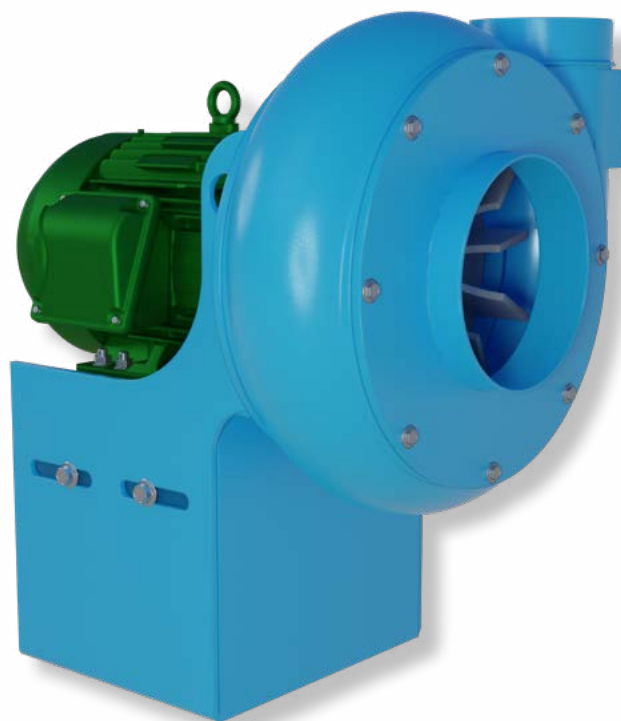




INDUSTRIAL PROCESS AND
COMMERCIAL VENTILATION SYSTEMS

CAST IRON BLOWERS

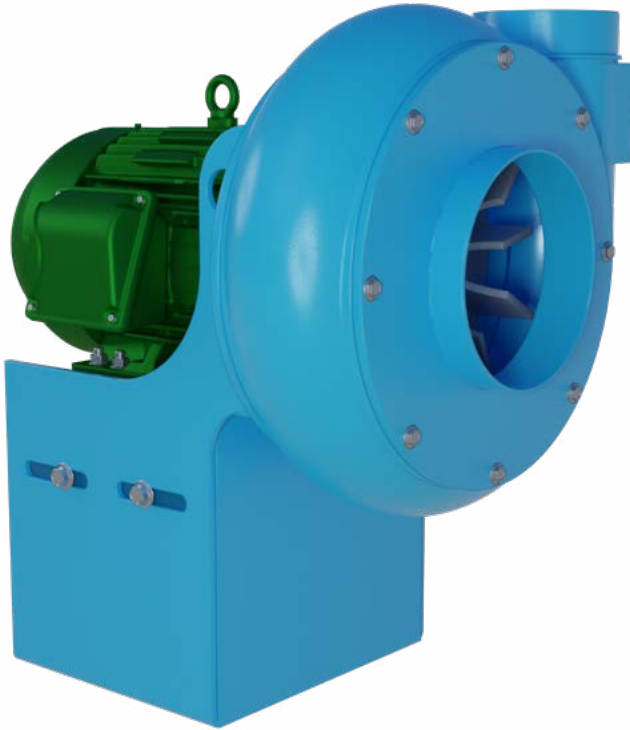
Model CIW



CAST IRON PRESSURE BLOWERS

Overview

CIW



Twin City Fan & Blower's CIW Cast Iron Pressure Blowers are the perfect choice for providing low volume, high pressure air for cooling, ventilating and exhaust systems, which handle dust, materials or corrosive fumes. These direct drive or belt driven blowers feature heavy-duty cast iron housings with cast aluminum impellers for extra long life and trouble-free service.

Capabilities

- 4 impeller sizes – 6.75", 8", 10" and 14"
- Airflow to 2,000 CFM
- Static pressures to 12"
- Temperatures to 250°F (Arrangement 4 to 180°F)
- Arrangement 1, 4, 9, 9F and 10 available

Features

- Rugged cast grey iron housing is inherently corrosion resistant
- Cast aluminum radial blade impeller is corrosion and spark resistant
- Rotatable to 8 discharge positions
- 200,000 hour average life bearings on belt driven units
- Round inlet and discharge for easy duct connections
- Heavy housings reduce noise levels

Applications

- Laboratory fume hood exhaust
- Polishing and grinding machine dust removal
- Welding fume exhaust
- Combustion air supply
- Raw materials, waste and fibers conveying
- Drying processes
- General exhaust applications

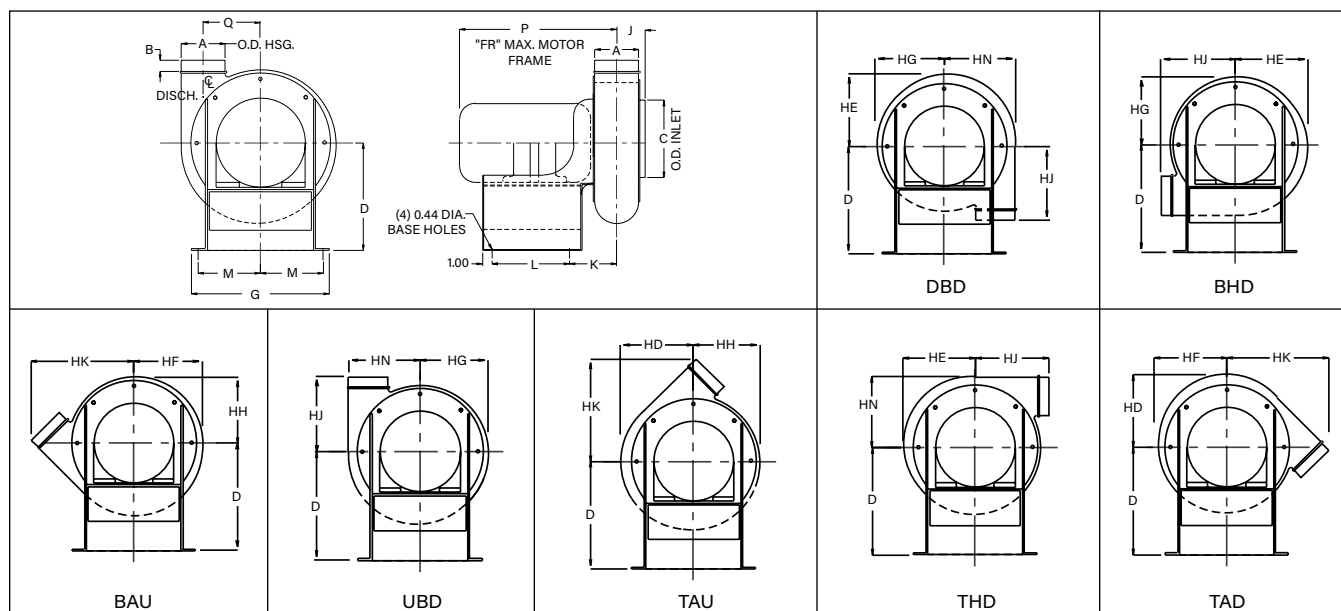


For complete product performance, drawings and available accessories, download our Fan Selector software at tcf.com.

Energy Regulations

Twin City Fan & Blower supports energy efficiency regulations enacted by the U.S. Department of Energy (DOE) and specific states. The selection and application of fan products is a significant part of these regulations. Engineers and specifiers must understand how to apply TCF products to their specific applications to meet applicable DOE and state regulatory requirements. Twin City Fan & Blower has made significant investments in product testing and development to provide efficient products. Developments in Twin City Fan & Blower's Fan Selector software are in place to aid your decision in product selection to assist with meeting the efficiency requirements as stipulated in the applicable regulations.

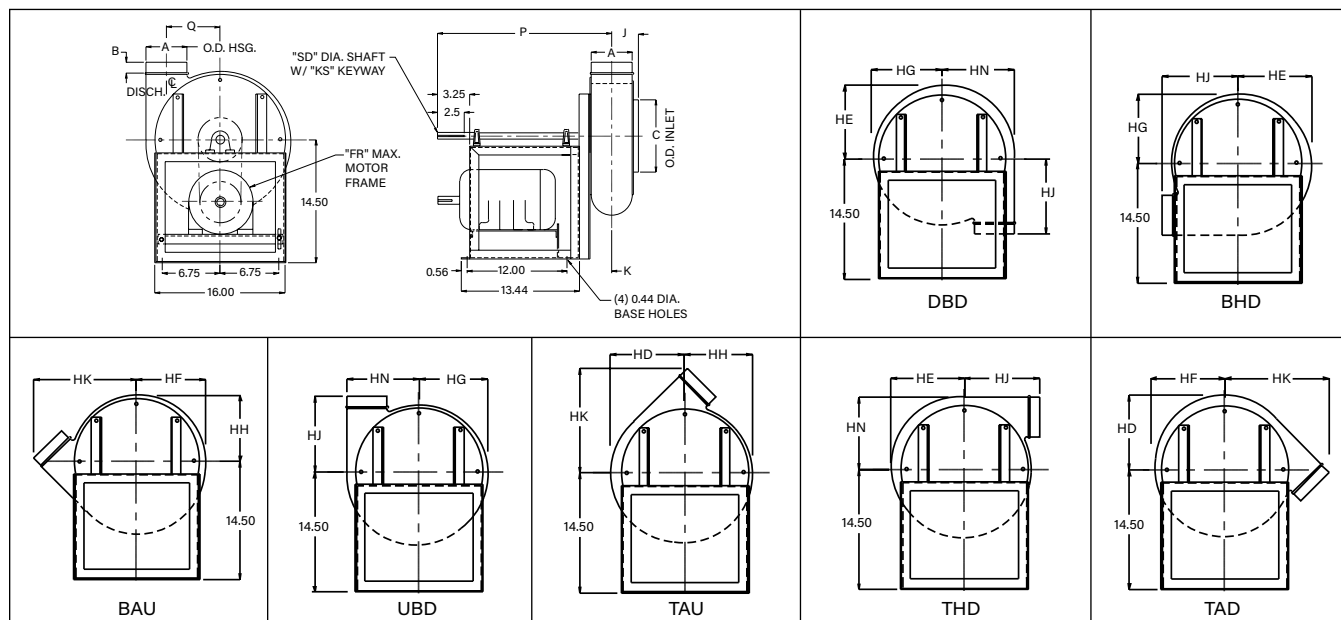
Arrangement 4



SIZE	A	B	C	D	FR	G	HD	HE	HF	HG	HH	HJ	HK	HN	J	K	L	M	P	Q
704	3.00	0.75	4.88	10.75	56	11.25	5.56	5.38	5.19	5.00	4.81	4.81	7.50	5.75	2.44	4.50	5.00	5.00	14.00	4.25
705	3.62	1.06	5.50	11.25	56	11.25	6.81	6.50	6.25	5.94	5.69	5.50	8.88	7.00	3.00	4.81	5.00	5.00	14.75	5.19
706	5.00	1.19	5.88	11.25	143T	11.25	7.56	7.31	7.12	6.88	6.69	7.12	10.50	7.75	3.44	5.13	5.00	5.00	15.50	5.25
708	6.75	1.25	7.75	13.75	184T	18.75	10.25	9.94	9.62	9.31	9.00	9.81	14.50	10.56	4.50	6.19	8.50	8.75	18.00	7.19

14711B

Arrangement 10

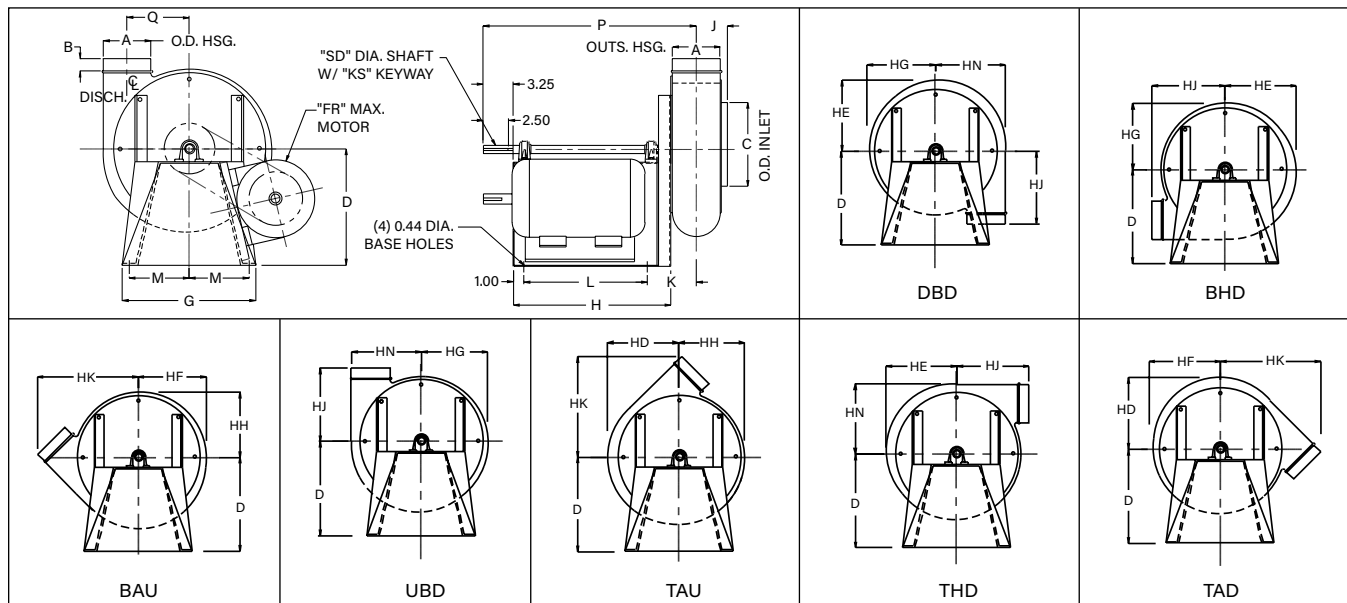


SIZE	A	B	C	FR	HD	HE	HF	HG	HH	HJ	HK	HN	J	K	KS	P	Q	SD
704	3.00	0.75	4.88	48	5.56	5.38	5.19	5.00	4.81	4.81	7.50	5.75	2.44	3.94	.19x.09	18.44	4.25	0.63
705	3.62	1.06	5.50	56	6.81	6.50	6.25	5.94	5.69	5.50	8.88	7.00	3.00	4.25	.19x.09	18.75	5.19	0.63
706	5.00	1.19	5.88	145T	7.56	7.31	7.12	6.88	6.69	7.12	10.50	7.75	3.44	4.56	.19x.09	19.38	5.25	0.75
708	6.75	1.25	7.75	145T	10.25	9.94	9.62	9.31	9.00	9.81	14.50	10.56	4.50	5.63	.25x.13	20.25	7.19	1.19

14714C

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

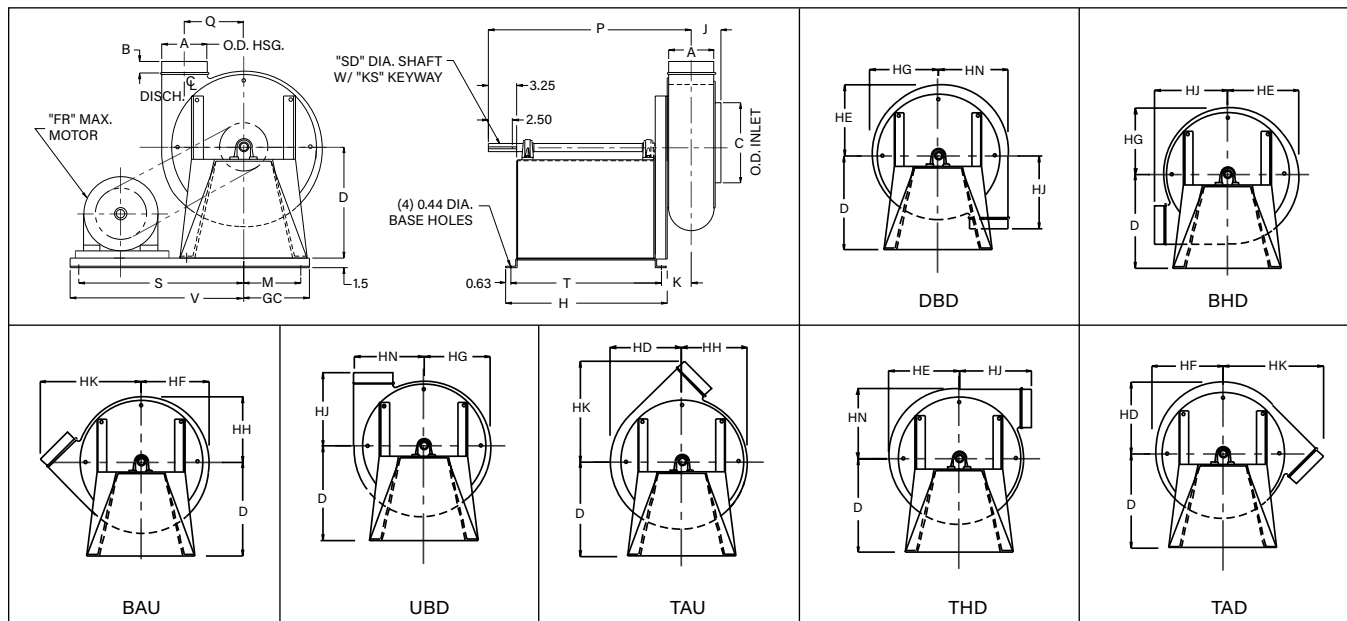
Arrangements 1 & 9



SIZE	A	B	C	D	FR	G	H	HD	HE	HF	HG	HH	HJ	HK	HN	J	K	KS	L	M	P	Q	SD
704	3.00	0.75	4.88	11.00	48	11.25	15.31	5.56	5.38	5.19	5.00	4.81	4.81	7.50	5.75	2.44	4.50	.19x.09	11.50	4.88	20.31	4.25	0.63
705	3.62	1.06	5.50	11.00	56	11.25	15.31	6.81	6.50	6.25	5.94	5.69	5.50	8.88	7.00	3.00	4.81	.19x.09	11.50	4.88	20.63	5.19	0.63
706	5.00	1.19	5.88	13.38	145T	13.25	18.63	7.56	7.31	7.12	6.88	6.69	7.12	10.50	7.75	3.44	5.25	.19x.09	14.88	5.88	24.69	5.25	0.75
708	6.75	1.25	7.75	13.50	184T	15.75	18.63	10.25	9.94	9.62	9.31	9.00	9.81	14.50	10.56	4.50	6.31	.25x.13	14.88	7.13	25.56	7.19	1.19

14712A

Arrangement 9F



SIZE	A	B	C	D	FR	G	GC	H	HD	HE	HF	HG	HH	HJ	HK	HN	J	K	KS	M	P	Q	S	SD	T	V
704	3.00	0.75	4.88	11.00	48	11.25	5.75	17.00	5.56	5.38	5.19	5.00	4.81	4.81	7.50	5.75	2.44	2.06	.19x.09	4.88	20.31	4.25	18.25	0.63	15.75	19.25
705	3.62	1.06	5.50	11.00	56	11.25	5.75	17.00	6.81	6.50	6.25	5.94	5.69	5.50	8.88	7.00	3.00	2.38	.19x.09	4.88	20.63	5.19	18.25	0.63	15.75	19.25
706	5.00	1.19	5.88	13.38	145T	13.25	6.75	20.38	7.56	7.31	7.12	6.88	6.69	7.12	10.50	7.75	3.44	2.81	.19x.09	5.88	24.69	5.25	21.38	0.75	19.13	22.38
708	6.75	1.25	7.75	13.50	184T	15.75	8.00	20.38	10.25	9.94	9.62	9.31	9.00	9.81	14.50	10.56	4.50	3.88	.25x.13	7.13	25.56	7.19	22.63	1.19	19.13	23.63

14713B

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.



Model CIW

Furnish and install Model CIW Cast Iron Pressure Blowers, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota. Fans shall be of the size and arrangement as indicated in the fan schedule.

HOUSINGS — All housings shall be one-piece heavy-duty cast iron construction. All units shall be built with an adjustable discharge housing, which can be field rotated to any of the eight standard positions.

IMPELLERS — The impeller shall be of the radial bladed back plate design and shall be cast aluminum construction. Impellers shall be suitable for exhaust purposes where low volume and high pressure applications exist.

BEARINGS — Bearings on belt driven units shall be selected to have a minimum average life of 200,000 hours (L-10 minimum life of 40,000 hours) based on AFBMA rating designations. The bearings shall be pillow block type, heavy-duty, anti-friction, self-aligning ball bearings.

SHAFTS — Fan shafts shall be per AISI 1040 or 1045 hot rolled steel, accurately turned, ground, polished and ring-gauged for accuracy. Shafts shall be sized so that the first critical speed will be at least 1.40 times the maximum operating speed.

MOTORS — Fan motors shall be foot-mounted NEMA Design B, standard industrial, continuous-duty, ball bearing, variable torque type suitable for operation on voltage, phase and hertz as listed in the fan schedule. Motor bearings shall have a minimum L-10 life, as defined by AFBMA, of at least 40,000 hours (200,000 hours average life).

FINISH — The unit, after fabrication, shall be cleaned and chemically pretreated by a phosphatizing process and shall be painted inside and outside with an alkyd primer and finish painted with an air dry enamel.

BALANCING — Prior to shipment all fans shall be completely assembled and test run as a unit at the operating speed. Final balance of the completed fan assembly shall be taken by electronic equipment. Records of the vibration readings in the axial, vertical and horizontal planes shall be maintained and a written copy of this record shall be available upon request.

SUBMITTALS — Submittals for approval of equipment shall include copies of outline drawings and pressure-volume performance curves showing point of operation.

ACCESSORIES — The fans shall be supplied with the following optional accessories:

- Belt Guard
- Companion Flange, Inlet
- Companion Flange, Outlet
- Drain
- Drain With Plug
- Flanged Inlet – Punched
- Flanged Outlet – Punched
- Heat Fan Construction (Belt Driven Units Only)
- Inlet Screen
- Motor Cover (Arr. 4)
- OSHA Belt Guard (Arr. 1, 9 or 9F)
- OSHA Shaft and Bearing Guard (Arr. 1, 9, 9F or 10)
- Shaft Seal (Belt Driven Only)
- Type B Spark Resistant Construction
- Special Coatings
- Floor Mount Isolators, RIS
- Floor Mount Isolators, Spring
- Weather Cover (Arr. 10)

Fan Weights Without Motor

ARRANGEMENT	SIZE 704	SIZE 705	SIZE 706	SIZE 708
1, 4, 9, 10	29	51	74	131
9F	54	79	106	168

Motor Weights

FRAME	48	56	143T	145T	182T	184T
OPEN DP	30	33	35	44	66	68
TE	30	33	35	44	67	75

INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

CENTRIFUGAL FANS | UTILITY SETS | PLENUM & PLUG FANS | INLINE CENTRIFUGAL FANS

MIXED FLOW FANS | TUBEAXIAL & VANEAXIAL FANS | WALL MOUNTED FANS | ROOF VENTILATORS

CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS

RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS

LABORATORY EXHAUST FANS | FILTERED SUPPLY FANS | MANCOOLERS | FIBERGLASS FANS | CUSTOM FANS



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