48	28.5
4VCF	-	-	1/2	0.37	118	142	4.15	5.00	-	-	82	27.5
5VSF	-	-	1.5	1.1	147	177	5.19	6.25	-	-	48	28.5
5VDF	-	-	1.5	1.1	247	297	8.72	10.50	-	-	82	27.5
•VAB	-	-	0.13	0.10	37		1.3		-	-	82	27.5
•VBB	-	-	0.21	0.16	71		2.5		-	-	82	27.5
•VCD	-	-	0.26	0.19	136		4.8		-	-	82	27.5

• Separate drive model

# rocking piston

## Performance

- Pressure to 12 bar (175 psi)
- Vacuum to 31 mbar (29" Hg)
- Air flow to 155.7 l/min (5.5 cfm)

## Features

- Quiet
- Oil-less
- Durable
- Lightweight
- Rugged construction
- Field service capability
- Corrosion resistant models available

## Typical applications

- Oxygen concentrators
- Beverage dispensing
- Body fluid analysis
- Automotive suspension
- Dental vacuum ovens
- Vacuum frames
- Core drilling

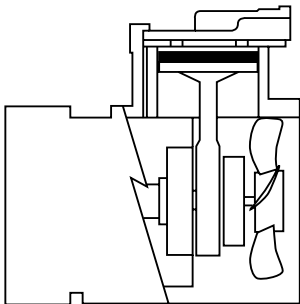


## Air compressors - Vacuum pumps

The outstanding performance and flexibility of Gast oil-less rocking piston air compressors and vacuum pumps, available in standard, twin, and miniature styles, make them the perfect choice for hundreds of applications.

Air flow capabilities from 3.2 to 155.7 l/min (0.11 to 5.5 cfm) are available as are vacuum capabilities up to 31 mbar (29" Hg) and pressure to 12 bar (175 psi). Choose from dual frequency, shaded pole, and permanent split capacitor (psc) electric motors with AC multi-voltages available for worldwide applications as well as 6, 12, and 24 Volt DC models in brush and brushless types. Horsepowers range from 1/20 to 1/2 HP (0.04 to 0.37 kW).

A complete line of recommended accessories is also available.



Another reciprocating concept mounts a flexible cup at the top of the connecting rod and creates vacuum or pressure as the cup maintains a seal against the cylinder walls in a rocking motion.



# specifications

Model/Series	Power rating @ 50Hz		Power rating @ 60Hz		Free air flow				Maximum pressure		Maximum vacuum	
	hp	kW	hp	kW	l/min		cfm		bar	psi	mbar	”Hg
					50Hz	60Hz	50Hz	60Hz				
8R (DC)	-	-	-	-	3.4		0.12		1.55	22.5	438	17
8R (AC)	0.02	0.02	-	-	-	3.2	-	0.11	1.4	21	471	16
20R (AC)	0.024	0.02	0.03	0.02	12.0	14.7	0.42	0.52	-	31	-	-
30R (DC)	0.07	0.05	1/15	0.05	13.6		0.48		8.3	120	-	-
55R (PSC•)	0.04	0.03	1/20	0.04	4.5	5.7	0.16	0.20	2.1	30	200	24
55R (DC)	0.08	0.06	1/10	0.07	7.1		0.25		2.1	30	200	24
34R (DC)	0.25	0.18	1/4	0.18	28.3		0.8		13.7	200	-	-
LOA (ShP••)	0.05	0.04	1/16	0.05	-	10.8	-	0.38	6.2	90	167	25
LOA (PSC•)	0.13	0.10	1/6	0.12	14.7	18.1	0.52	0.64	7.0	100	133	26
LOA (DC)	0.08	0.06	1/10	0.07	17.6		0.62		7.0	100	99	27
LAA	0.10	0.07	1/6	0.12	36.2	43.0	1.28	1.52	3.5	50	31	29
SOA	0.13	0.10	1/6	0.12	39.6	48.1	1.4	1.7	2.1	30	82	27.5
SAA	0.13	0.10	1/6	0.12	-	49.6	-	1.75	-	-	15	29.5
SAA	0.13	0.10	1/6	0.12	-	93.4	-	3.30	-	-	99	27
SAA	0.13	0.10	1/6	0.12	-	55.2	-	1.95	2.1	30	-	-
ROA (ShP••)	0.10	0.07	1/8	0.09	29.7	35.4	1.05	1.25	7.0	100	133	26
ROA (PSC•)	0.20	0.15	1/4	0.19	42.5	45.3	1.50	1.60	7.0	100	99	27
ROA (DC)	0.10	0.07	1/8	0.09	42.5		1.50		-	-	133	26
RAA	0.20	0.15	1/4	0.19	70.8	76.5	2.5	2.7	7.0	100	82	27.5
71R/72R (1 cyl.)	0.26	0.20	1/3	0.25	59.5	68.0	2.1	2.4	7.0	100	-	-
71R/72R (2 cyl.)	0.26	0.20	1/3	0.25	155.7		5.5		1.7	25	31	29
71R (2 cyl.)	0.40	0.30	1/2	0.37	48.1	56.6	1.7	2.0	12	175	-	-
74R	0.20	0.15	1/4	0.19	36.8	42.5	1.3	1.5	7.0	100	-	-
75R	0.26	0.20	1/3	0.25	127.4	144.4	4.5	5.1	2.8	40	99	27
82R	0.26	0.20	1/3	0.25	127.4	144.4	4.5	5.1	2.8	40	99	27

• PSC - Permanent Split Capacitor motor  
 ••ShP - Shared Pole motor

# regenerative blowers

## Performance

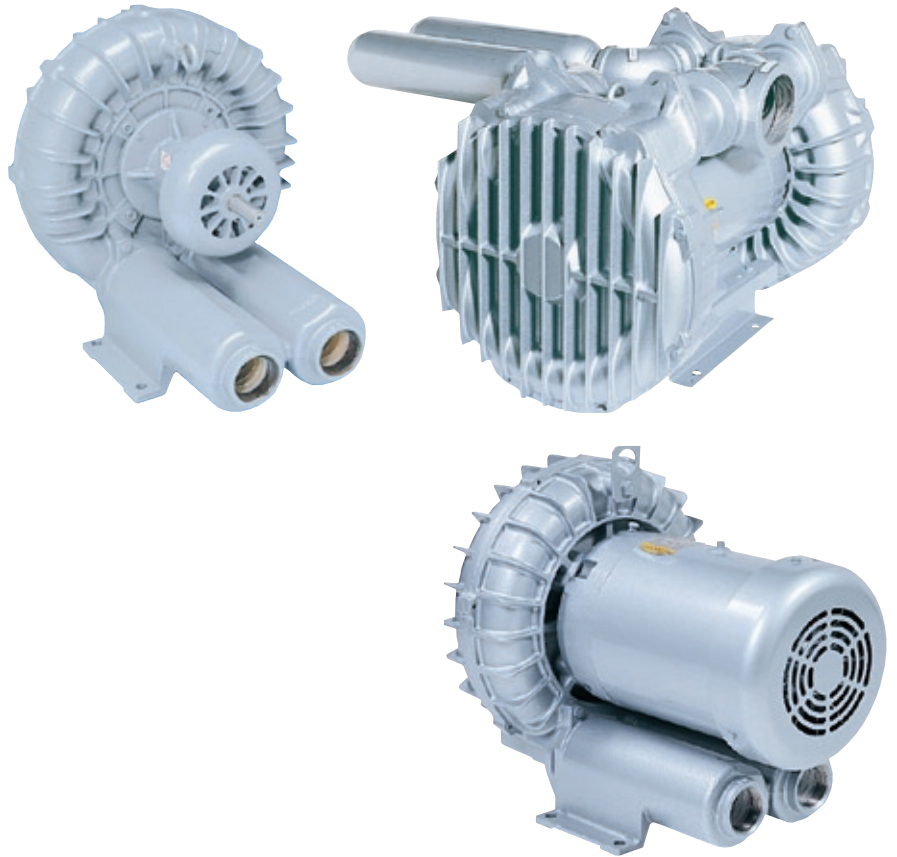
- Pressure to 707 mbar (10.25 psi/284" H<sub>2</sub>O)
- Vacuum to 457 mbar (13.5" Hg/184" H<sub>2</sub>O)
- Air flow to 2294 m<sup>3</sup>/h (1350 cfm)

## Features

- Oil-less
- Mount in any position
- Maintenance-free
- Continuous, non-pulsating air flow

## Typical applications

- Air tables
- Solution and media agitation
- Vacuum hold-down and pickup
- Air blow-off
- Soil and ground water remediation
- Carton forming and packaging
- Lab filtration
- Sewage aeration
- Materials handling
- Aquaculture
- Pneumatic conveying

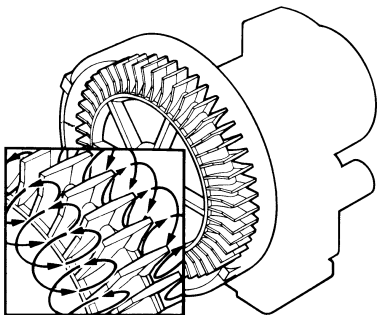


## Air compressors - Vacuum pumps

The Gast full line of regenerative blowers for high volume vacuum or compressed air applications offers both motor-mounted and separate drive models. Air flow capabilities range from 39 to 2294 l/min (23 to 1350 cfm), vacuum capabilities up to 457 mbar (13.5" Hg/184" H<sub>2</sub>O), and pressure capabilities up to 707 mbar (10.25 psi/284" H<sub>2</sub>O). TEFC electric motors are UL and CSA certified on several models (see chart) and come in single and three-phase, dual frequency, and multi-voltage versions for worldwide applications; 12 Volt DC is available on the smallest model. Horsepowers range from 1/8 to 30 HP (0.09 to 22.4 kW).

Special models with explosion-proof motors, 1/3 to 10 HP, are designed for soil vapor extraction applications. Consult distributor or factory for special literature (F2-12) – these models are not shown on chart.

A complete line of recommended accessories is also available.



A certain amount of air slips past each impeller blade during rotation and returns to the base of a succeeding blade for reacceleration – "regenerative."



# specifications

Model/Series	Power rating @ 50Hz		Power rating @ 60Hz		Free air flow				Maximum pressure				Maximum vacuum			
	hp	kW	hp	kW	m <sup>3</sup> /h		cfm		mbar		"H <sub>2</sub> O		mbar <sup>o</sup>		"H <sub>2</sub> O	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
R1*	0.1	0.08	1/8	0.09	39	46	23	27	52	71	21	28.5	50	66	20	26.5
R2*	0.26-0.4	0.19-0.29	1/3-1/2	0.25-0.37	56	71	33	42	75	97	30	39	62	87	25	35
R3*	0.4	0.32	1/2	0.37	73	88-90	43	52-53	77-100	107-137	35-78	43-55	70-87	100-125	28-35	40-50
R4*	0.8	0.64	1	0.75	126	156	74	92	95	130	38	52	85	120	34	48
R4P*	1.2	0.96	1.5	1.1	187	216	110	127	117-125	157-162	47-50	63-65	107-112	147-149	43-45	59-60
R4H*	4.8	3.84	6	4.5	182	218	107	128	690	707	277	284	457	457	184	184
R5*	2.0	1.6	2.5	1.86	226	272	133	160	125	162	50	65	117	149	47	60
R6*	2.0-4.0	1.49-2.98	2.5-5	1.86-3.73	306	365	180	215	87-194	100-262	35-78	40-105	112-174	112-219	45-70	45-88
R4M*	7.2	5.76	9	6.7	369	428	217	252	374	423	150	170	311	339	125	136
R6PS*	8.8	7.04	11	8.2	365	450	215	265	361	423	145	170	274	324	110	130
R6P*	4.4	3.52	5.5	4.1	399-416	476-493	235-245	280-290	125-212	75-274	50-85	30-110	149-174	87-224	60-70	35-90
R7*	8	6.4	10	7.46	595	714	350	420	286	249-311	115	100-125	224	237-274	90	95-110
R7S*	14.4	11.52	18	13.4	595	714	350	420	423	498	170	200	324	374	130	150
R6PP*	8.8	7.04	11	8.2	688	824	405	485	187	237	75	95	162	199	65	80
R7P*	14.4	11.52	18	13.4	1132	1351	666	795	224	262	90	105	212	237	85	95
R9*	12	9.6	15	11.3	994	1155	585	680	311	311	125	125	262	286	105	115
R9S*	24	19.2	30	22.4	921	1121	542	660	518	551	208	221	357	374	143	150
R9P*	24	19.2	30	22.4	1937	2294	1140	1350	274	311	110	125	249	274	100	110
SDR4•	3.2	2.56	4	3.0	250		147		274		110		224		90	
SDR5•	8	6.4	10	7.5	408		240		379		152		299		120	
SDR6•	12	9.6	15	11.2	510		300		406		163		336		135	
SDR6P•	12	9.6	15	11.2	612		360		374		150		336		135	

• Separate Drive (motor less) models

\* Our AC blower motors are UL & CSA approved

# air motors/gearmotors

## Performance

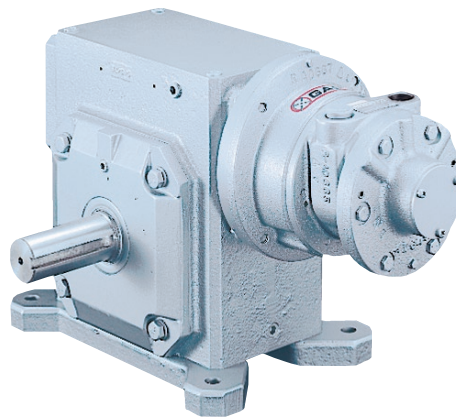
- Up to 9.5 HP (7.1 kW)
- Variable speeds to 10,000 rpm
- Gearmotor maximum torque to 5200 lb. in. (587 Nm)

## Features

- Variable speed
- Non-electrical sparking
- Cool running
- Compact and portable
- Operate in all positions
- Mounting flexibility
- Will not burn out

## Typical applications

- Mixing equipment
- Conveyor drives
- Pump drives
- Food packaging
- Pharmaceutical packaging
- Hoists and winches
- Hose reels
- Fiberglass choppers
- Tension devices
- Turntables

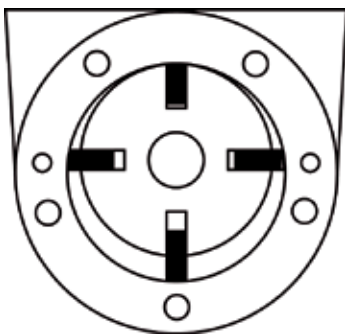


Known industry wide for their rugged construction and reliability, Gast air motors and air powered gearmotors are available in lubricated or non-lubricated models.

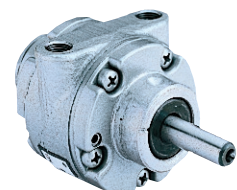
Lubricated air motors come in seven basic models up to 9.5 HP (7.1 kW); motor speeds are variable from 300 to 10,000 RPM. Non-lubricated versions, which require absolutely no lubrication, come in three basic models ranging from 0.18 to 0.82 HP (0.13 to 0.61 kW) and with motor speeds up to 4,000 RPM. Choose from hub, foot, face, NEMA C-Flange, or Metric D Series interface mountings and clockwise, counter-clockwise, or reversible rotations; four and eight vane models are also available.

Air powered gearmotors are available in right-angle and in-line models offering a maximum torque range of 73 to 5,200 lb. in. (8 to 587 Nm) and gear ratios from 10:1 to 60:1 single reduction gear reducers.

A full line of recommended accessories is also available.



Compressed air into an air motor forces the sliding vanes out of the eccentric-mounted rotor. An extended shaft on the rotor spins to perform the work.



# specifications

## Air motors

Model	Operating data							Maximum torque		
	Max. speed	Output power		Torque		Max. air consumption		Max. speed		
	rpm	hp	kW	lb. in.	Nm	l/min	cfm	rpm	lb. in.	Nm
1AM(A)*	10.000	0.45	0.33	2.75	0.31	580	20.5	650	5.6	0.65
1UP(B)	6.000	0.45	0.33	5.25	0.58	765	27	500	6.00	0.68
2AM(A)	3.000	0.93	0.68	19.50	2.20	850	30	350	26.10	3.05
4AM(A)*	3.000	1.70	1.30	36.00	4.10	2209	78	300	56.00	6.3
6AM(A)	3.000	4.00	3.00	84.00	10.00	3625	128	300	115.00	13.00
8AM(A)	2.500	5.25	3.90	132.00	14.40	4955	175	300	185.00	21.00
16AM(A)	2.000	9.50	7.10	290.00	34.00	7787	275	300	372.00	43.00
•NL22(B)	4.000	0.18	0.13	2.80	0.32	524	18.5	1000	4.30	0.49
•NL32(B)	2.000	0.42	0.31	13.50	1.5	850	30	300	21	2.5
•NL42(B)	2.000	0.82	0.61	25.50	2.90	1161	41	500	44	5.0
•NL52(B)	2.000	2.0	1.50	80.00	9.0	1982	70	500	81	8.9

• Non-lubricated models

\* Also available in Stainless Steel

## Gearmotors

Model	Gear ratio	Operating data								Maximum torque		
		Max. speed	Line pres.	Output power		Torque		Max. air consumption		Max. speed		
		rpm		hp	kW	lb. in.	Nm	l/min	cfm	rpm	lb. in.	Nm
1AM-NRV	15:1	350	A	0.34	0.26	62	7.1	595	21.0	30	72	8.1
1UP-NRV	15:1	400	C	0.32	0.23	49	5.5	595	21.0	30	71	8.0
2AM-43A	20:1	150	C	0.26	0.39	110	12.4	510	18	60	145	16.4
2AM-43A	20:1	150	A	0.58	0.43	240	27.1	1189	42	60	270	30.5
4AM-RV	10:1	300	B	1.26	0.94	274	31.0	1628	57.5	30	425	48.0
4AM-RV	15:1	200	B	1.25	0.90	400	45.2	1699	60.0	20	640	72.0
4AM-70C	20:1	150	A	1.17	0.87	487	55.0	2010	71.0	15	740	83.6
4AM-70C	40:1	75	A	0.95	0.71	800	90.4	2010	71.0	7	1255	141.8
4AM-70C	60:1	50	A	0.82	0.61	1040	117.5	2010	71.0	5	1640	185.3
6AM-22A	10:1	300	A	3.40	2.54	720	81.4	3681	130.0	30	950	107.4
6AM-22A	20:1	150	A	2.65	1.98	1100	124.3	3681	130.0	15	1550	175.6
6AM-22A	40:1	75	A	2.10	1.57	1725	194.9	3823	135.0	8	2500	282.5
8AM-32A	20:1	125	A	3.70	2.76	1850	209.1	5012	177.0	15	2550	288.2
16AM-13	20:1	100	A	6.50	4.85	4175	471.8	7787	275.0	15	5175	584.8

A – 100 psig and 7,0 bar line pressure for imperial and metric data, respectively.

B – 80 psig and 5,5 bar line pressure for imperial and metric data, respectively.

C – 60 psig and 4,1 bar line pressure for imperial and metric data, respectively.

# vacuum generators

## Performance

- Vacuum to 99 mbar (27" Hg)
- Air flow to 4474 l/min (158 cfm)

## Features

- Economical to operate
- Compact size
- Lightweight construction
- Low air consumption
- No moving parts
- Quiet operation
- Minimal maintenance
- Low cost

## Typical applications

- Envelope insertion/extraction
- Evacuation of volatile vapours
- Aspiration
- Carton forming
- Robotic pick and place
- Any number of other vacuum applications where pump size, noise level or high-temperature environment are considerations



For those vacuum applications where a regular vacuum pump may not be preferred, Gast vacuum generators provide an excellent alternative. Choose from 27 chemical and corrosion resistant models capable of achieving up to 99 mbar (27" Hg) with vacuum flow rates ranging from 5.7 to 4474 l/min (0.2 to 158 cfm). Single or multi stage designs offer several options, including high vacuum, high flow, combination high performance, and severe duty series. Also available are vacuum cups in flat and bellows, threaded or "slip fit" mounting options, with diameters from 1/4 to 5/8 in.



When compressed air is forced through a conical nozzle, its velocity increases and pressure decreases. Gast vacuum generators operate on this venturi principle, which creates vacuum without a single moving part.



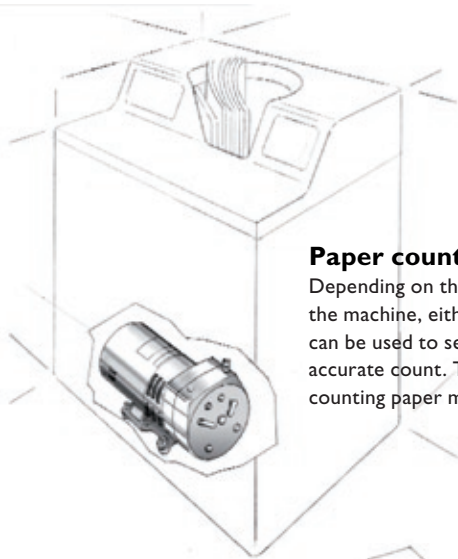


# specifications

Model*	Description	Free air flow		Maximum vacuum		Air consumption	
		l/min @ 1000 mbar	cfm @ 0 "Hg	mbar	"Hg	l/min @ Suggested Operating Pressure (bar)	cfm @ Suggested Operating Pressure (psi)
MG-005-00-00	Single-Stage High Vacuum Series	5.7	0.2	99	27	13 @ 2.1-5.2	0.46 @ 30-75
MG-010-00-00		27	0.95	133	26	45 @ 2.1-5.2	1.60 @ 30-75
MG-015-00-00		62	2.2	99	27	99 @ 2.1-5.2	3.50 @ 30-75
MG-020-00-00		113	4	99	27	181 @ 2.1-5.2	6.40 @ 30-75
MG-007-00-00	Single-Stage High Flow Series	13	0.46	420	17	14 @ 4.8	0.49 @ 70
MG-012-00-00		45	1.6	420	17	54 @ 4.8	1.90 @ 70
MG-022-00-00		193	6.8	420	17	201 @ 4.8	7.09 @ 70
MG-280-L0-00		793	28	757	7.5	368 @ 5.5	13.00 @ 80
MG-340-M0-00		963	34	455	16.5	748 @ 5.5	26.40 @ 80
MG-065-00-00	Multi-Stage High Vacuum Series	193	6.8	99	27	76 @ 4.7	2.7 @ 68
MG-130-00-00		340	12	99	27	139 @ 4.7	4.9 @ 68
MG-260-00-00		481	17	133	26	198 @ 4.7	7.0 @ 68
MG-075-00-00	Multi-Stage High Flow Series	340	12	335	20	96 @ 6.0	3.4 @ 87
MG-140-00-00		453	16	335	20	156 @ 6.0	5.5 @ 87
MG-131-00-00	Multi-Stage Severe-Duty Series	340	12	133	26	139 @ 4.7	4.9 @ 68
MG-141-00-00		453	16	335	20	156 @ 6.0	5.5 @ 87
MG-261-00-00		481	17	133	26	198 @ 4.7	7.0 @ 68
MG-271-00-00		736	26	335	20	379 @ 6.0	13.4 @ 87
MG-260-02-00	Multi-Stage (Combination) High-Performance and Severe-Duty	1019	36	133	26	396 @ 4.7	14 @ 68
MG-260-04-00		2010	71	133	26	793 @ 4.7	28 @ 68
MG-260-08-00		4474	158	133	26	1586 @ 4.7	56 @ 68

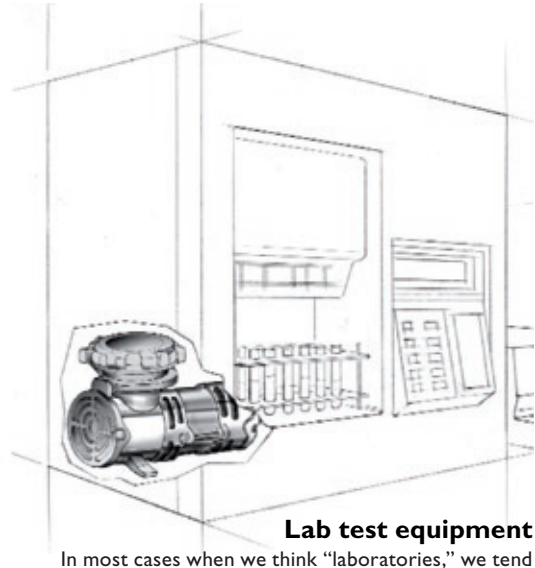
\* Imperial models have VG prefix instead of MG.

# applications



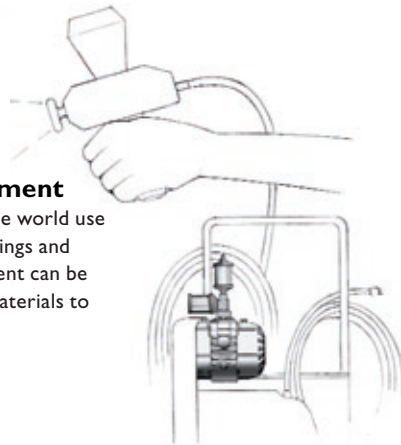
## Paper counting machines

Depending on the operating principle of the machine, either vacuum or pressure can be used to separate sheets for an accurate count. This can be a big help in counting paper money, for example.



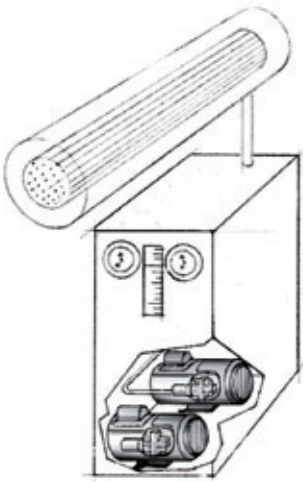
## Lab test equipment

In most cases when we think "laboratories," we tend to think of medical operations. Environmental labs, metallurgical labs and calibration facilities are a few examples of the technical facilities that require equipment to move and test samples. This equipment may use vacuum, compressed air or both to perform these functions.



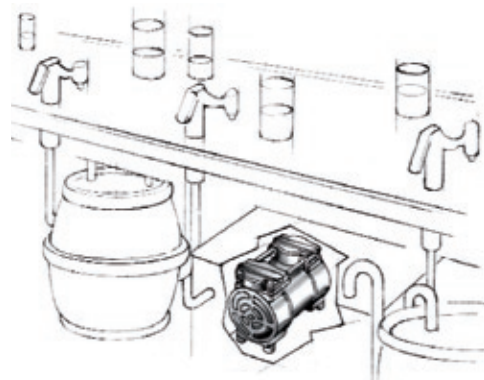
## Texture spraying equipment

Construction workers all over the world use air to apply fancy textures to ceilings and walls. The same spraying equipment can be used to apply sound-absorbing materials to walls or pipes.



## Cable pressurization equipment

Telephone cables stretch for millions of miles throughout the world. If moisture enters any of them, communication signals can be affected. The threat of moisture can be eliminated by maintaining a constant positive pressure with dried compressed air in these cables.

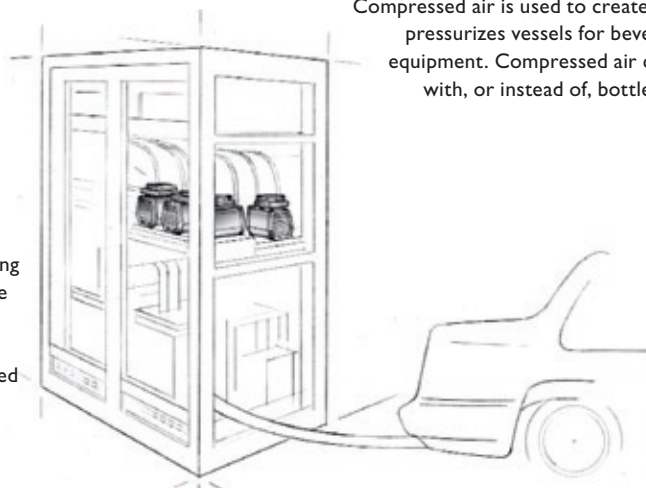


## Beverage dispensing equipment

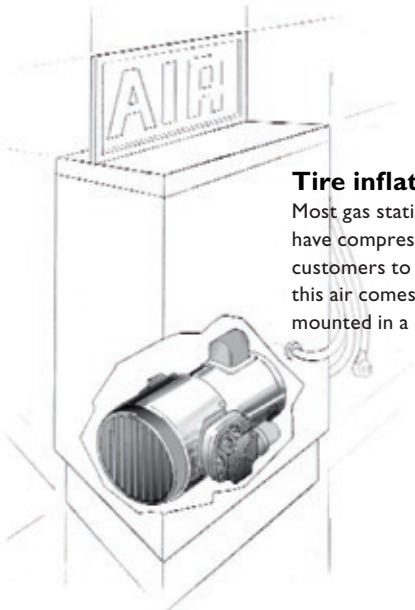
Compressed air is used to create nitrogen which pressurizes vessels for beverage dispensing equipment. Compressed air can also be used with, or instead of, bottled CO<sub>2</sub> in some applications.

## Auto emissions test equipment

Government regulations on auto emissions are making it necessary for more and more test equipment to be used. This equipment uses vacuum to draw samples from emission gasses for analysis. Because some of these gasses are highly aggressive, vacuum pumps used in these applications must be corrosion resistant.

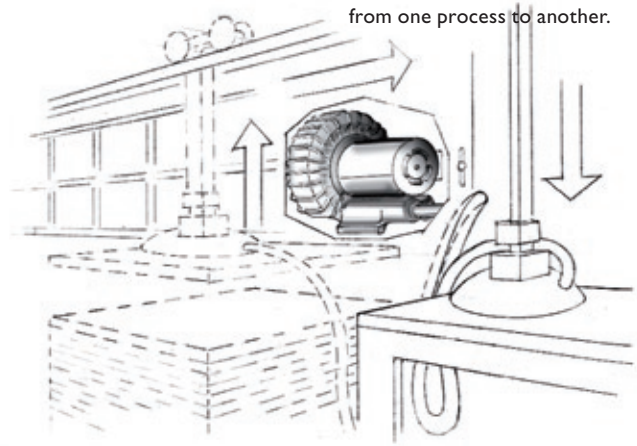


# applications



## Tire inflation equipment

Most gas stations and car wash facilities have compressed air available for customers to inflate tires. Many times this air comes from a compressor mounted in a coin-operated box.

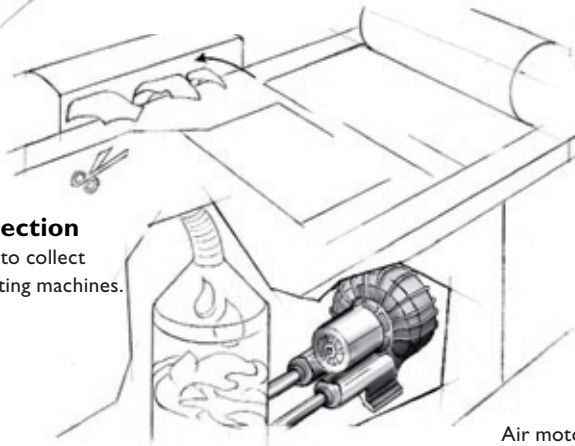


## Automated product feeding

Vacuum force is used to automatically stack product as it is received or to move the product from one process to another.

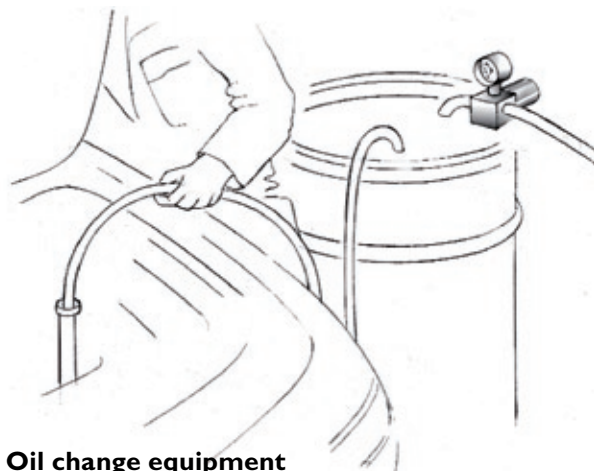
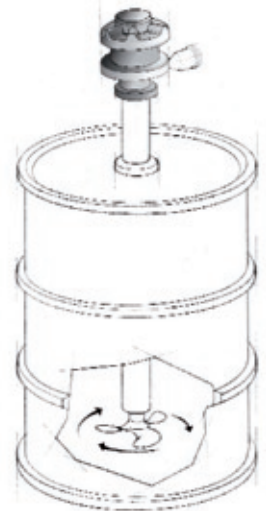
## Waste Collection

Vacuum is used to collect scraps from cutting machines.



## Mixing equipment

Air motors are widely used for mixing applications of all types. Variable speed, compact size and non-sparking operation make air motors popular with paint, chemical and even food producers.



## Oil change equipment

Vacuum is used to pull oil from the oil pan and deposit it in a collection drum, eliminating the mess usually associated with changing engine oil.



## Liquid pump drives

Air motors are a good option for liquid pumps when speed control is necessary or when pumps must be installed in remote locations or explosive environments.

## Quality and satisfaction

Gast's reputation for quality and customer satisfaction in air-moving products has been setting the industry's standard of excellence throughout the world since 1921.

## Wide variety

Gast offers a complete line of air-moving products in a broad range of types and sizes, and includes more extras without adding on extra costs. Utilizing state-of-the-art design, manufacturing processes, and electric motor technology, Gast products can be customized to meet the demands of many applications.

## Literature

Easy-to-follow literature provides a broad overview of Gast's extensive line of pneumatic products including operating principles, typical applications and general operating parameters and specifications to offer preliminary guidelines for choosing the right Gast pump for the job.

## Vast network of national and international distributors

Gast distributors carry a substantial stock of pneumatic products, parts and accessories. For the name and location of your closest representative, visit our website at [www.gastmfg.com](http://www.gastmfg.com) or contact one of our offices below.

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