

# PRODUCTS CATALOG



**Industrial**  
*Air* Technology Corp.

## Industrial Fans

Industrial Air Technology services the industrial fan market with a complete line of centrifugal fans. We understand the rigorous requirements particular to industrial air movement applications. The fans we produce are designed and built for users who value quality craftsmanship and reliable performance. The Industrial Air Technology standard product offering includes backward inclined, industrial exhauster, radially tipped, and high pressure/turbo series fans.

Nonstandard products are available to be customized to meet the specific needs of the customer's application. It is Industrial Air Technology's goal to provide a fan that best satisfies the various needs our customer faces. In fabricating our fans, we are mindful of the rigorous requirements in the industrial environment. Fabrication materials and techniques are selected to provide a solid operating platform. Each wheel is dynamically balanced to ensure smooth, vibration free operation and the entire rotating group is specified for a long life of trouble free service. Industrial Air Technology also offers a complete list of fan accessories to provide a total package.

## People

At Industrial Air Technology we feel that our employees are the real strength of the company. We have assembled talented fabricators who take great pride in their quality of workmanship. Our engineering department utilizes modern design and stress analysis tools to assist with new product design and performance test equipment improve existing designs. Field support technicians are available for technical assistance and other customer needs. Our sales staff comprises individuals who are not just sales agents, but are technically oriented and knowledgeable in product applications. We are aligned with industrial minded representatives who are able to deal technically with the demanding needs of the industrial marketplace.

## Tools

Industrial Air Technology offers a complete package of tools to give the representative and the customer the independence necessary to make the best fan selection. This catalog describes our product lines and includes useful technical data, performance sheets, and dimensional data. We have developed a computer selection program and a fan drawing library on CD.

## Facility

Industrial Air Technology has a modern manufacturing facility located in northern Michigan. The facility houses an impressive array of design and fabrication tools and the employees that utilize them to provide air movement solutions to our valued customers.

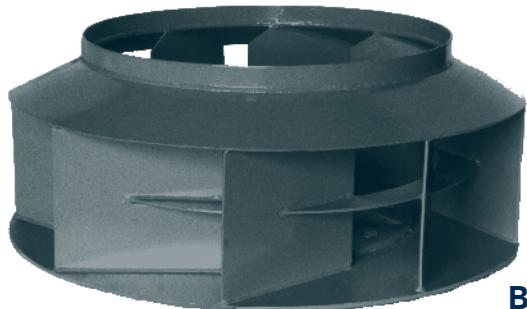
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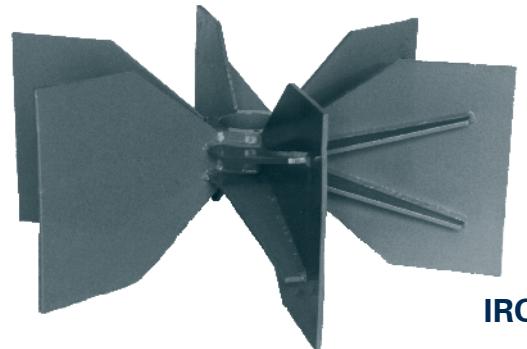
**Backward Inclined (BI) Series:**

Used for relatively clean air applications with little or no particulate in the air-stream. Our most efficient offering. Widely applied in most industrial markets.

Wheel Type	BI
CFM	295,000
Static Pressure	½" through 22"
AMCA Class	2, 3, 4, and 5
Wheel Sizes	12-1/4" through 120"
Arrangements	1, 3, 4, 8, and 9



BI



IRO

**Industrial Exhauster (IE) Series:**

Used for material handling, pressure blower, process gas, and many other industrial applications. Our best offering for material handling requirements. With the aid of blade and housing wear plates/liners, these fans can also be used for a number of abrasive material handling applications.

Wheel Types	IRO/IRS	IRW	IRT
Material	Granular	Fibrous	Light Abrasives
CFM	76,386	17,860	119,692
Static Pressure	2" through 50"	2" through 30"	2" through 50"
Wheel Sizes	12-1/4" to 85-1/4"	19-1/8" to 36-1/2"	19-1/8" to 120"
Arrangement	1, 8, 9	1, 8, 9	1, 4, 8, and 9

**IRO/IRS — (Industrial Radial Open)**

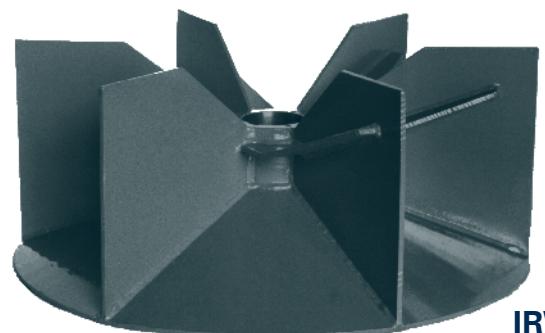
The open type radial bladed paddle wheel design is an ideal selection for material conveying applications due to its heavy duty rugged construction. Airstreams containing heavy dust loading or coarse material are perfectly matched with this type of wheel design. The IRS (side rimmed radial bladed paddle wheel) is our high speed version of the IRO. Higher tip speeds are made possible through the addition of side reinforcing sheets of steel. These wheel designs offer stable airflow performance over most of their pressure range.



IRT

**IRW — (Industrial Radial Wool)**

The backplated radial bladed paddle wheel design is the ideal selection for stringy type material where there is the possibility of material build up in the fan. The design of the backplate causes an even disbursement of material across the fan to help reduce clogging. Conveying long or stringy fibrous material commonly related with the paper industry is the perfect application for this design.



IRW

### IRT — (Industrial Radial Tip)

The radial tipped wheel design is the most efficient selection in the industrial exhaust series of fans. It offers efficiency while maintaining some slight material handling capabilities where there is a light dust loading or slightly abrasive type material in the airstream. The performance is very stable throughout most of the operating range. Excellent selection where energy savings are a premium but material handling characteristics are required.

### Radially Tipped (RT) Series:

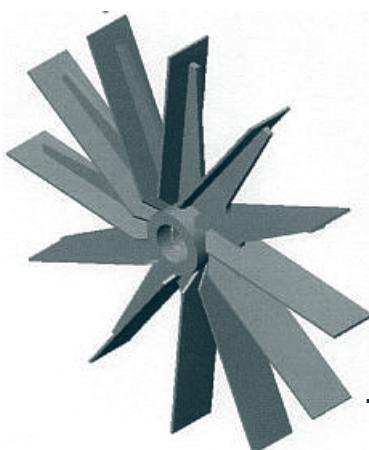
The major usage for this product is in process fan applications. The advantage of the fan is the ability to handle a high volume of air and yet be able to generate higher pressures than most clean air fans. Being radially tipped in design, the fan can handle dirty air without

having excessive material build-up to hamper the performance of the fan. It's a perfect selection for the application which requires more pressure or material handling than the BI is suited for and more CFM of air than the IE is suited for. There is not a major sacrifice in fan efficiency, with the radial tipped fan being able to generate up to 75% static efficiency.



<b>Wheel Type</b>	<b>RTS</b>
<b>CFM</b>	187,500
<b>Static Pressure</b>	35"
<b>Wheel Sizes</b>	27" to 110"
<b>Arrangements</b>	1 and 8

<b>Wheel Type</b>	<b>TRO, BCLS</b>
<b>CFM</b>	100,000
<b>Static Pressure</b>	120"
<b>Wheel Sizes</b>	15" to 84"
<b>Arrangements</b>	1, 4, 8, and 9



**TRO**

### High Pressure Series (TRO):

The major usages for these products are in the scrubber industry, pneumatic conveying, fluidized beds, and vacuum systems to name a few. The advantage of these fans is the ability to obtain high pressures with moderate flows and still offer the ability for material handling with most of the wheel designs. The fans open many doors in a unique market segment for specialty applications. They also allow many exotic metals to be used to deal with corrosive airstreams or high stress situations. Real workhorses in the harsh industrial environment.

Hopefully we've given you enough information about our company to further peak your interest in getting to know our personnel better by entrusting your next important centrifugal fan purchase to Industrial Air Technology Corp. For more information, please call our nearest sales representative or call us directly at 989.705.1768

There are many applications which have a large fan moving a high volume of air but at a low static pressure, so a large horsepower motor is not required. In these instances, many times the motor is not large enough to turn the fan wheel and shaft due to high inertia requirements. In these instances one needs to consult with the motor or starter manufacturer to see if the motor is capable of the necessary load inertia. The chart that follows gives quick calculations that can be performed to see if the motor has the necessary start up capabilities.

$$t = \frac{WR^2 \times N^2}{1.62 \times HPm}$$

$t$  = Start time in seconds.

$WR^2$  = Wheel inertia - lb. ft.<sup>2</sup>

$N$  = Fan speed in 1000's of rpm.

$HPm$  = Motor horsepower.

#### Start time

10 seconds or less — satisfactory.

11 to 15 seconds — probably satisfactory.

15 to 20 seconds — check with starter and motor manufacturer.

Over 20 seconds — not recommended.

In order to compare published motor  $WR^2$  capability with that of the fan on V-belt drive applications, it is necessary to convert the fan  $WR^2$  to the equivalent  $WR^2$  referred to the motor shaft by applying the following formula.

$$WR_m^2 = WR_f^2 \times \left[ \frac{N_f}{N_m} \right]^2$$

Where  $WR_m$  = Equivalent  $WR^2$  referred to motor shaft.

$WR_f^2$  = Fan  $WR^2$  at fan speed.

$N_f$  = Fan speed.

$N_m$  = Motor speed.

## MATERIAL HANDLING GUIDELINES

This chart is for general reference purposes only and does not take into account all things necessary to make the most intelligent fan selection for material handling applications. Abrasive or erosive properties of particles, temperature, moisture content and velocity are all factors that must be considered in making a specific selection.

Airstream	Max. Loading (Grains/Std. Cu. Ft.)	Max. Loading (Lbs Material /Lbs Air)	Max. Particle Size	Fan Type
Clean air	0.05	0.0001 - 1	0.05 microns	BISW
Light dust	0.5	0.001 - 1	50 microns	BISW
Medium heavy dust	10	0.02 - 1	150 microns	RTS, IRT
Light material	250	0.5 - 1	0.025 x wheel dia.	IRO
Light material shavings	250	0.5 - 1	0.024 x wheel dia.	IRO, IRW
Heavy material impact	500	1.0	0.05 x wheel dia.	IRO, IRW

# FAN EFFICIENCY

Mechanical Efficiency is defined as: The ratio of fan output to the power applied to the fan, can be helpful in selecting fan size, type or manufacturer for the same application.

$$ME = \frac{TP \times CFM}{6356 \times BHP}$$

$$TP = \text{FAN TOTAL PRESSURE}$$

$$= SP_{OUT} + VP_{OUT} - SP_{IN} - VP_{IN}$$

NOTE:  $SP_{in}$  normally carries negative (-) sign

Static Efficiency is defined as: The ratio of fan output less the kinetic energy (outlet velocity pressure) leaving the fan to the power applied to the fan.

$$SE = \frac{SP \times CFM}{6356 \times BHP}$$

$$SP = \text{FAN STATIC PRESSURE}$$

$$= SP_{OUT} + VP_{OUT} - SP_{IN} - VP_{IN} - VP_{OUT}$$

Therefore, ME is always greater than SE for a given fan. Fans are typically compared using SE

The performance tables shown in this catalog may be used to select a fan for your specific application. When selecting a fan be sure to keep the following parameters in mind to ensure the correct fan selection.

- A) All ratings are based on standard air, defined as follows: air temperature is 70 F, 50% RH, 29.92" HG, and 0.075 lb./cu.ft. density. For SI units as follows: 21C, 50% RH, 101.3 kPa and 1.2 kg/m cu.
  - B) All tests on which the performance tables are based were conducted with open inlets and ducted outlets. None of the tests account for any losses caused by VIV's, outlet dampers, inlet screens, v-belt drives, or unusual duct configurations.
- Fan characteristics are such that volumetric flow rate is unaffected by gas density but the power and pressure vary directly with changes in gas density. Therefore, the selection process will require that rating tables are entered with actual volumetric flow rate (ACFM) and a corrected fan static pressure. The corresponding equation for the corrected fan static pressure (Pe) is as follows:

$$Pe = Pa (0.075 / Da)$$

Pe = Corrected Fan Static Pressure

Pa = Actual Fan Static Pressure @ Da

Da = Actual Density, lb./cu. ft.

By adhering to the following procedure, all the factors necessary to ensure the proper selection of the fan can be easily met. The desired performance should be easy to obtain with a high degree of accuracy.

- 1) Determine the actual amount of air flow (ACFM) that is required for the system conditions. The elevation and temperature of the air as well as any other airstream variable (humidity, molecular weight, negative inlet pressure, etc.) that will have a direct influence on the density must be known at this point.
- 2) Determine the system resistance due to duct work and all other system components. This should be given in inches of water. Now you have the static pressure component for proper selection of the fan.
- 3) To make a fan selection for a density other than 0.075 lb./cu. ft. (1.2 kg/m cu.), a correction must be made before and after the selection as follows:

- a) Compute actual fan inlet air density correction (refer to table for temperature and elevation corrections).
- b) Take the actual static pressure and divide it by the density correction factor to obtain the equivalent fan static pressure at standard density (0.075).

Note: ACFM does not change with density.

- 4) At this point you are ready to make the fan selection. It is necessary to use the corrected fan static pressure (Pe) as the initial guide to the fan operating point. When this point is determined there may be several fans that can give you the desired performance. At this time you must determine what criteria is most important — low fan cost, low operating cost, low sound level, duct design velocity, space limitations, etc.
- 5) Now with the fan selected, we must consider all losses due to fan accessories.
  - a) VIV's and outlet dampers cause losses estimated by figures A and B.
  - b) Inlet boxes and silencers are other items that cause losses that must be accounted for.
- 6) Unusual inlet and outlet conditions cause an adverse affect on the fan. AMCA publication #201 contains these corrections. These must also be added to static pressure and are known as System Effect Factors (SEF).
- 7) Now you can add all accessory losses and SEF losses to the system fan static pressure (Pe) at standard density to obtain the equivalent selection fan static pressure. Then re-enter the selection tables for the chosen fan size with the equivalent selection fan static pressure (SP) and the required ACFM.
- 8) Determine the fan speed at the corresponding selection point based on SP and ACFM.
- 9) Read the fan BHP at the selection point.
- 10) Add approximately 3% to BHP for v-belt drive loss (see figure C). Now the total BHP is known at 0.075 lb./cu. ft. density. Then take this number and multiply it by the density correction factor to show actual horsepower at operating conditions.

# CORRECTION FACTORS

## Variable Inlet Vanes

Reductions up to approximately 30% of wide open (free air) flow are possible with inlet vanes. As an inlet vane closes it imparts a spin on the air as it enters the fan inlet in the direction of the wheel rotation. This pre-spin of the air helps to maintain the efficiency of the fan at the turn down conditions. To compensate for this slight loss, you must increase the RPM of the fan and BHP. This correction is shown as pressure loss on the adjacent chart.

## Outlet Damper

Due to resistance in air flow caused by a wide open position on the outlet damper, a correction must be made to obtain required performance. Outlet damper losses must be added to the fan static pressure before entering the performance tables. This value is based off of outlet velocity and may be obtained from the adjacent chart.

## V-Belt Drive Losses

Standard v-belt drives cause a loss of motor horsepower in fans. As a result there must be a factor added to the final horsepower to compensate for the losses. The losses tend to be higher as the fan speed goes up. The lower the horsepower the higher the percentage of losses also. The typical drive loss is between 3-8% of fan shaft HP. See adjacent chart.

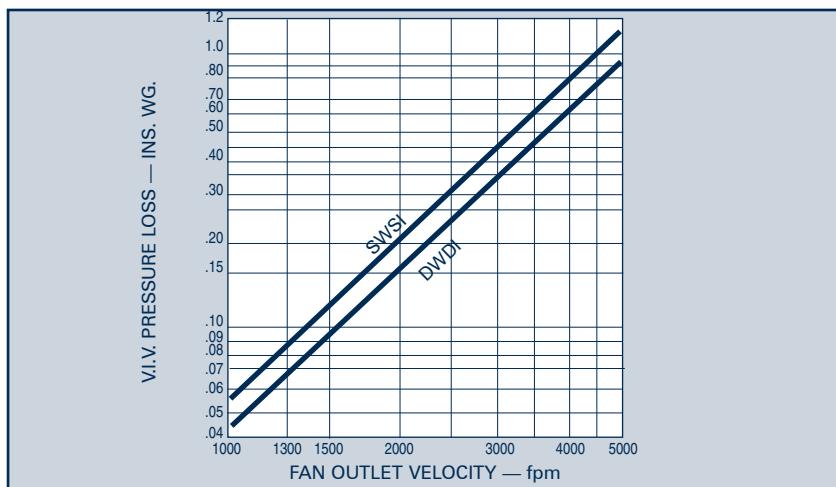


Figure A; VI.V. Losses in Full Open Position

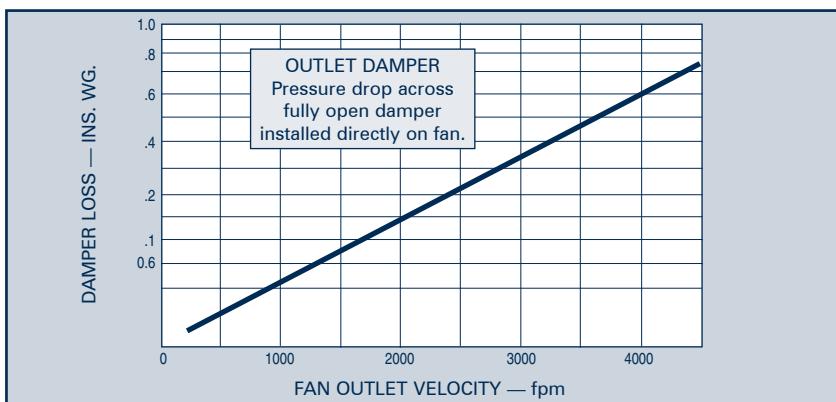


Figure B; Outlet Damper Losses in Full Open Position

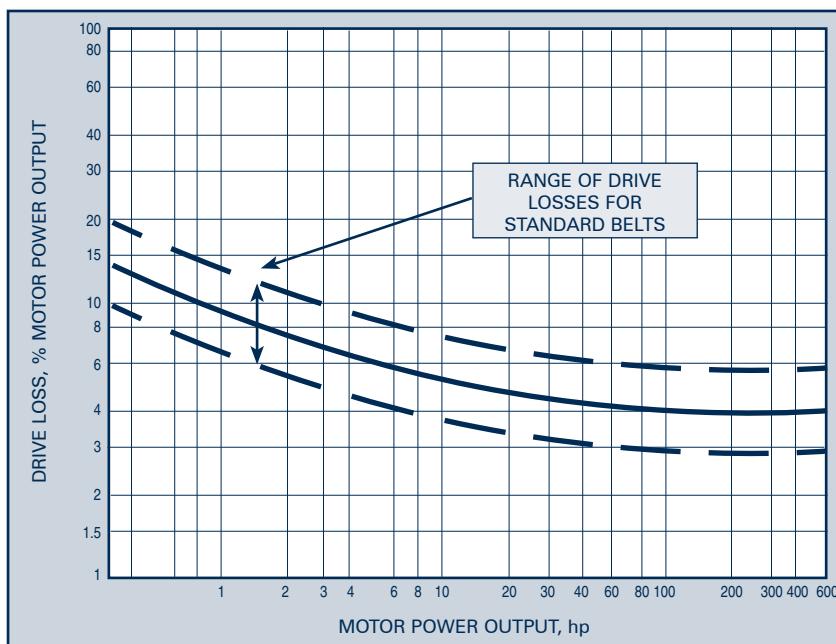


Figure C; Drive Losses

CORRECTION FACTORS TABLE

AIR TEMP IN °F	ALTITUDE (ft. above sea level)																		
	BAROMETRIC PRESSURE IN INCHES HG																		
	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	7000	8000	9000	10000		
29.92	29.38	28.86	28.33	27.82	27.31	26.81	26.32	25.84	25.36	24.89	24.43	23.98	23.09	22.12	21.38	20.57			
70	1.000	.981	.965	.947	.930	.913	.896	.880	.864	.848	.832	.817	.799	.774	.739	.715	.687		
100	.946	.928	.913	.896	.880	.864	.848	.832	.817	.802	.787	.773	.756	.732	.699	.676	.650		
125	.906	.889	.874	.858	.843	.827	.812	.797	.783	.768	.754	.740	.724	.701	.670	.648	.622		
150	.869	.852	.839	.823	.808	.793	.779	.765	.751	.737	.723	.710	.694	.673	.642	.621	.597		
175	.835	.819	.806	.791	.777	.762	.748	.735	.721	.708	.695	.682	.667	.646	.617	.597	.574		
200	.803	.788	.775	.760	.747	.733	.719	.707	.694	.681	.668	.656	.642	.622	.593	.574	.552		
225	.773	.758	.746	.732	.719	.706	.693	.680	.668	.656	.643	.632	.618	.598	.571	.553	.531		
250	.747	.733	.721	.707	.695	.682	.669	.657	.645	.634	.622	.610	.597	.578	.552	.534	.513		
275	.721	.707	.696	.683	.671	.658	.646	.634	.623	.611	.600	.589	.576	.558	.533	.516	.495		
300	.697	.684	.673	.660	.648	.636	.625	.613	.602	.591	.580	.569	.557	.539	.515	.498	.479		
325	.675	.662	.651	.639	.628	.616	.605	.594	.583	.572	.562	.551	.539	.522	.499	.483	.464		
350	.654	.642	.631	.619	.608	.597	.586	.576	.565	.555	.544	.534	.523	.506	.483	.468	.449		
375	.634	.622	.612	.600	.590	.579	.568	.558	.548	.538	.527	.518	.507	.491	.469	.453	.436		
400	.616	.604	.594	.583	.573	.562	.552	.542	.532	.522	.513	.503	.492	.477	.455	.440	.423		
425	.598	.587	.577	.566	.556	.546	.536	.526	.517	.507	.498	.489	.478	.463	.442	.428	.411		
450	.582	.571	.562	.551	.541	.531	.521	.512	.503	.494	.484	.475	.465	.450	.430	.416	.400		
475	.567	.556	.547	.537	.527	.518	.508	.499	.490	.481	.472	.463	.453	.438	.419	.405	.390		
500	.552	.542	.533	.523	.513	.504	.495	.486	.477	.468	.459	.451	.441	.427	.408	.395	.380		
525	.538	.528	.519	.509	.500	.491	.482	.473	.465	.456	.448	.440	.430	.416	.398	.385	.370		
550	.525	.515	.507	.497	.488	.479	.470	.462	.454	.445	.437	.429	.419	.406	.388	.375	.361		
575	.512	.502	.494	.485	.476	.467	.459	.451	.442	.434	.426	.418	.409	.396	.378	.366	.352		
600	.500	.491	.483	.474	.465	.457	.448	.440	.432	.424	.416	.409	.400	.387	.369	.357	.343		
625	.488	.479	.471	.462	.545	.446	.437	.429	.422	.414	.406	.397	.390	.378	.361	.349	.335		
650	.477	.468	.460	.452	.444	.436	.427	.420	.412	.404	.397	.390	.381	.369	.353	.341	.328		
675	.467	.458	.451	.442	.434	.426	.418	.411	.403	.396	.389	.382	.373	.361	.345	.334	.321		
700	.457	.448	.441	.433	.425	.417	.409	.402	.395	.388	.380	.373	.365	.354	.338	.327	.314		
725	.447	.439	.431	.423	.416	.408	.401	.393	.386	.379	.372	.365	.357	.346	.330	.320	.307		
750	.438	.430	.423	.415	.407	.400	.392	.385	.378	.371	.364	.358	.350	.339	.323	.313	.301		
775	.429	.421	.414	.406	.399	.392	.384	.378	.371	.364	.357	.350	.343	.332	.317	.307	.295		
800	.421	.413	.406	.399	.392	.384	.377	.370	.364	.357	.350	.344	.336	.326	.311	.301	.289		
825	.412	.404	.398	.390	.383	.376	.369	.363	.356	.349	.343	.337	.329	.319	.304	.295	.283		
850	.404	.396	.390	.383	.376	.369	.362	.356	.349	.343	.336	.330	.323	.313	.298	.289	.278		
875	.397	.389	.383	.376	.369	.362	.356	.349	.343	.337	.330	.324	.317	.307	.293	.284	.273		
900	.389	.382	.375	.368	.362	.355	.349	.342	.336	.330	.324	.318	.311	.301	.287	.278	.267		
925	.382	.375	.369	.362	.354	.349	.342	.336	.330	.324	.318	.312	.305	.296	.282	.273	.262		
950	.375	.369	.362	.355	.349	.342	.336	.330	.324	.318	.312	.306	.300	.291	.277	.268	.258		
975	.369	.361	.356	.349	.343	.337	.331	.325	.319	.313	.307	.301	.295	.286	.273	.264	.254		
1000	.363	.356	.350	.344	.338	.331	.325	.319	.314	.308	.302	.297	.290	.281	.268	.260	.249		
1025	.357	.350	.345	.338	.332	.327	.320	.314	.308	.303	.297	.292	.285	.276	.264	.255	.245		
1050	.351	.344	.339	.332	.326	.320	.314	.309	.303	.298	.292	.287	.280	.272	.259	.251	.241		
1075	.345	.338	.333	.327	.321	.315	.309	.304	.298	.293	.287	.282	.276	.267	.255	.247	.237		
1100	.339	.333	.327	.321	.315	.310	.304	.298	.293	.287	.282	.277	.271	.263	.251	.243	.233		
1125	.334	.328	.322	.316	.311	.305	.299	.294	.289	.283	.278	.273	.267	.259	.247	.239	.229		
1150	.329	.323	.317	.312	.306	.300	.295	.290	.284	.279	.274	.269	.263	.255	.243	.235	.226		
1175	.324	.318	.313	.307	.301	.296	.290	.285	.280	.275	.270	.265	.259	.251	.239	.232	.223		
1200	.319	.313	.308	.302	.297	.291	.286	.281	.276	.271	.265	.261	.255	.247	.236	.228	.219		

PRESSURE UNITS COMMONLY USED IN FAN APPLICATIONS

In. WG	Osi	Psi	HG	mm WG	mm HG	Atm
1	0.576	.0360	.0733	25.400	1.863	.00245
1.735	1	.062	.127	44.074	3.231	.00425
27.761	16.093	1	2.036	705.13	51.715	.068
13.635	7.857	.491	1	346.33	25.400	.033
.0394	0.023	.00142	.00289	1	.073	.00010
.537	0.309	.0193	.0394	13.365	1	.00132
407.98	235.119	14.696	29.921	.104	760.00	1

# SPARK RESISTANCE

## Classifications for Spark Resistant Construction

Type A — Construction requires that all parts in contact with the airstream must be a non-ferrous material.

Type B — Construction requires fan to have a non-ferrous wheel and non-ferrous ring through which the shaft passes.

Type C — Construction requires that a shift of the wheel or shaft not permit two ferrous parts to rub together.

For this Standard, non-ferrous material shall be any material with less than 5% iron or any other material with demonstrated ability to be spark resistant.

# FAN LAWS

## Fan Speed Varies with Size and Density Constant

Volume (V) varies as the speed (S) varies.

Pressure (P) varies as the square of the speed (S) change.

Horsepower (HP) varies as the cube of the speed (S) change.

$$\frac{V_2}{V_1} = \frac{S_2}{S_1}$$

$$\frac{P_2}{P_1} = \left[ \frac{S_2}{S_1} \right]^2$$

$$\frac{HP_2}{HP_1} = \left[ \frac{S_2}{S_1} \right]^3$$

## Fan Size Varies with Speed and Density Constant

Volume (V) varies as the cube of the wheel diameter (D) change.

Pressure (P) varies as the square of the wheel diameter (D) change.

Horsepower (HP) varies as the fifth power of the wheel diameter (D) change.

$$\frac{V_2}{V_1} = \left[ \frac{D_2}{D_1} \right]^3$$

$$\frac{P_2}{P_1} = \left[ \frac{D_2}{D_1} \right]^2$$

$$\frac{HP_2}{HP_1} = \left[ \frac{D_2}{D_1} \right]^5$$

Application of these laws is at user's discretion. The above laws are useful, but they can lead to errors if they are misapplied. The calculated fan must have the same point of rating and characteristic performance curve as the known fan. When in doubt, it is best to reselect the fan rather than attempt to use the fan laws.

# MAXIMUM SPEED DE-RATING FOR TEMPERATURE

Temp. (F)	Material of Construction				
	Steel	Corten	304 SS	316 SS	Aluminum
70	1.00	1.00	1.00	1.00	1.00
200	1.00	1.00	.89	.92	.95
300	.98	1.00	.80	.87	
400	.96	1.00	.77	.84	
500	.91	1.00	.74	.80	
600	.88	1.00	.71	.78	
700	.85	1.00	.69	.77	
800	.80	.96	.68	.76	
900	NR	NR	.65	.73	
1000	NR	NR	NR	.72	

# DISCHARGE OF CENTRIFUGAL FANS



**Clockwise**  
90° (Top Horizontal)



**Clockwise**  
135° (Top Angular Down)



**Clockwise**  
180° (Down Blast)



**Clockwise**  
225° (Bottom Angular Down)



**Clockwise**  
45° (Top Angular Up)



**Clockwise**  
360° (Up Blast)



**Clockwise**  
315° (Bottom Angular Up)



**Clockwise**  
270° (Bottom Horizontal)



**Counterclockwise**  
90° (Top Horizontal)



**Counterclockwise**  
135° (Top Angular Down)



**Counterclockwise**  
180° (Down Blast)



**Counterclockwise**  
225° (Bottom Angular Down)



**Counterclockwise**  
45° (Top Angular Up)



**Counterclockwise**  
360° (Up Blast)



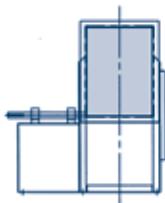
**Counterclockwise**  
315° (Bottom Angular Up)



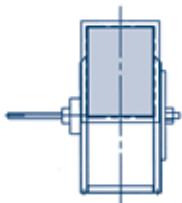
**Counterclockwise**  
270° (Bottom Horizontal)

Direction of rotation is determined from the side opposite the fan inlet (*typically the drive side*).  
On double inlet fans with drives on both sides, drive side is that with the higher powered drive unit.  
Direction of discharge is determined in accordance with diagrams above.

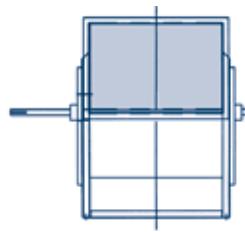
# DRIVE ARRANGEMENTS



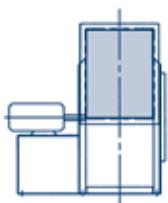
ARR. 1 SWSI for belt drive or direct connection.  
Impeller overhung. Two bearings on base.



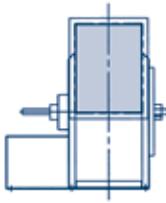
ARR. 3 SWSI for belt drive or direct connection.  
One bearing on each side and supported by fan housing.



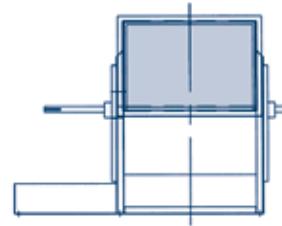
ARR. 3 DWI for belt drive or direct connection.  
One bearing on each side and supported by fan housing.



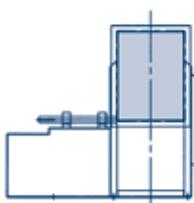
ARR. 4 SWSI for direct drive. Impeller overhung  
on prime mover shaft. No bearings on fan.  
Prime mover base mounted or integrally direct  
connected.



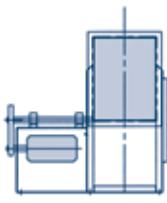
ARR. 7 SWSI for belt drive or direct connection.  
Arrangement 3 plus base for prime mover.



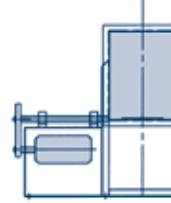
ARR. 7 DWI for belt drive or direct connection.  
Arrangement 3 plus base for prime mover.



ARR. 8 SWSI for belt drive or direct connection.  
Arrangement 1 plus extended base for prime  
mover.

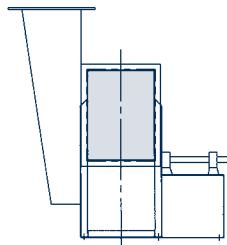


ARR. 9 SWSI for belt drive. Impeller overhung,  
two bearings with prime mover outside base.

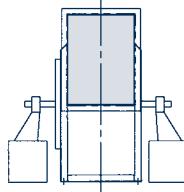


ARR. 10 SWSI for belt drive. Impeller overhung.  
Two bearings with prime mover inside base.

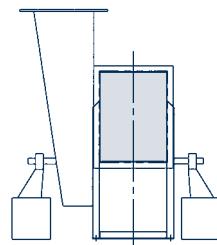
## INLET BOXES & BEARING PEDESTALS



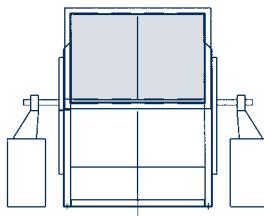
ARR. 1 SWSI WITH INLET BOX for belt drive or direct connection. Impeller overhung, two bearings on base. Inlet box may be self-supporting.



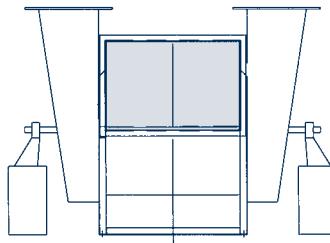
ARR. 3 SWSI WITH INDEPENDENT PEDESTALS for belt drive or direct connection fan. Housing is self-supporting. One bearing on each side supported by independent pedestals.



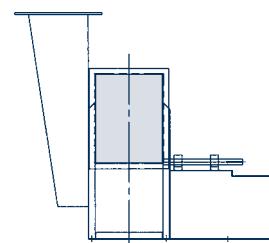
ARR. 3 SWSI WITH INLET BOX & INDEPENDENT PEDESTALS for belt drive or direct connection fan. Housing is self-supporting. One bearing on each side supported by independent pedestals with shaft extending through inlet box.



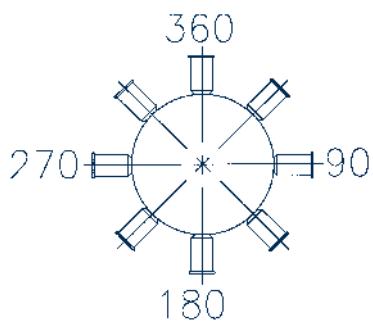
ARR. 3 DWDI WITH INDEPENDENT PEDESTALS for belt drive or direct connection fan. Housing is self-supporting. One bearing on each side supported by independent pedestals.



ARR. 3 DWDI WITH INLET BOX & INDEPENDENT PEDESTALS for belt drive or direct connection fan. Housing is self-supporting. One bearing on each side supported by independent pedestals with shaft extending through inlet box.

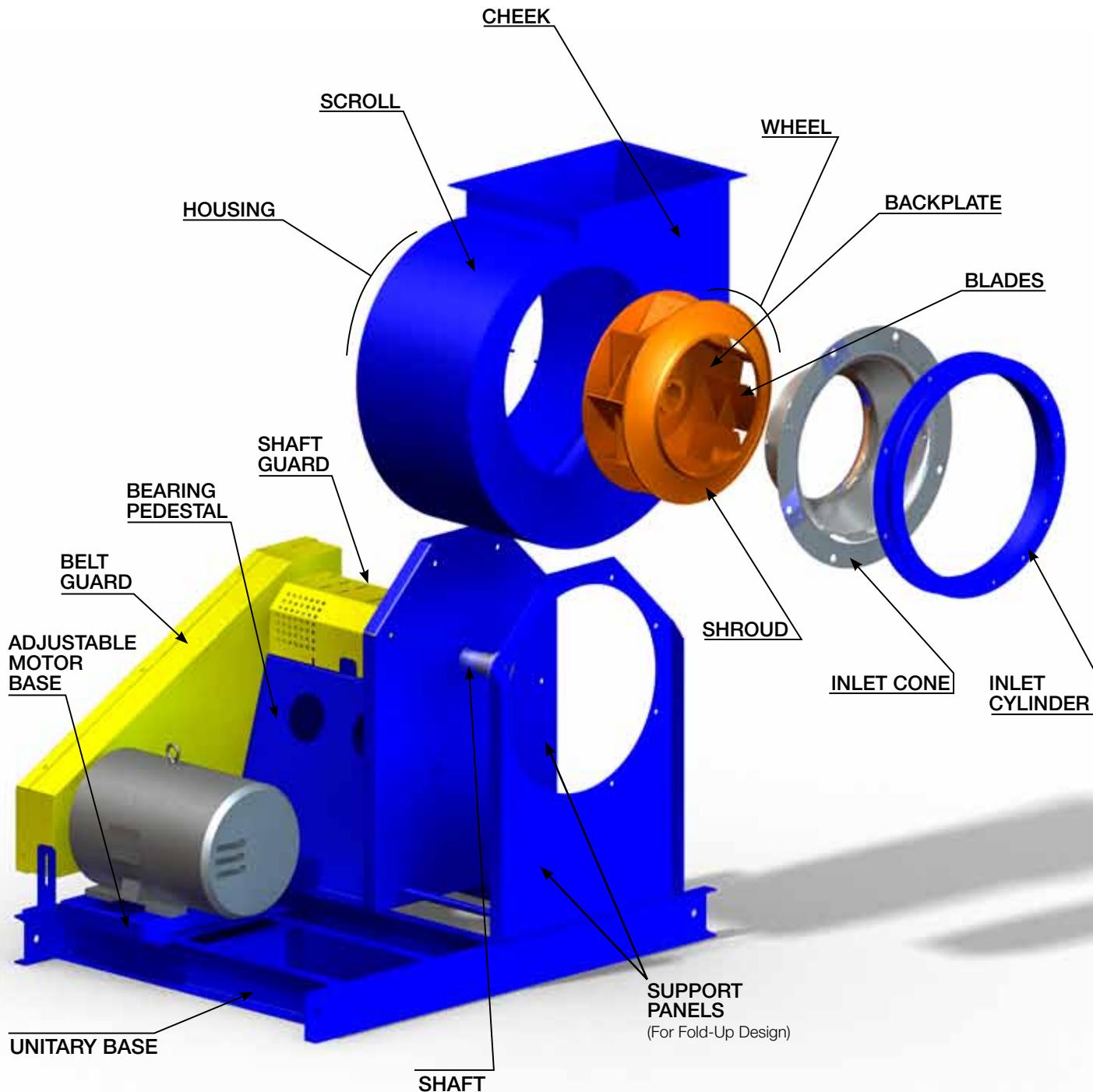


ARR. 8 SWSI WITH INLET BOX for belt drive or direct connection. Impeller overhung, two bearings on base plus extended base for prime mover. Inlet box may be self-supporting.



1. Reference line is the top vertical axis through center of fan shaft.
2. Position of inlet box and air entry to inlet box is determined from DRIVE SIDE OF FAN.
3. Position of inlet box is designated in degrees clockwise from top vertical axis as shown, and may be any intermediate angle as required.
4. Positions 135° to 225° in some cases interfere with floor structure.

# FAN COMPONENT TERMINOLOGY



# FACTORS EFFECTING FAN SELECTION

When selecting a fan, it is important to consider the specific factors effecting both its design and performance. These factors include: airstream condition; operating environment; geometry and structure; and customer preferences.

Airstream Condition	Environment Condition	Geometry / Structure	Customer Preferences	Fan variables affected by the four primary considerations	Airstream Condition	Environment Condition	Geometry / Structure	Customer Preferences	Fan variables affected by the four primary considerations
X				Volumetric Flow Rate CFM	X			X	Custom Scroll Material
X				Fan Static Pressure in WG	X			X	Custom Cheek Material
X				Operating Temperature	X			X	Housing Liner (rubber)
X				Wheel Speed (RPM)			X	X	Horiz. Split Housing
X				Fan Brake HP			X	X	Pie-Slice Split Housing
X				Fan (Wheel) Type			X	X	Sound Abatement Insulation
X				Fan (Wheel) Size	X		X	X	Heat Loss Insulation
X				Fan (Wheel) Width	X		X	X	Insulation Thickness
X				Performance Class			X	X	Fan Inlet Flange
X	X	X		Drive Arrangement			X	X	Fan Outlet Flange
	X	X		Fan Wheel Rotation		X	X	X	Custom Pedestal Material
	X	X		Discharge Position			X	X	Unitary Base
X				Hi-Temp Construction				X	Access Door Type
X				Spark Resistance Class				X	Access Door Seal
X			X	Custom Air-Stream Material				X	Custom Drain
X			X	Custom Wheel Material			X	X	Paint Specification
X			X	Wear Plates on Wheel			X	X	Weather Hood
X			X	Type of Hub				X	Motor Supplied by Others
X				Hub Length				X	Motor Installed by Others
X				Hub Cone				X	Motor Mfr (Brand)
X				Weight of Wheel	X				Motor HP
X			X	Critical Speed	X			X	Motor RPM
X			X	Fan Shaft Diameter				X	Motor Efficiency Class
X	X		X	Custom Shaft Seal	X			X	Motor Frame Size
			X	Custom Shaft Guard				X	Motor Duty (General Purpose)
X				Shaft Cooler				X	Motor Enclosure Type
X	X		X	Custom Bearing Type				X	Motor Volt/Cycle/Phase
			X	Extended Life Bearings			X	X	Motor Location
X	X	X		Extended Lube Lines	X	X		X	Custom Motor Bearings
			X	Bearing Temp. Detector		X			Custom Drive Service Factor
			X	Vibration Switch	X				Coupling or Sheave ID & Length

# QUICK REFERENCE CHECK LIST

In the attempt to ensure the proper selection and application of the fan, we would like to offer the following table to assist in the process. Make sure you address each of the following items as a valuable check list.

- 1) **Fan Type**
- 2) **Fan Size**
- 3) **Construction Class of Fan**
- 4) **Discharge Position**
- 5) **Wheel Rotation (CW or CCW)**
- 6) **Fan Arrangement**
- 7) **Motor Location (Arr. 1, 3, and 9)**
- 8) **Performance Requirements**
  - a. CFM
  - b. SP
  - c. Fan RPM
  - d. BHP
  - e. Temperature
  - f. Air Density
- 9) **Motor Requirements**
  - a. Motor HP
  - b. Motor RPM
  - c. Enclosure Type
  - d. Voltage/Phase/Cycle
  - e. Motor Frame Limitations (Arr. 9)
- 10) **V-Belt Drive**
  - a. Constant or Variable Speed
  - b. Service Factor
- 11) **Accessories (List Accessories Required)**
  - a. Access Doors bolted or hinged-flush or raised-location
  - b. Belt Guard, three sided or totally enclosed
  - c. Companion Inlet Flange
  - d. Drain
  - e. Extended Lube Lines
  - f. High Temp. Package
  - g. Inlet and Outlet Screens
  - h. Inlet Flange
  - i. Outlet Flange
  - j. Outlet Damper, Opposed Blade or Parallel Blade
  - k. Shaft Cooler
  - l. Shaft Guard
  - m. Shaft Seal
  - n. Spark Resistant Construction (type A, B or C)
  - o. Special Protective Coatings
  - p. Split Housing
  - q. Unitary and Inertia Bases
  - r. Variable Inlet Vane (VIV)
  - s. Vibration Isolators (RIS or Springs)
  - t. Weathercover

We also offer a complete selection of buy out accessories to compliment our entire product offering which must be quoted by your local sales representative or the factory.



# INDUSTRIAL FANS & BLOWERS

Backward  
Inclined

**Industrial**  
*Air* Technology Corp.

**Type BISW & BIDW**  
**Technical Data &**  
**Performance**  
**Backward Inclined**

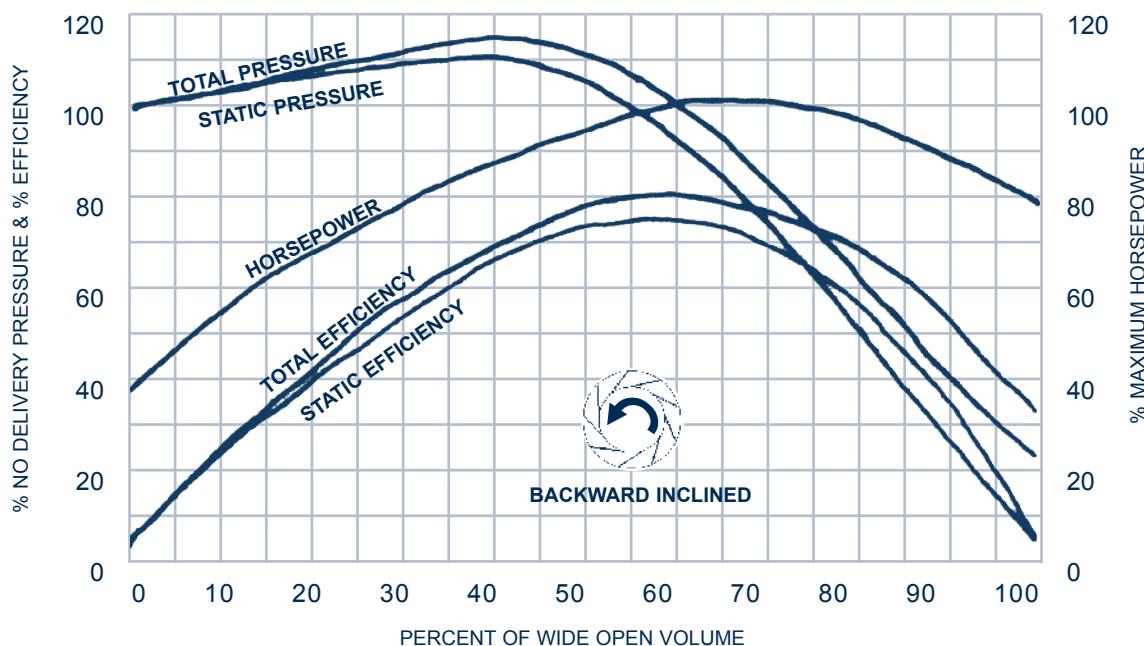


The following chart is a listing of the WR<sup>2</sup> (lb. ft<sup>2</sup>) values of the BI fans. It incorporates the values for the SWSI and DWDI fans. The values can then be plugged into the previously given formulas above for calculating the motor capabilities in regards to direct drive as well as belt drive fan units.

Fan Size	BISW			BIDW	
	Class 2 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 3 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 4 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 2 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 3 WR <sup>2</sup> (lb. ft <sup>2</sup> )
122	2.5				
150	5.5				
182	13	17	20		
200	17.5	23	27		
222	26	34	40		
245	39	60	70	86	101
270	56	86	98	129	140
300	117	143	154	196	227
330	175	231	251	285	332
365	243	326	350	424	501
402	362	468	536	715	844
445	562	770	890	1040	1232
490	947	1148	1379	1518	1783
542	1610	1880	2218	2574	2920
600	2410	2862	3465	3713	4240
660	3420	4660	5287	5350	6109
730	5120	7036	7740	10593	13300

## TYPICAL PERFORMANCE CURVE

Type BI



# BISW PERFORMANCE DATA

## BISW 122

WHEEL DIAMETER ..... 12.25 IN.  
MAX WHEEL SPEED ..... Class 2 - 4170 RPM

		STATIC PRESSURE (in. WG)																			
		0.5		1		1.5		2		3		4		5		6		7		8	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
600	706	1046	0.08	1345	0.16	1597	0.26														
800	941	1180	0.12	1449	0.21	1678	0.31	1882	0.43	2246	0.7										
1000	1176	1329	0.17	1577	0.28	1787	0.4	1976	0.52	2313	0.81	2615	1.13	2891	1.48						
1200	1412	1489	0.23	1718	0.36	1915	0.5	2091	0.64	2407	0.94	2690	1.28	2951	1.65	3195	2.05	3425	2.47		
1400	1647	1658	0.32	1869	0.47	2053	0.62	2220	0.78	2519	1.1	2787	1.46	3034	1.85	3266	2.26	3485	2.71	3694 3.18	
1600	1882	1835	0.43	2027	0.59	2201	0.76	2359	0.94	2644	1.3	2899	1.68	3134	2.09	3355	2.52	3564	2.98	3764 3.46	
1800	2118	2016	0.57	2192	0.74	2355	0.93	2506	1.13	2778	1.53	3022	1.94	3248	2.37	3459	2.82	3660	3.29	3852 3.79	
2000	2353	2202	0.74	2363	0.93	2515	1.13	2658	1.34	2919	1.78	3154	2.23	3371	2.69	3574	3.16	3767	3.66	3952 4.17	
2200	2588	2391	0.95	2539	1.15	2681	1.36	2816	1.59	3065	2.07	3292	2.55	3502	3.05	3698	3.55	3885	4.07	4063 4.61	
2400	2824	2583	1.19	2718	1.4	2851	1.63	2979	1.87	3217	2.39	3436	2.91	3639	3.44	3829	3.98	4010	4.53		
2600	3059	2777	1.48	2902	1.7	3025	1.94	3146	2.2	3374	2.74	3584	3.3	3781	3.88	3966	4.45	4141	5.04		
2800	3294	2972	1.81	3088	2.05	3203	2.3	3317	2.57	3534	3.14	3737	3.74	3927	4.35	4107	4.97				
3000	3529	3168	2.19	3276	2.44	3385	2.71	3492	2.98	3698	3.58	3894	4.21	4078	4.86						
3200	3765	3365	2.62	3467	2.89	3568	3.17	3669	3.46	3866	4.08	4054	4.74								
3400	4000	3564	3.11	3659	3.39	3754	3.68	3850	3.98	4037	4.63										
3600	4235	3762	3.65	3852	3.95	3942	4.26	4033	4.57												
3800	4471	3962	4.25	4046	4.58	4132	4.9														

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 150

WHEEL DIAMETER ..... 15 IN.  
MAX WHEEL SPEED ..... Class 2 - 3370 RPM

		STATIC PRESSURE (in. WG)																			
		0.5		1		1.5		2		3		4		5		6		7		8	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
1000	781	889	0.14	1124	0.26	1323	0.41	1500	0.58												
1400	1094	1044	0.22	1252	0.38	1428	0.55	1586	0.73	1868	1.15	2120	1.63								
1800	1406	1217	0.35	1403	0.55	1564	0.75	1708	0.96	1966	1.41	2197	1.92	2410	2.47	2609	3.07	2797	3.71		
2200	1719	1402	0.53	1569	0.76	1717	1	1851	1.24	2090	1.75	2305	2.29	2504	2.88	2690	3.52	2866	4.19	3034 4.9	
2600	2031	1597	0.78	1745	1.04	1881	1.31	2006	1.6	2231	2.17	2434	2.77	2621	3.4	2796	4.07	2962	4.77	3121 5.51	
3000	2344	1799	1.12	1930	1.39	2055	1.7	2171	2.02	2384	2.67	2576	3.34	2753	4.03	2919	4.74	3077	5.48	3228 6.26	
3400	2656	2006	1.54	2123	1.84	2236	2.17	2344	2.52	2545	3.26	2728	4	2897	4.76	3056	5.53	3206	6.33	3350 7.14	
3800	2969	2216	2.07	2320	2.4	2424	2.75	2524	3.13	2713	3.93	2887	4.75	3049	5.59	3202	6.44	3346	7.3		
4200	3281	2428	2.72	2523	3.08	2617	3.45	2710	3.85	2887	4.71	3053	5.61	3208	6.52	3355	7.45				
4600	3594	2642	3.49	2728	3.88	2815	4.28	2901	4.71	3067	5.61	3224	6.58								
5000	3906	2857	4.41	2937	4.83	3016	5.26	3096	5.71	3251	6.66										

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 182

WHEEL DIAMETER ..... 18.25 IN.

MAX WHEEL SPEED ..... Class 2 - 2730 RPM; Class 3 - 3450 RPM; Class 4 - 3900 RPM

		STATIC PRESSURE (in. WG)																			
		2		4		6		8		10		12		14		16		18		20	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2100	1111	1234	0.95																		
2600	1376	1299	1.17	1711	2.45																
3100	1640	1385	1.45	1759	2.8	2089	4.41														
3600	1905	1484	1.81	1826	3.23	2133	4.92	2414	6.82												
4100	2169	1592	2.24	1907	3.75	2193	5.51	2457	7.49	2705	9.65										
4600	2434	1707	2.75	2000	4.38	2266	6.21	2515	8.25	2749	10.49	2971	12.9	3183	15.45						
5100	2698	1827	3.35	2100	5.12	2350	7.03	2584	9.14	2806	11.44	3018	13.92	3221	16.56	3415	19.32				
5600	2963	1950	4.03	2208	5.97	2442	7.98	2663	10.17	2874	12.53	3075	15.08	3269	17.78	3456	20.62	3636	23.6	3811	26.68
6100	3228	2077	4.82	2320	6.92	2542	9.07	2751	11.34	2951	13.78	3143	16.38	3328	19.15	3507	22.06	3681	25.11	3850	28.28
6600	3492	2206	5.71	2436	7.99	2647	10.28	2846	12.66	3036	15.18	3219	17.85	3397	20.68	3568	23.65	3735	26.77	3897	30.01
7100	3757	2337	6.72	2556	9.18	2757	11.63	2947	14.13	3128	16.74	3303	19.5	3473	22.39	3637	25.43	3798	28.61		
7600	4021	2469	7.86	2678	10.5	2871	13.11	3052	15.75	3226	18.48	3394	21.32	3556	24.29	3714	27.4	3868	30.64		
8100	4286	2604	9.13	2803	11.95	2988	14.74	3162	17.53	3328	20.38	3489	23.33	3645	26.38	3797	29.56				
8600	4550	2739	10.55	2930	13.54	3107	16.51	3275	19.47	3435	22.46	3590	25.52	3740	28.67	3886	31.94				
9100	4815	2875	12.13	3059	15.29	3229	18.44	3390	21.57	3545	24.71	3694	27.9	3839	31.16						
9600	5079	3013	13.87	3189	17.2	3353	20.53	3509	23.83	3658	27.13	3802	30.46								

Class 2 = Regular Type Face; Class 3 =       ; Class 4 =       

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 200

WHEEL DIAMETER ..... 20 IN.

MAX WHEEL SPEED ..... Class 2 - 2490 RPM; Class 3 - 3150 RPM; Class 4 - 3600 RPM

		STATIC PRESSURE (in. WG)																			
		2		4		6		8		10		12		14		16		18		20	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	1096	1124	1.14																		
3100	1360	1183	1.39	1560	2.92																
3700	1623	1260	1.73	1603	3.34	1905	5.28														
4300	1886	1350	2.15	1664	3.85	1945	5.88	2202	8.16												
4900	2149	1449	2.67	1737	4.48	1999	6.58	2241	8.96	2467	11.55										
5500	2412	1553	3.28	1821	5.23	2065	7.42	2292	9.87	2507	12.56	2710	15.44								
6100	2675	1662	3.99	1913	6.11	2141	8.4	2355	10.93	2558	13.69	2752	16.67	2937	19.82	3115	23.14				
6700	2939	1775	4.81	2010	7.12	2225	9.54	2427	12.16	2619	14.99	2804	18.05	2981	21.29	3152	24.7	3317	28.26	3476	31.97
7300	3202	1890	5.75	2112	8.26	2316	10.83	2507	13.55	2690	16.48	2865	19.6	3034	22.92	3198	26.42	3357	30.07	3511	33.88
7900	3465	2007	6.81	2218	9.54	2411	12.28	2593	15.13	2767	18.15	2934	21.36	3096	24.75	3253	28.32	3406	32.06	3554	35.95
8500	3728	2127	8.02	2327	10.96	2511	13.89	2685	16.89	2851	20.02	3011	23.32	3166	26.79	3316	30.44	3463	34.25		
9100	3991	2248	9.38	2439	12.53	2615	15.66	2781	18.83	2940	22.09	3093	25.5	3241	29.06	3386	32.79	3527	36.68		
9700	4254	2370	10.89	2553	14.27	2721	17.6	2880	20.95	3033	24.37	3180	27.9	3322	31.57	3461	35.38	3597	39.35		
10300	4518	2493	12.59	2668	16.17	2830	19.72	2983	23.27	3130	26.85	3271	30.52	3408	34.3	3542	38.22				
10900	4781	2618	14.47	2785	18.26	2941	22.03	3089	25.77	3230	29.54	3366	33.36	3498	37.28						
11500	5044	2743	16.55	2904	20.54	3054	24.53	3196	28.48	3333	32.44	3464	36.43	3592	40.49						

Class 2 = Regular Type Face; Class 3 =       ; Class 4 =       

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 222

WHEEL DIAMETER ..... 22.25 IN.  
 MAX WHEEL SPEED ..... Class 2 - 2240 RPM; Class 3 - 2830 RPM; Class 4 - 3250 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																			
			2	4	6	8	10	12	14	16	18	20	2	4	6	8	10	12	14	16	18	20
3000	1060	1005	1.37																			
4000	1413	1078	1.8	1409	3.72																	
5000	1767	1178	2.42	1470	4.48	1731	6.94															
6000	2120	1294	3.24	1555	5.47	1792	8.07	2010	11	2215	14.2											
7000	2473	1421	4.27	1658	6.74	1873	9.48	2074	12.54	2264	15.89	2445	19.49	2616	23.3							
8000	2827	1555	5.53	1772	8.3	1969	11.23	2155	14.42	2332	17.9	2501	21.64	2663	25.61	2819	29.79	2969	34.15			
9000	3180	1694	7.05	1894	10.15	2077	13.32	2250	16.69	2414	20.3	2573	24.16	2725	28.27	2873	32.59	3016	37.11	3154	41.81	
10000	3534	1836	8.86	2023	12.31	2194	15.77	2355	19.36	2509	23.13	2658	27.13	2801	31.36	2941	35.81	3076	40.46	3208	45.31	
11000	3887	1982	10.99	2157	14.8	2317	18.58	2469	22.43	2614	26.41	2753	30.57	2889	34.94	3021	39.52	3149	44.3			
12000	4240	2130	13.47	2294	17.64	2445	21.77	2589	25.91	2725	30.14	2858	34.51	2986	39.04	3111	43.77	3233	48.67			
13000	4594	2279	16.34	2434	20.86	2578	25.36	2713	29.82	2843	34.33	2969	38.93	3091	43.67	3209	48.56					
14000	4947	2430	19.65	2577	24.5	2713	29.36	2842	34.17	2966	38.99	3086	43.87	3202	48.84							

Class 2 = Regular Type Face; Class 3 = ; Class 4 =

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 245

WHEEL DIAMETER ..... 24.5 IN.  
 MAX WHEEL SPEED ..... Class 2 - 2040 RPM; Class 3 - 2585 RPM; Class 4 - 2970 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																			
			2	4	6	8	10	12	14	16	18	20	2	4	6	8	10	12	14	16	18	20
4000	1176	929	1.8																			
5000	1471	989	2.27	1285	4.61																	
6000	1765	1064	2.89	1332	5.37	1570	8.35															
7000	2059	1150	3.68	1393	6.33	1613	9.44	1815	12.96	2003	16.79											
8000	2353	1243	4.64	1467	7.51	1669	10.76	1858	14.41	2036	18.4	2204	22.69									
9000	2647	1341	5.79	1548	8.93	1736	12.34	1913	16.11	2080	20.24	2240	24.68	2392	29.39	2538	34.35					
10000	2941	1443	7.14	1636	10.59	1812	14.2	1978	18.12	2135	22.38	2286	26.95	2431	31.8	2571	36.92	2706	42.26	2836	47.81	
11000	3235	1548	8.7	1729	12.49	1894	16.35	2050	20.45	2199	24.85	2342	29.54	2480	34.53	2613	39.78	2742	45.27	2868	50.99	
12000	3529	1654	10.5	1825	14.64	1981	18.8	2129	23.11	2270	27.67	2405	32.5	2536	37.61	2664	42.99	2787	48.62	2908	54.47	
13000	3824	1763	12.56	1924	17.07	2073	21.54	2213	26.11	2346	30.86	2475	35.85	2600	41.1	2722	46.6	2840	52.35	2956	58.35	
14000	4118	1873	14.91	2026	19.77	2168	24.59	2301	29.44	2428	34.43	2551	39.6	2671	45	2787	50.65	2900	56.53			
15000	4412	1984	17.57	2130	22.79	2265	27.95	2392	33.12	2514	38.37	2632	43.76	2746	49.35	2858	55.14	2966	61.16			
16000	4706	2097	20.56	2236	26.12	2365	31.65	2487	37.15	2604	42.69	2717	48.33	2826	54.12	2933	60.11					
17000	5000	2210	23.91	2343	29.81	2467	35.7	2584	41.55	2696	47.4	2805	53.32	2910	59.35							

Class 2 = Regular Type Face; Class 3 = ; Class 4 =

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 270

WHEEL DIAMETER ..... 27 IN.  
MAX WHEEL SPEED ..... Class 2 - 1850 RPM; Class 3 - 2350 RPM; Class 4 - 2700 RPM

STATIC PRESSURE (in. WG)																			
CFM	OV	RPM	BHP																
5000	1208	835	2.08																
6000	1449	880	2.53	1157	5.19														
7000	1691	942	3.15	1179	5.82														
8000	1932	1012	3.93	1220	6.67	1428	10.12												
9000	2174	1087	4.85	1274	7.75	1459	11.19	1644	15.28										
10000	2415	1165	5.94	1338	9.06	1504	12.55	1671	16.62	1837	21.27								
11000	2657	1246	7.19	1408	10.58	1559	14.2	1710	18.28	1862	22.9	2013	28.04						
12000	2899	1328	8.62	1482	12.32	1623	16.12	1760	20.26	1899	24.88	2038	30	2177	35.58	2313	41.56		
13000	3140	1411	10.25	1559	14.28	1691	18.31	1819	22.58	1946	27.23	2074	32.33	2203	37.9	2331	43.9	2457	50.27
14000	3382	1495	12.09	1637	16.46	1763	20.77	1883	25.22	2001	29.95	2119	35.07	2238	40.62	2358	46.6	2477	52.99
15000	3623	1581	14.16	1717	18.88	1838	23.49	1952	28.16	2063	33.04	2173	38.23	2283	43.78	2394	49.74	2506	56.11
16000	3865	1667	16.48	1798	21.55	1915	26.48	2024	31.41	2129	36.47	2232	41.78	2336	47.39	2439	53.35	2543	59.69
17000	4106	1754	19.05	1880	24.48	1993	29.74	2098	34.96	2199	40.25	2297	45.71	2394	51.43	2491	57.44	2588	63.79
18000	4348	1841	21.9	1963	27.69	2073	33.29	2175	38.82	2271	44.37	2365	50.04	2457	55.89	2549	62	2640	68.39
19000	4589	1929	25.03	2047	31.19	2153	37.14	2252	42.99	2346	48.83	2436	54.73	2524	60.77	2611	67	2698	73.49
20000	4831	2018	28.48	2132	35	2235	41.31	2331	47.49	2422	53.63	2509	59.79	2594	66.04	2677	72.45		
21000	5072	2107	32.25	2217	39.13	2317	45.8	2411	52.33	2499	58.78	2584	65.23	2666	71.73				

Class 2 = Regular Type Face; Class 3 = ■; Class 4 = ■  
Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 300

WHEEL DIAMETER ..... 30 IN.  
MAX WHEEL SPEED ..... Class 2 - 1660 RPM; Class 3 - 2100 RPM; Class 4 - 2450 RPM

STATIC PRESSURE (in. WG)																			
CFM	OV	RPM	BHP																
6000	1172	748	2.5																
7500	1465	796	3.18	1042	6.46														
9000	1758	865	4.15	1070	7.46	1274	11.72												
10500	2051	945	5.4	1121	8.87	1298	13.12	1472	18.16										
12000	2344	1029	6.93	1188	10.7	1341	14.99	1496	20.02	1649	25.75								
13500	2637	1116	8.77	1263	12.93	1400	17.38	1536	22.42	1674	28.13	1811	34.48						
15000	2930	1206	10.93	1344	15.56	1470	20.29	1592	25.42	1715	31.12	1838	37.43	1962	44.33	2084	51.71		
16500	3223	1297	13.46	1428	18.58	1546	23.68	1658	29.02	1769	34.79	1881	41.09	1993	47.95	2106	55.36	2217	63.24
18000	3516	1390	16.38	1515	22.02	1626	27.55	1731	33.19	1833	39.14	1935	45.49	2037	52.34	2140	59.71	2244	67.59
20000	3906	1516	20.95	1633	27.3	1738	33.46	1835	39.62	1929	45.93	2020	52.51	2112	59.46	2204	66.83	2297	74.66
23000	4492	1707	29.43	1814	36.86	1911	44.05	2001	51.12	2086	58.19	2168	65.37	2249	72.73	2329	80.37	2408	88.32
26000	5078	1901	40.1	2000	48.63	2090	56.89	2174	64.97	2253	72.97	2329	80.94	2403	88.99				

Class 2 = Regular Type Face; Class 3 = ■; Class 4 = ■  
Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.  
Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 330

WHEEL DIAMETER ..... 33 IN.  
MAX WHEEL SPEED ..... Class 2 - 1515 RPM; Class 3 - 1910 RPM; Class 4 - 2250 RPM

		STATIC PRESSURE (in. WG)																			
		2		4		6		8		10		12		14		16		18		20	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000	1127	676	2.94																		
9000	1449	721	3.8	947	7.78																
11000	1771	791	5.1	975	9.12	1159	14.27														
13000	2093	871	6.81	1028	11.06	1185	16.2	1341	22.31												
15000	2415	956	8.94	1097	13.62	1232	18.84	1368	24.92	1504	31.87										
17000	2738	1045	11.52	1175	16.76	1295	22.25	1414	28.37	1534	35.27	1654	42.94	1772	51.26						
19000	3060	1135	14.6	1258	20.47	1368	26.4	1474	32.71	1580	39.63	1688	47.25	1795	55.59	1902	64.54	2007	74.04		
21000	3382	1227	18.24	1343	24.79	1446	31.25	1544	37.91	1640	45	1736	52.65	1833	60.93	1931	69.87	2028	79.41	2124	89.49
23000	3704	1321	22.48	1431	29.74	1529	36.81	1620	43.94	1709	51.33	1797	59.14	1884	67.46	1973	76.36	2061	85.84	2151	95.93
25000	4026	1416	27.4	1520	35.37	1614	43.1	1701	50.78	1784	58.59	1865	66.68	1946	75.17	2026	84.12	2107	93.6	2189	103.6
27000	4348	1512	33.04	1611	41.73	1701	50.14	1784	58.43	1863	66.75	1939	75.24	2014	84.02	2089	93.15	2164	102.7	2239	112.7
29000	4670	1609	39.47	1703	48.88	1789	58	1869	66.94	1945	75.84	2017	84.81	2088	93.96	2158	103.4	2228	113.1		
31000	4992	1706	46.73	1796	56.88	1879	66.71	1956	76.33	2029	85.85	2099	95.37	2166	105	2232	114.8				

Class 2 = Regular Type Face; Class 3 = ; Class 4 = 

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 365

WHEEL DIAMETER ..... 36.5 IN.  
MAX WHEEL SPEED ..... Class 2 - 1360 RPM; Class 3 - 1710 RPM; Class 4 - 2050 RPM

		STATIC PRESSURE (in. WG)																			
		2		4		6		8		10		12		14		16		18		20	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1316	631	4.15																		
12000	1579	676	5.23	863	10.11																
14000	1842	730	6.66	891	11.62	1051	17.93														
16000	2105	790	8.43	932	13.64	1073	19.93	1213	27.4												
18000	2368	853	10.53	983	16.17	1107	22.53	1232	29.98	1357	38.46										
20000	2632	918	13	1039	19.17	1151	25.76	1263	33.21	1376	41.67	1489	51.06								
24000	3158	1052	19.16	1161	26.6	1258	34.03	1352	41.87	1445	50.38	1538	59.7	1632	69.88	1727	80.85	1819	92.5		
28000	3684	1190	27.19	1289	36.02	1378	44.62	1461	53.31	1541	62.33	1621	71.87	1701	82.04	1781	92.92	1862	104.5	1943	116.9
32000	4211	1330	37.4	1422	47.66	1504	57.6	1581	67.41	1654	77.32	1724	87.49	1794	98.05	1864	109.1	1934	120.7	2004	133
36000	4737	1473	50.09	1558	61.8	1635	73.14	1707	84.25	1774	95.29	1839	106.4	1903	117.7	1965	129.3	2027	141.3		
40000	5263	1618	65.56	1696	78.75	1769	91.51	1836	104	1900	116.3	1961	128.6	2020	140.9						

Class 2 = Regular Type Face; Class 3 = ; Class 4 = 

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

BISW 402

WHEEL DIAMETER ..... 40.25 IN.

MAX WHEEL SPEED ..... Class 2 - 1240 RPM; Class 3 - 1530 RPM; Class 4 - 1870 RPM

Class 2 = Regular Type Face: Class 3 =  : Class 4 = 

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance shown is for installation type B - Free inlet, Bacted outlet. Power law.  
Performance ratings do not include the effects of appurtenances in the airstream.

BISW 445

WHEEL DIAMETER ..... 44.5 IN.

MAX WHEEL SPEED ..... Class 2 - 1110 RPM; Class 3 - 1390 RPM; Class 4 - 1710 RPM

Class 2 = Regular Type Face: Class 3 =  Class 4 = 

Performance shown is for installation type B - Free inlet. Ducted outlet. Power rating (BHP) does not include drive losses.

Performance shown is for installation type B - Free inlet, Ducted outlet. Power law.  
Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 490

WHEEL DIAMETER ..... 49 IN.

MAX WHEEL SPEED ..... Class 2 - 1020 RPM; Class 3 - 1260 RPM; Class 4 - 1560 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	4	6	8	10	12	14	16	18	20	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
19000	1383	465	7.64																		
23000	1674	506	10.2	626	17.8																
27000	1965	551	13.25	659	21.75	761	31.32														
31000	2256	596	16.61	699	26.73	788	36.64	877	47.95												
35000	2547	643	20.36	743	32.48	825	43.37	906	54.82	983	67.66										
43000	3129	748	30.58	833	45.51	912	59.98	980	73.36	1044	86.86	1108	101.1	1172	116.5						
47000	3420	806	37.52	879	52.71	957	69.39	1023	84.46	1084	99.02	1143	113.8	1201	129.3	1259	145.8	1318	163.5		
51000	3712	866	45.82	927	60.74	1002	79.33	1068	96.48	1127	112.5	1183	128.3	1237	144.4	1290	161.1	1344	178.7	1398	197.3
55000	4003	928	55.54	979	70.06	1047	89.77	1113	109.2	1172	127.1	1225	144.3	1277	161.3	1327	178.6	1376	196.5	1426	215.1
59000	4294	990	66.78	1033	80.98	1094	101	1158	122.5	1216	142.6	1269	161.5	1319	179.8	1367	198.1	1413	216.6	1460	235.6
63000	4585	1052	79.64	1090	93.65	1142	113.3	1204	136.4	1262	158.8	1314	179.8	1363	199.7	1409	219.3	1454	238.8	1498	258.5
67000	4876	1115	94.2	1148	108.2	1194	127.4	1250	151.1	1307	175.6	1359	198.9	1408	220.8	1453	242	1497	262.8	1539	283.5

Class 2 = Regular Type Face; Class 3 = ; Class 4 = 

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 542

WHEEL DIAMETER ..... 54.25 IN.

MAX WHEEL SPEED ..... Class 2 - 915 RPM; Class 3 - 1210 RPM; Class 4 - 1420 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	4	6	8	10	12	14	16	18	20	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
20000	1184	400	7.74																		
24000	1420	425	9.77																		
28000	1657	456	12.37	656	21.66																
32000	1894	489	15.36	587	25.46																
36000	2131	522	18.64	616	30.15	700	42.02														
40000	2367	555	22.16	648	35.55	725	48.09	801	61.93												
44000	2604	590	26.11	681	41.49	754	55.21	823	69.38	892	85.09										
48000	2841	628	30.78	714	47.86	785	63.21	850	78.17	913	94	976	111.4								
52000	3078	669	36.39	747	54.56	818	71.92	880	88.06	938	104.5	996	121.9	1055	140.8						
57000	3374	722	44.85	789	63.46	859	83.58	919	101.8	975	119.4	1028	137.5	1081	156.4	1134	176.7	1189	198.4		
62000	3670	777	55.01	833	73.37	901	95.93	961	116.7	1014	136.1	1064	155.3	1113	174.9	1162	195.4	1211	216.9	1260	239.7
67000	3965	833	67	880	84.84	942	108.9	1002	132.5	1055	154.2	1103	175.1	1150	195.9	1195	217	1240	238.8	1285	261.6
72000	4261	890	80.9	930	98.33	985	122.8	1043	149.1	1096	173.5	1144	196.5	1189	218.9	1232	241.2	1274	263.8	1316	287.1
77000	4557	948	96.86	982	114	1030	138.2	1085	166.4	1138	193.7	1185	219.3	1229	243.7	1271	267.6	1312	291.4	1351	315.5
82000	4853	1006	115	1036	132.1	1077	155.7	1128	184.7	1179	214.7	1227	243.1	1271	270	1312	295.9	1351	321.3	1389	346.7

Class 2 = Regular Type Face; Class 3 = ; Class 4 = 

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 600

WHEEL DIAMETER ..... 60 IN.

MAX WHEEL SPEED ..... Class 2 - 820 RPM; Class 3 - 1040 RPM; Class 4 - 1275 RPM

		147.3 STATIC PRESSURE (in. WG)																			
		2		4		6		8		10		12		14		16		18		20	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
24000	1160	360	9.28																		
30000	1450	388	12.33																		
36000	1740	423	16.39	517	28.02																
42000	2030	459	21.1	546	34.38	626	48.75														
48000	2320	496	26.26	580	42.17	651	57.31	721	74.24												
54000	2610	535	32.13	616	51.04	683	67.88	745	85.24	807	104.4										
60000	2900	577	39.34	653	60.66	718	80.04	775	98.67	831	118.2	887	139.4								
66000	3190	623	48.32	690	70.9	754	93.44	809	114.1	861	134.7	911	156.2	962	179.2	1014	204.2				
72000	3480	671	59.23	728	81.96	791	107.8	845	131.1	894	153.5	841	176	988	199.4	1034	224.2	1081	250.6		
78000	3770	720	72.21	768	94.44	828	122.9	882	149.4	930	174.1	975	198.3	1018	222.7	1061	247.9	1104	274.3	1147	302.2
84000	4060	770	87.37	810	109	865	138.8	918	168.8	966	196.4	1010	222.8	1051	248.7	1092	275	1131	302	1171	330
90000	4350	821	104.8	855	126	903	155.9	955	188.9	1003	219.9	1046	249	1086	277.1	1125	304.9	1163	333	1200	361.7
96000	4640	873	124.8	902	145.7	943	175.1	992	210	1040	244.5	1083	276.8	1123	307.5	1160	337.4	1196	367.1	1232	396.9
102000	4930	924	147.3	950	168.3	986	196.8	1030	232.5	1077	270	1120	305.7	1159	339.5	1196	371.9	1232	403.7	1266	435.2

Class 2 = Regular Type Face; Class 3 =  ; Class 4 =  

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 660

WHEEL DIAMETER ..... 66 IN.

MAX WHEEL SPEED ..... Class 2 - 750 RPM; Class 3 - 940 RPM; Class 4 - 1150 RPM

		STATIC PRESSURE (in. WG)																			
		2		4		6		8		10		12		14		16		18		20	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
30000	1199	330	11.63																		
37500	1499	357	15.66																		
52500	2098	425	26.92	503	43.64	573	61.13														
60000	2398	460	33.53	536	53.75	599	72.52	660	93.04												
67500	2698	497	41.27	570	65.13	630	86.33	685	107.7	739	130.9										
75000	2997	538	50.93	605	77.42	663	102.1	715	125.3	764	149.3	813	174.9	863	203						
82500	3297	582	62.99	640	90.15	698	119.2	747	145.3	793	170.9	838	197.3	883	225.3	928	255.2				
90000	3597	628	77.6	676	104.9	732	137.5	781	167.3	826	195.4	867	223.3	908	252.	949	282.1	990	314	1032	347.9
97500	3897	674	94.92	714	121.5	767	156.8	816	190.7	859	222.1	900	252.4	938	282.6	976	313.6	1014	345.8	1051	379.5
105000	4196	722	115.1	755	141	802	177.3	850	215.4	894	250.7	933	284	970	316.5	1006	349.1	1041	382.3	1076	416.5
112500	4496	770	138.4	798	163.9	839	199.8	885	241.1	928	280.7	967	317.7	1004	353.2	1038	388.1	1072	423	1105	458.3
120000	4796	818	165	843	190.3	878	225.3	920	268.3	963	312	1002	353.3	1038	392.3	1072	430	1104	467.2	1136	504.4

Class 2 = Regular Type Face; Class 3 =  ; Class 4 =  

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BISW 730

WHEEL DIAMETER ..... 73 IN.

MAX WHEEL SPEED ..... Class 2 - 680 RPM; Class 3 - 860 RPM; Class 4 - 1040 RPM

CFM	OV	RPM	2		4		6		8		10		12		14		16		18		20	
			BHP	RPM	BHP	RPM	BHP	RPM														
38000	1240	301	14.81																			
46000	1501	323	19.24																			
54000	1763	350	24.79	427	42.13																	
62000	2024	377	31.09	448	50.68	514	71.95															
70000	2285	404	37.92	473	60.96	532	83.16	591	108.2													
78000	2546	433	45.52	500	72.56	555	96.85	607	122.3	660	150.8											
86000	2807	463	54.58	527	85.17	581	112.5	629	139.4	676	168	724	199.5									
94000	3068	496	65.65	555	98.53	607	129.9	653	159	697	188.7	740	220.2	784	254.4							
102000	3329	531	78.98	582	112.7	634	148.4	679	180.8	721	212.4	761	244.9	800	279.2	841	315.8					
110000	3590	567	94.71	611	128.1	662	168	706	204.3	746	238.6	784	272.8	821	307.9	858	344.8	895	383.7	933	425.2	
118000	3852	604	113	641	145.6	689	188.4	733	229.2	773	267	809	303.6	844	340.3	879	378	913	417.3	948	458.5	
126000	4113	641	133.9	673	165.8	717	210	761	255.3	800	297.1	836	336.8	869	375.8	902	415	934	455.2	967	496.8	
134000	4374	679	157.6	706	188.9	745	233.2	788	282.3	827	328.7	862	372.1	896	414	927	455.4	958	497.2	988	539.8	
142000	4635	717	184.3	741	215.4	775	258.8	815	310.5	854	361.4	890	409.2	922	454.6	953	498.8	983	542.7	1012	586.9	
150000	4896	755	214.1	777	245.1	806	287.6	843	340.3	881	395.4	917	447.7	949	497.1	980	544.7	1009	591.3	1037	637.7	

Class 2 = Regular Type Face; Class 3 = ; Class 4 = 

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 182

WHEEL DIAMETER ..... 18.25 IN.

MAX WHEEL SPEED ..... Class 2 - 2730 RPM; Class 3 - 3450 RPM

CFM	OV	RPM	0.25		0.5		1		1.5		2		4		6		8		10		12	
			BHP	RPM	BHP	RPM																
3000	880	595	0.24	699	0.37	875	0.69	1035	1.07													
4000	1173	719	0.42	812	0.6	963	0.97	1096	1.38	1222	1.84											
5000	1466	847	0.68	934	0.92	1072	1.37	1189	1.83	1298	2.33	1694	4.72									
6000	1760	980	1.05	1060	1.34	1190	1.89	1299	2.43	1397	2.99	1750	5.49	2070	8.54							
7000	2053	1116	1.54	1189	1.89	1312	2.55	1416	3.18	1508	3.81	1830	6.5	2121	9.64	2393	13.25					
8000	2346	1255	2.19	1320	2.57	1437	3.35	1537	4.09	1625	4.81	1925	7.75	2192	11.03	2443	14.71	2682	18.8			
9000	2639	1397	3	1455	3.43	1565	4.31	1660	5.16	1745	5.99	2031	9.24	2280	12.7	2513	16.5	2735	20.67	2949	25.21	
10000	2933	1540	4.02	1592	4.48	1694	5.46	1786	6.42	1868	7.36	2144	10.96	2379	14.66	2597	18.63	2804	22.91	3005	27.53	
11000	3226	1684	5.24	1731	5.74	1826	6.81	1913	7.89	1993	8.94	2260	12.93	2485	16.92	2692	21.09	2887	25.52	3076	30.25	
12000	3519	1829	6.71	1872	7.24	1959	8.39	2043	9.57	2120	10.74	2380	15.16	2597	19.47	2794	23.89	2980	28.51	3158	33.38	
13000	3812	1975	8.44	2014	9	2095	10.23	2173	11.51	2248	12.78	2502	17.64	2713	22.31	2903	27.02	3081	31.87	3250	36.93	
14000	4106	2122	10.44	2157	11.04	2232	12.34	2306	13.71	2377	15.09	2625	20.4	2831	25.46	3015	30.49	3187	35.61	3350	40.89	
15000	4399	2268	12.75	2301	13.39	2370	14.76	2440	16.21	2508	17.68	2749	23.45	2952	28.93	3131	34.31	3297	39.72			
16000	4692	2415	15.39	2446	16.06	2510	17.49	2576	19.02	2641	20.59	2875	26.8	3073	32.71	3249	38.48	3411	44.22			
17000	4985	2563	18.37	2592	19.07	2652	20.58	2713	22.18	2775	23.84	3002	30.48	3197	36.84	3369	43					
18000	5279	2710	21.72	2737	22.46	2794	24.03	2852	25.7	2910	27.44	3129	34.5	3321	41.32							

Class 2 = Regular Type Face; Class 3 = 

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 200

WHEEL DIAMETER ..... 20 IN.

MAX WHEEL SPEED ..... Class 2 - 2490 RPM; Class 3 - 3150 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
4000	966	580	0.35	670	0.53	822	0.92	958	1.39	1086	1.92										
5000	1208	675	0.55	759	0.78	894	1.23	1013	1.73	1124	2.29										
6000	1449	772	0.82	852	1.1	978	1.64	1085	2.2	1184	2.79	1546	5.66								
8000	1932	976	1.63	1045	2.03	1159	2.78	1255	3.5	1341	4.22	1643	7.37	1917	11.1	2172	15.39				
10000	2415	1187	2.92	1245	3.4	1349	4.38	1439	5.31	1518	6.21	1788	9.86	2025	13.86	2249	18.33	2462	23.27		
12000	2899	1404	4.81	1452	5.37	1545	6.54	1629	7.7	1704	8.82	1955	13.15	2170	17.59	2369	22.35	2559	27.49		
14000	3382	1624	7.42	1664	8.05	1746	9.39	1823	10.77	1895	12.12	2134	17.25	2335	22.29	2517	27.49	2689	32.96		
16000	3865	1845	10.87	1880	11.56	1952	13.06	2022	14.63	2089	16.2	2319	22.22	2510	27.97	2682	33.75	2842	39.68		
18000	4348	2068	15.28	2099	16.04	2162	17.68	2225	19.42	2287	21.2	2507	28.11	2692	34.69	2856	41.14	3008	47.64		
20000	4831	2292	20.77	2319	21.6	2375	23.38	2432	25.27	2489	27.23	2699	35.02	2878	42.48	3036	49.71				
22000	5314	2516	27.46	2540	28.36	2591	30.28	2642	32.31	2695	34.43	2893	43.06	3067	51.43						
24000	5797	2741	35.47	2763	36.44	2808	38.49	2855	40.67	2903	42.93	3090	52.34								

Class 2 = Regular Type Face; Class 3 = **■**

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 222

WHEEL DIAMETER ..... 22.25 IN.

MAX WHEEL SPEED ..... Class 2 - 2240 RPM; Class 3 - 2830 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
6000	1172	593	0.63	670	0.91	793	1.46	902	2.07	1004	2.76										
8000	1562	736	1.2	805	1.59	916	2.31	1009	3.04	1094	3.81	1404	7.41								
10000	1953	885	2.07	946	2.56	1049	3.5	1135	4.41	1211	5.31	1481	9.22	1726	13.85	1954	19.17				
12000	2344	1038	3.33	1091	3.91	1187	5.08	1268	6.19	1340	7.27	1585	11.67	1803	16.56	2008	22.05	2203	28.13		
14000	2734	1195	5.06	1240	5.71	1328	7.09	1405	8.43	1474	9.72	1704	14.76	1903	20.05	2089	25.79	2266	32.06		
16000	3125	1354	7.33	1393	8.06	1472	9.62	1545	11.18	1611	12.7	1831	18.5	2018	24.32	2189	30.44	2351	36.97		
18000	3516	1514	10.24	1548	11.03	1619	12.75	1687	14.53	1750	16.27	1963	22.91	2141	29.38	2301	35.99	2453	42.9		
20000	3906	1675	13.84	1705	14.71	1769	16.58	1832	18.54	1892	20.51	2098	28.03	2269	35.24	2423	42.45	2566	49.83		
22000	4297	1837	18.24	1864	19.17	1922	21.18	1980	23.31	2036	25.48	2235	33.91	2401	41.93	2549	49.83	2686	57.78		
24000	4688	1999	23.49	2024	24.49	2076	26.64	2129	28.93	2182	31.28	2373	40.6	2536	49.49	2680	58.14	2812	66.75		
26000	5078	2162	29.68	2184	30.75	2232	33.04	2281	35.47	2330	37.99	2513	48.18	2672	57.96	2812	67.43				
28000	5469	2324	36.89	2346	38.03	2389	40.46	2435	43.03	2480	45.71	2655	56.7	2810	67.41						
30000	5859	2488	45.2	2507	46.41	2548	48.97	2590	51.69	2632	54.51	2799	66.27								

Class 2 = Regular Type Face; Class 3 = **■**

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

# BIDW PERFORMANCE DATA

## BIDW 245

WHEEL DIAMETER ..... 24.5 IN.

MAX WHEEL SPEED ..... Class 2 - 2040 RPM; Class 3 - 2585 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			0.25	0.5	1	1.5	2	4	6	8	10	12	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1288	577	0.94	645	1.31	752	2.04	845	2.81	932	3.66										
10000	1610	685	1.57	747	2.05	846	2.96	930	3.86	1006	4.81	1282	9.22								
12000	1932	796	2.45	852	3.04	946	4.16	1024	5.24	1094	6.33	1341	11.05	1565	16.65	1773	23.09				
14000	2254	911	3.65	961	4.33	1049	5.68	1124	6.96	1190	8.22	1417	13.41	1619	19.25	1810	25.85	1991	33.19		
16000	2576	1028	5.22	1071	5.98	1154	7.54	1226	9.05	1289	10.51	1503	16.3	1690	22.49	1865	29.31	2032	36.81	2193	44.96
18000	2899	1146	7.21	1185	8.04	1261	9.81	1329	11.55	1391	13.23	1596	19.72	1771	26.38	1934	33.52	2088	41.24	2238	49.55
20000	3221	1265	9.69	1300	10.59	1369	12.53	1435	14.49	1494	16.4	1692	23.68	1859	30.92	2012	38.47	2157	46.49	2297	55.03
22000	3543	1385	12.7	1416	13.67	1480	15.77	1542	17.94	1599	20.07	1791	28.2	1952	36.1	2098	44.17	2235	52.58	2366	61.43
24000	3865	1506	16.29	1534	17.33	1592	19.58	1650	21.94	1705	24.29	1892	33.31	2049	41.95	2189	50.61	2319	59.5	2444	68.73
26000	4187	1627	20.53	1653	21.64	1706	24.03	1760	26.56	1812	29.12	1995	39.04	2147	48.48	2283	57.81	2409	67.26	2528	76.95
28000	4509	1748	25.46	1772	26.63	1822	29.17	1872	31.86	1921	34.61	2098	45.42	2247	55.72	2379	65.78	2501	75.85		
30000	4831	1870	31.13	1892	32.38	1938	35.05	1985	37.89	2031	40.82	2202	52.51	2349	63.69	2478	74.54				
32000	5153	1992	37.6	2013	38.92	2055	41.73	2099	44.71	2143	47.81	2308	60.35	2451	72.43	2578	84.11				
34000	5475	2114	44.93	2133	46.31	2173	49.26	2214	52.38	2255	55.63	2414	68.98	2554	81.98						
36000	5797	2236	53.16	2254	54.62	2292	57.7	2330	60.96	2369	64.36	2521	78.47								
38000	6119	2359	62.35	2376	63.88	2411	67.09	2447	70.49	2484	74.04										

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 270

WHEEL DIAMETER ..... 27 IN.

MAX WHEEL SPEED ..... Class 2 - 1850 RPM; Class 3 - 2350 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			0.25	0.5	1	1.5	2	4	6	8	10	12	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	805	392	0.43	463	0.7	587	1.33														
9000	1208	514	0.94	574	1.35	672	2.16	758	3.02	840	3.97										
12000	1611	645	1.83	696	2.36	783	3.44	858	4.51	926	5.61	1174	10.61								
15000	2013	783	3.24	824	3.86	903	5.2	971	6.55	1033	7.88	1247	13.48	1443	19.86	1630	27.13				
18000	2416	925	5.32	959	6	1027	7.56	1091	9.18	1148	10.8	1344	17.26	1517	24.15	1681	31.74	1839	40.06		
21000	2819	1070	8.19	1098	8.94	1156	10.66	1214	12.53	1268	14.42	1453	21.93	1611	29.57	1758	37.66	1899	46.33	2037	55.65
24000	3221	1216	11.99	1239	12.8	1290	14.66	1341	16.73	1392	18.88	1567	27.49	1716	36.06	1851	44.87	1980	54.08	2105	63.79
27000	3624	1362	16.84	1383	17.72	1427	19.71	1473	21.94	1518	24.3	1685	34.03	1827	43.65	1955	53.33	2076	63.25	2191	73.53
30000	4027	1510	22.89	1528	23.84	1566	25.96	1607	28.32	1648	30.86	1806	41.61	1943	52.36	2065	63.05	2179	73.83	2288	84.84
33000	4430	1657	30.25	1674	31.28	1708	33.53	1744	36.02	1782	38.71	1929	50.37	2061	62.27	2179	74.05	2289	85.8		
36000	4832	1805	39.07	1820	40.17	1851	42.56	1884	45.18	1917	48	2054	60.47	2181	73.47	2296	86.38				
39000	5235	1953	49.47	1967	50.65	1995	53.19	2025	55.93	2055	58.88	2182	72.03	2304	86.06						
42000	5638	2102	61.59	2114	62.85	2140	65.53	2167	68.41	2195	71.49	2313	85.26								

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 300

WHEEL DIAMETER .....30 IN.

MAX WHEEL SPEED .....Class 2 -1660 RPM; Class 3 -2100 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	861	369	0.61	431	0.97	537	1.76														
11000	1184	459	1.14	513	1.64	602	2.62	680	3.68	755	4.85										
14000	1507	554	1.97	602	2.59	682	3.85	751	5.1	814	6.41	1046	12.47								
17000	1830	653	3.2	694	3.92	768	5.45	831	6.97	889	8.49	1092	15.05	1280	22.75						
20000	2153	756	4.92	790	5.71	857	7.49	917	9.29	970	11.07	1156	18.38	1323	26.47	1482	35.57				
23000	2476	860	7.23	889	8.08	949	10.05	1005	12.13	1056	14.19	1230	22.43	1382	31.11	1525	40.58	1665	50.93	1800	62.17
26000	2799	966	10.19	990	11.12	1043	13.24	1095	15.56	1144	17.91	1309	27.2	1451	36.65	1583	46.65	1711	57.38	1834	68.89
29000	3122	1072	13.92	1094	14.9	1140	17.17	1188	19.68	1233	22.29	1392	32.7	1527	43.07	1651	53.77	1769	65.02	1883	76.9
32000	3445	1179	18.48	1198	19.53	1239	21.93	1282	24.61	1325	27.44	1478	38.96	1608	50.37	1725	61.9	1836	73.81	1943	86.22
36000	3875	1322	26.01	1338	27.16	1374	29.73	1412	32.6	1451	35.68	1594	48.61	1719	61.5	1831	74.32	1935	87.32	2034	100.6
40000	4306	1465	35.39	1480	36.64	1512	39.39	1545	42.43	1579	45.71	1714	59.9	1833	74.31	1941	88.57	2040	102.8		
44000	4736	1609	46.83	1622	48.18	1650	51.11	1680	54.33	1711	57.79	1835	73.06	1950	88.95	2054	104.7				
48000	5167	1753	60.53	1765	61.98	1790	65.1	1817	68.49	1845	72.12	1959	88.32	2069	105.6						

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 330

WHEEL DIAMETER .....33 IN.

MAX IMPELLER SPEED.....Class 2 - 1515 RPM; Class 3 - 1910 RPM

		STATIC PRESSURE (in. WG)																				
		0.25		0.5		1		1.5		2		4		6		8		10		12		
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
9000	801	321	0.65	379	1.05	481	1.99															
11000	979	365	0.94	418	1.43	507	2.46	588	3.65													
14000	1246	433	1.54	482	2.17	561	3.42	629	4.74	694	6.18											
16000	1423	481	2.08	526	2.8	601	4.23	665	5.68	724	7.21	944	14.43									
20000	1779	579	3.6	617	4.46	686	6.26	744	8.04	797	9.83	985	17.66	1159	26.92							
24000	2135	682	5.83	713	6.78	774	8.91	829	11.07	878	13.21	1047	21.99	1200	31.75	1345	42.75					
28000	2491	786	8.89	812	9.93	866	12.33	917	14.85	963	17.37	1121	27.39	1259	37.94	1389	49.42	1515	61.96	1637	75.57	
32000	2847	892	12.95	914	14.07	961	16.67	1008	19.51	1052	22.4	1201	33.84	1329	45.43	1448	57.65	1562	70.71	1673	84.7	
36000	3203	999	18.12	1018	19.34	1059	22.12	1101	25.22	1142	28.44	1285	41.37	1407	54.22	1518	67.41	1623	81.2	1725	95.73	
40000	3559	1106	24.56	1123	25.87	1159	28.83	1197	32.13	1234	35.64	1371	50.05	1488	64.31	1593	78.66	1692	93.39	1787	108.7	
44000	3915	1213	32.41	1228	33.81	1261	36.94	1295	40.43	1329	44.18	1459	59.98	1572	75.73	1673	91.4	1767	107.3	1857	123.5	
49000	4359	1348	44.4	1361	45.93	1390	49.28	1420	52.99	1450	56.98	1571	74.33	1680	91.98	1777	109.5	1867	126.9			
54000	4804	1483	59.08	1495	60.73	1520	64.31	1547	68.23	1574	72.46	1686	91.13	1790	110.6	1884	130					
59000	5249	1618	76.72	1629	78.5	1652	82.32	1676	86.46	1701	90.89	1803	110.7	1902	131.9							

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 365

WHEEL DIAMETER ..... 36.5 IN.

MAX IMPELLER SPEED ..... Class 2 - 1360 RPM; Class 3 - 1710 RPM

		STATIC PRESSURE (in. WG)																	
CFM	OV	RPM	0.25 BHP	0.5 RPM	1 BHP	1.5 RPM	2 BHP	2 RPM	4 BHP	4 RPM	6 BHP	6 RPM	8 BHP	8 RPM	10 BHP	10 RPM	12 BHP	12 RPM	
11000	799	294	0.77	344	1.25	430	2.28												
16000	1163	383	1.64	423	2.3	492	3.7	554	5.13	612	6.66								
21000	1526	479	3.11	511	3.93	571	5.71	624	7.54	673	9.39	851	17.43						
26000	1890	579	5.39	606	6.37	656	8.47	704	10.69	748	12.95	903	22.21	1044	32.37				
31000	2253	680	8.64	704	9.81	747	12.21	789	14.76	829	17.41	970	28.24	1095	39.46	1214	51.5	1330	64.55
36000	2616	782	13.05	803	14.42	842	17.15	879	20	915	22.98	1045	35.42	1160	48.09	1267	61.19	1370	74.99
41000	2980	884	18.79	904	20.38	939	23.47	972	26.62	1004	29.91	1125	43.85	1233	58.14	1332	72.63	1426	87.51
46000	3343	987	26.05	1005	27.88	1038	31.35	1068	34.83	1097	38.41	1208	53.7	1310	69.65	1404	85.73	1492	102
51000	3706	1091	35.01	1108	37.08	1138	40.97	1165	44.8	1192	48.69	1295	65.22	1391	82.72	1480	100.5	1563	118.3
56000	4070	1194	45.85	1210	48.18	1238	52.51	1264	56.71	1289	60.94	1384	78.67	1474	97.57	1559	117	1639	136.5
61000	4433	1298	58.76	1313	61.35	1340	66.13	1364	70.74	1387	75.32	1476	94.27	1560	114.5	1641	135.4		
66000	4797	1402	73.93	1416	76.77	1441	82.04	1464	87.06	1486	92.02	1569	112.2	1649	133.6				
71000	5160	1505	91.53	1519	94.64	1543	100.4	1565	105.9	1586	111.2	1664	132.7						

Class 2 = Regular Type Face; Class 3 = 

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 402

WHEEL DIAMETER ..... 40.25 IN.

MAX IMPELLER SPEED ..... Class 2 - 1240 RPM; Class 3 - 1530 RPM

		STATIC PRESSURE (in. WG)																	
CFM	OV	RPM	0.25 BHP	0.5 RPM	1 BHP	1.5 RPM	2 BHP	2 RPM	4 BHP	4 RPM	6 BHP	6 RPM	8 BHP	8 RPM	10 BHP	10 RPM	12 BHP	12 RPM	
13000	777	262	0.9	308	1.46	387	2.7												
19000	1135	341	1.89	378	2.68	442	4.34	498	6.06	552	7.9								
25000	1493	427	3.59	456	4.57	511	6.7	560	8.88	605	11.08	768	20.76						
31000	1852	516	6.22	540	7.4	587	9.91	631	12.57	671	15.26	813	26.35	943	38.6				
37000	2210	606	9.99	628	11.38	668	14.26	706	17.32	743	20.49	872	33.42	987	46.9	1097	61.43		
43000	2569	697	15.09	717	16.73	752	19.99	786	23.42	819	27	939	41.88	1044	57.04	1142	72.78	1237	89.43
49000	2927	789	21.76	807	23.66	839	27.34	869	31.13	899	35.07	1010	51.77	1109	68.88	1199	86.23	1285	104.1
55000	3286	881	30.18	898	32.36	927	36.51	955	40.68	982	44.98	1084	63.33	1177	82.41	1263	101.6	1343	121.2
61000	3644	973	40.59	989	43.06	1016	47.71	1042	52.29	1067	56.96	1161	76.81	1249	97.78	1330	119	1406	140.4
67000	4002	1066	53.2	1080	55.97	1106	61.13	1130	66.16	1153	71.23	1240	92.53	1323	115.2	1401	138.4	1474	161.8
73000	4361	1159	68.21	1172	71.29	1197	77	1219	82.51	1241	87.99	1322	110.8	1400	135	1474	160.1		
79000	4719	1251	85.85	1265	89.24	1288	95.52	1309	101.5	1329	107.4	1405	131.7	1478	157.4				
85000	5078	1344	106.3	1357	110	1379	116.9	1399	123.4	1418	129.8	1490	155.7						

Class 2 = Regular Type Face; Class 3 = 

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

BIDW 445

WHEEL DIAMETER ..... 44.5 IN.

MAX IMPELLER SPEED. .... Class 2 - 1110 RPM; Class 3 - 1390 RPM

Class 2 = Regular Type Face; Class 3 =

Performance shown is for installation type B - Free inlet, Ducted outlet.

Performance shown is for installation type B - Free  
Power rating (BHP) does not include drive losses

Performance ratings do not include the effects of appurtenances in the airstream

BIDW 490

WHEEL DIAMETER ..... 49 IN.

MAX IMPELLER SPEED.....Class 2 - 1020 RPM; Class 3 - 1260 RPM

Class 2 = Regular Type Face; Class 3 =

Performance shown is for installation type B - Free inlet. Ducted outlet.

Performance shown is for installation type B - Free.  
Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 542

WHEEL DIAMETER ..... 54.25 IN.  
 MAX IMPELLER SPEED ..... Class 2 - 915 RPM; Class 3 - 1210 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
24000	789	196	1.67	230	2.72	288	4.98														
34500	1134	253	3.43	280	4.87	328	7.88	369	11	409	14.34										
45000	1479	314	6.38	336	8.15	377	11.98	414	15.9	447	19.88	569	37.37								
55500	1824	378	10.88	396	12.98	431	17.5	464	22.27	494	27.1	600	47.01	698	69.12						
66000	2169	442	17.27	458	19.75	489	24.9	518	30.39	545	36.06	642	59.17	728	83.34	810	109.5				
76500	2514	507	25.88	522	28.78	549	34.6	574	40.72	599	47.12	689	73.64	768	100.7	842	128.9	913	158.9		
87000	2859	573	37.05	586	40.41	610	46.97	633	53.72	656	60.76	739	90.51	813	120.9	882	151.9	946	183.9		
97500	3204	638	51.14	651	54.99	673	62.33	694	69.75	715	77.41	792	110.1	862	144	926	178.2	987	212.9		
108000	3549	704	68.49	716	72.84	737	81.04	756	89.17	775	97.47	846	132.8	913	170.1	974	207.7	1031	245.6		
118500	3894	771	89.45	782	94.32	801	103.4	819	112.3	836	121.3	903	159.2	965	199.5	1024	240.7	1078	282		
129000	4239	837	114.4	847	119.8	866	129.8	883	139.5	899	149.2	961	189.7	1019	232.8	1075	277.3	1128	322.2		
139500	4584	903	143.6	913	149.5	931	160.5	947	171.1	962	181.6	1020	224.6	1075	270.4	1128	318	1179	366.3		
150000	4929	970	177.4	979	184	996	196	1011	207.4	1026	218.7	1080	264.5	1132	312.8	1183	363.2				

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 600

WHEEL DIAMETER ..... 60 IN.  
 MAX IMPELLER SPEED ..... Class 2 - 820 RPM; Class 3 - 1040 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
30000	806	180	2.13	210	3.44	262	6.24														
42500	1142	230	4.26	254	6.04	297	9.74	335	13.57	371	17.67										
55000	1478	284	7.79	304	9.95	341	14.63	374	19.43	404	24.29	515	45.68								
67500	1814	340	13.11	357	15.67	388	21.17	418	26.97	445	32.85	542	57.11	630	84.09						
80000	2149	396	20.61	411	23.62	439	29.87	465	36.54	490	43.42	578	71.45	657	100.8	731	132.8				
92500	2485	454	30.66	467	34.16	492	41.21	515	48.64	538	56.39	619	88.49	691	121.2	758	155.5	823	192		
105000	2821	511	43.65	524	47.69	546	55.6	567	63.78	587	72.31	663	108.3	731	145	793	182.4	852	221.3		
117500	3157	569	59.97	581	64.58	601	73.43	620	82.39	639	91.66	709	131.2	773	172	832	213.3	887	255.3		
130000	3493	627	80.01	638	85.23	657	95.08	675	104.9	692	114.9	757	157.6	818	202.5	873	247.9	925	293.6		
142500	3829	685	104.2	695	110	713	120.9	730	131.6	746	142.4	806	188.2	864	236.9	917	286.4	967	336.2		
155000	4164	744	132.8	753	139.3	770	151.3	786	163	800	174.6	857	223.5	911	275.5	962	329	1010	383		
167500	4500	802	166.4	811	173.5	827	186.7	842	199.3	856	211.9	909	263.8	960	319	1008	376.3				
180000	4836	860	205.2	869	213	884	227.4	898	241.1	912	254.6	962	309.7	1010	367.9						

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 660

WHEEL DIAMETER ..... 66 IN.

MAX IMPELLER SPEED ..... Class 2 - 750 RPM; Class 3 - 940 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
36000	799	163	2.54	190	4.11	238	7.48														
49000	1088	201	4.64	224	6.71	264	11	300	15.48	333	20.33										
62000	1376	243	7.93	262	10.41	297	15.74	328	21.17	357	26.72										
75000	1665	286	12.72	303	15.6	334	21.84	362	28.34	388	34.89	480	62.54								
88000	1953	330	19.31	345	22.63	372	29.66	398	37.14	422	44.78	506	75.94	582	109.7						
101000	2242	375	27.98	388	31.78	412	39.61	435	47.94	457	56.58	536	91.85	605	128.5	671	167.8	735	210.4		
114000	2531	420	39.03	432	43.36	454	52.02	474	61.13	495	70.65	569	110.2	633	150.4	693	192.4	752	236.8	809	
127000	2819	465	52.75	476	57.65	496	67.22	515	77.1	534	87.42	603	131	664	175.3	721	220.6	774	267.7	827	
140000	3108	510	69.46	520	74.94	539	85.48	557	96.18	574	107.3	639	154.5	697	203.2	751	252.4	801	302.6	850	
153000	3396	555	89.43	565	95.53	583	107.1	599	118.7	615	130.5	676	181.2	732	234.1	783	287.5	831	341.6	877	
166000	3685	600	113	610	119.7	627	132.4	642	144.9	657	157.5	714	211.4	767	268.4	816	326.1	863	384.3	907	
179000	3973	646	140.4	655	147.8	671	161.6	685	175	699	188.6	753	245.6	804	306.2	851	368.3	896	430.8	938	
192000	4262	692	172	700	180.1	715	195	729	209.5	742	223.9	793	284.1	841	348.2	887	414.3	930	481.2		
205000	4550	737	208.1	745	216.9	760	233	773	248.5	786	263.9	834	327.3	879	394.6	923	464.6				
220000	4883	790	255.7	798	265.3	812	282.9	824	299.7	836	316.2	881	383.4	924	454.4						

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

## BIDW 730

WHEEL DIAMETER ..... 73 IN.

MAX IMPELLER SPEED ..... Class 2 - 680 RPM; Class 3 - 860 RPM

		STATIC PRESSURE (in. WG)																			
		0.25		0.5		1		1.5		2		4		6		8		10		12	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
40000	725	139	2.63	165	4.39	211	8.32														
60000	1088	182	5.69	203	8.22	239	13.47	271	18.96	301	24.9										
80000	1451	230	11.04	246	14.2	277	21.03	305	28.01	330	35.1	422	66.52								
100000	1814	279	19.45	293	23.24	319	31.39	344	39.98	366	48.69	445	84.61	518	124.6						
120000	2176	330	31.62	342	36.13	364	45.48	386	55.45	406	65.76	478	107.8	542	151.7	603	199.2				
140000	2539	381	48.26	392	53.58	411	64.22	430	75.39	449	87.07	515	135.6	573	185	628	236.4	680	291	732	
160000	2902	432	70.1	442	76.29	460	88.33	477	100.7	493	113.6	554	168.2	609	224.1	659	280.8	707	339.4	753	
180000	3264	483	97.86	493	105	509	118.6	524	132.2	539	146.3	596	206.4	647	268.9	695	331.9	739	395.8	782	
200000	3627	535	132.3	544	140.4	559	155.6	573	170.6	587	185.9	639	251.1	687	319.8	732	389.5	774	459.6	814	
220000	3990	587	174.1	595	183.2	609	200.1	622	216.7	635	233.3	683	303.3	729	377.8	772	454	812	530.8	850	
240000	4353	638	224	646	234.2	660	252.9	672	271	684	289.1	729	363.9	771	443.7	812	526.1	851	609.5		
260000	4715	690	282.8	698	294	710	314.7	722	334.4	733	353.9	775	433.8	815	518.4	854	606.6				
280000	5078	742	351.2	749	363.5	761	386.1	773	407.6	783	428.6	823	513.7								

Class 2 = Regular Type Face; Class 3 = █

Performance shown is for installation type B - Free inlet, Ducted outlet.

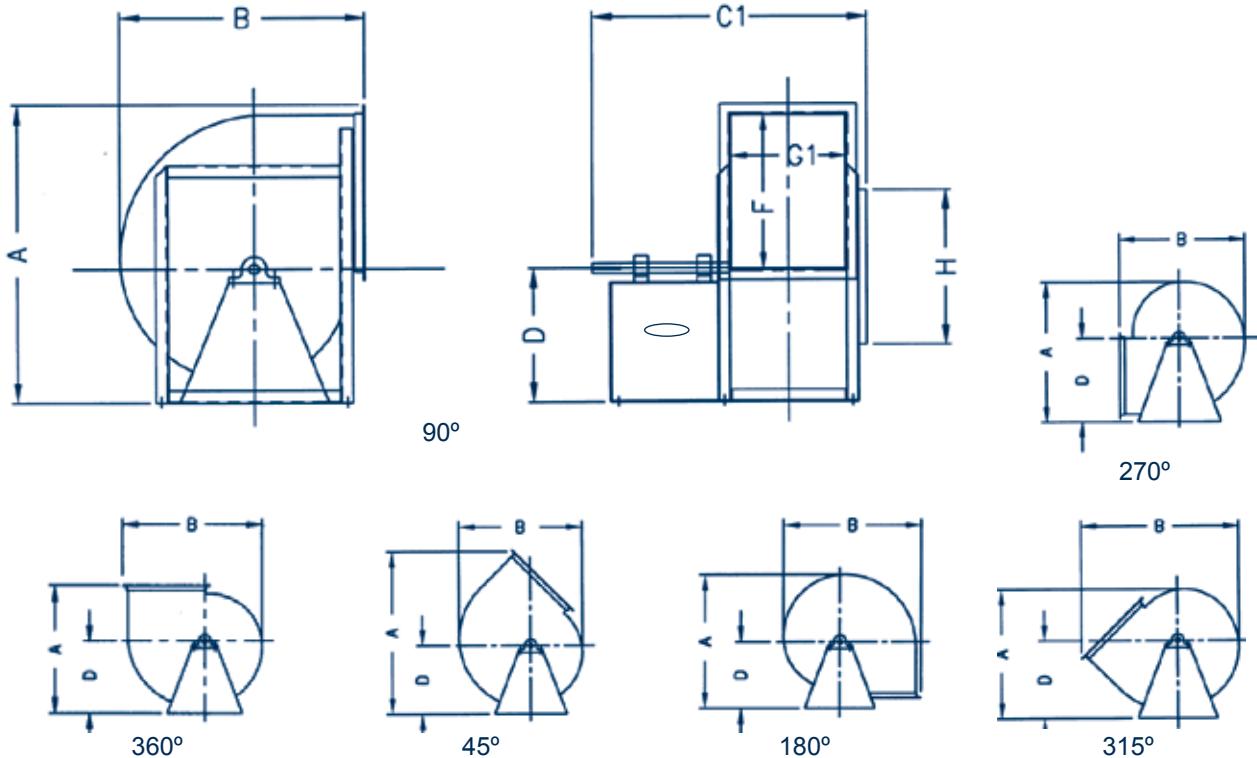
Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the airstream.

# DIMENSIONAL DATA

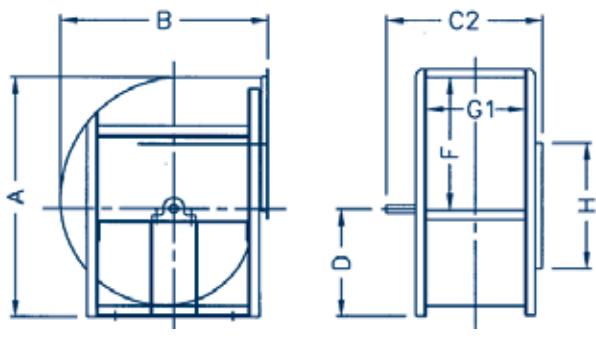
## Sizes 122 - 730 BISW

Arrangements 1 and 9



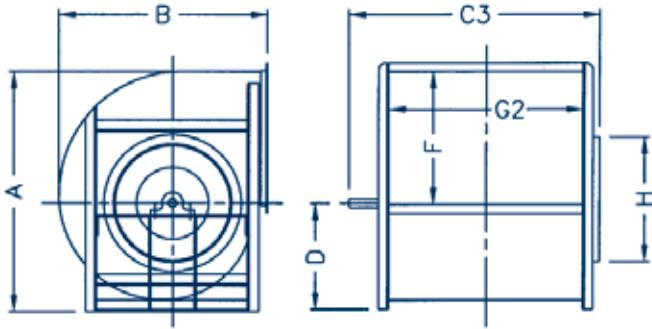
## Sizes 182 - 730 BISW

Arrangement 3



## Sizes 182 - 730 BIDW

Arrangement 3



1. Columns A, B, and C have been rounded up to the nearest 1". Dimensions F, G and H, are outside dimensions. Dimension C is max from all available construction classes.
2. All dimensions shown on this and other pages are for general information only and should not be used for precise construction/installation purposes. Only prints marked certified should be used for this purpose. All fans are shown in clockwise rotation (as viewed from side opposite fan inlet) and are viewed from the drive side of fan. Counter clockwise fans are dimensionally equal but viewed in a mirror image.
3. Due to continuous product improvement at Air Tech, dimensions are subject to change. For more complete dimensional information, refer to the applicable Air Tech submittal drawing.

## DIMENSIONAL DATA

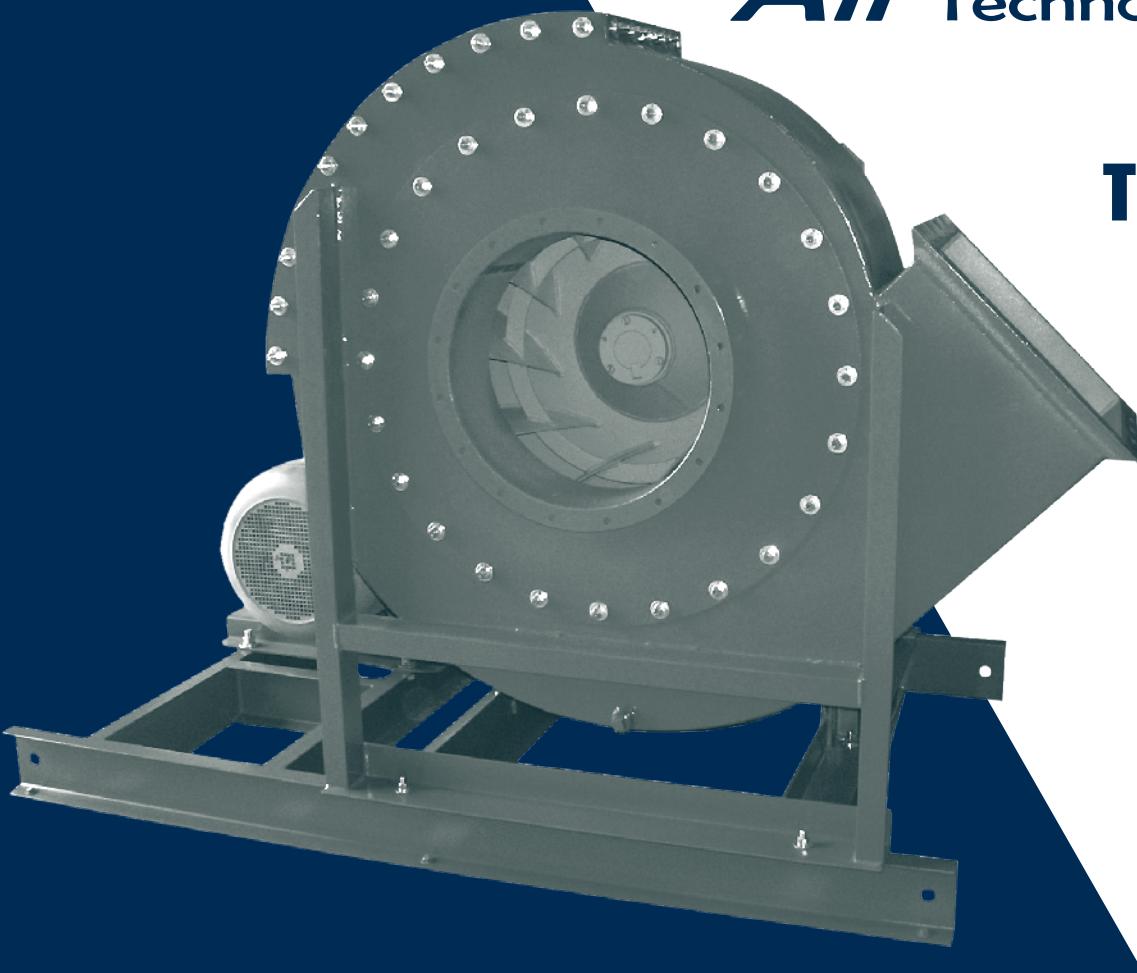
SIZE	A					B					C1	C2	C3
	45	90	180	270	315	360	45	90 270	180 360	315			
122	35	29	29	28	27	28	24	25	26	30	30		
150	41	36	35	33	32	34	29	29	31	36	37		
182	50	45	42	40	38	40	32	33	36	42	46	29 7/16	40 7/8
200	54	50	45	43	42	43	35	36	39	46	49	31 7/16	44
222	60	54	49	46	45	47	39	39	43	50	52	34 3/16	48 1/4
245	65	58	54	51	49	51	43	43	47	55	55	38 3/16	53 5/8
270	66	56	51	56	54	52	47	47	52	60	59	34	54
300	73	62	55	62	60	56	52	51	57	66	63	39	60
330	79	67	60	67	65	61	57	56	63	72	67	43	65
365	87	74	65	74	71	66	63	61	69	79	71	47	71
402	95	82	72	81	79	73	69	67	76	87	77	52	77
445	104	90	79	89	86	79	76	74	84	96	84	56	87
490	114	98	86	97	94	86	84	81	92	105	89	60	94
542	125	107	93	107	104	94	92	88	101	115	100	65	103
600	137	118	102	118	114	103	102	97	112	126	109	71	112
660	149	129	113	129	124	113	112	107	123	139	119	76	121
730	165	142	123	142	137	123	123	117	136	153	130	85	131

SIZE	D				F	G1	G2	H
	45	360	90	180				
122	18	18	18	18	18 1/16	9 3/4	na	13
150	21	na	na	na	15 15/16	12	na	15 7/8
182	24	24	24	24	19 3/8	14 9/16	26	19 1/4
200	24	24	24	24	21 1/4	15 15/16	28 1/2	21 1/8
222	27	27	27	27	23 5/8	17 11/16	31 3/4	23
245	29	29	29	29	26	19 7/16	34 7/8	25 7/8
270	31	31	31	31	28 5/8	21 7/16	38 3/8	28 1/2
300	34	34	34	34	31 13/16	23 13/16	42 11/16	31 3/4
330	38	38	38	38	35	26 3/16	46 7/8	34 7/8
365	42	42	42	42	38 11/16	28 15/16	51 7/8	38 1/2
402	42	37	34 5/8	47	42 5/8	31 7/8	57 3/16	42
445	46	40	37 3/8	52	47 1/8	35 1/4	63 3/16	46 1/2
490	50	44	40 1/4	56	51 11/16	38 3/4	69 9/16	51
542	55	48	43 1/2	62	57 3/8	42 7/8	77	56 1/2
600	61	53	47 1/4	69	63 7/16	47 7/16	85 1/8	62 1/2
660	66	557	51 1/2	75	69 3/4	52 1/8	93 5/8	69
730	73	63	56	83	77 3/16	57 5/8	103 1/2	76

# INDUSTRIAL FANS & BLOWERS

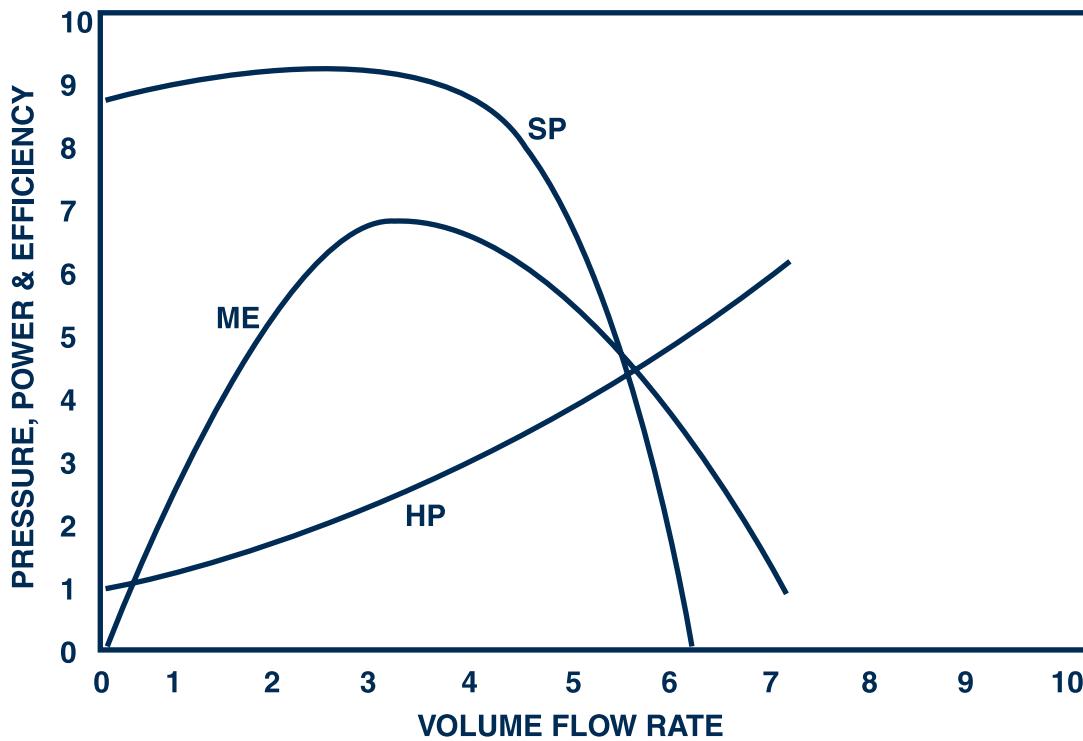
**Industrial**  
*Air* Technology Corp.

**Type IE**



Industrial  
Exhausters

## PREFERENCE CURVE



## IE WHEEL WR<sup>2</sup> VALUES

The following chart is a listing of the WR<sup>2</sup> (lb. ft<sup>2</sup>) values of the industrial exhauster series. The values can be plugged into the formulas above for calculating the motor capabilities in regards to direct drive as well as belt drive fan units.

Fan Size	IRO/IRS			IRW	IRT		
	Class 15 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 30 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 50 WR <sup>2</sup> (lb. ft <sup>2</sup> )		Class 15 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 30 WR <sup>2</sup> (lb. ft <sup>2</sup> )	Class 50 WR <sup>2</sup> (lb. ft <sup>2</sup> )
122	1						
156	4						
191	6	9		12	11	11	
226	14	18	18	40	23	23	28
261	26	42	42	65	39	39	60
296	38	61	110	100	82	89	119
330	59	95	145	150	127	140	170
365	90	121	190	230	214	237	299
400	210	402	402		347	385	468
451	280	966	966		601	663	767
505	390	1280	1280		982	1081	1355
575	650	2515	2515		1937	2108	2455
643	1330	3560	3860		3451	3758	5005
712	1790	5245	6700		5352	5803	6930
782	3060	8010	9700		8085	8773	10735
852	3895	9990	14900		11193	13071	15023

# IRO PERFORMANCE DATA

## IRO 122

WHEEL DIAMETER . . . . . 12.25 IN.  
MAX WHEEL SPEED . . . . . 4670 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			.5	1	2	3	4	6	8	10	12	15	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	772	807	0.03	1110	0.06	1555	0.14	1901	0.24	2194	0.35	2687	0.62	3102	0.92	3468	1.26	3798	1.63	4245	2.24
300	1158	878	0.05	1151	0.09	1574	0.19	1912	0.30	2201	0.42	2690	0.70	3104	1.02	3469	1.38	3800	1.77	4248	2.40
400	1544	977	0.08	1220	0.13	1614	0.24	1939	0.37	2220	0.51	2700	0.81	3110	1.15	3474	1.52	3803	1.93	4250	2.59
500	1931	1095	0.12	1313	0.18	1676	0.31	1983	0.46	2253	0.61	2721	0.94	3125	1.31	3484	1.71	3810	2.13	4255	2.82
600	2317	1225	0.17	1421	0.24	1755	0.39	2043	0.56	2301	0.73	2755	1.10	3149	1.50	3502	1.92	3825	2.37	4265	3.10
700	2703	1363	0.24	1540	0.32	1849	0.49	2120	0.67	2364	0.87	2800	1.28	3184	1.71	3529	2.17	3847	2.65	4282	3.41
800	3089	1507	0.34	1668	0.42	1955	0.61	2209	0.81	2441	1.02	2858	1.47	3229	1.94	3566	2.44	3877	2.95	4305	3.77
900	3475	1657	0.45	1802	0.55	2069	0.75	2308	0.97	2528	1.20	2927	1.68	3285	2.20	3613	2.73	3917	3.29	4337	4.15
1000	3861	1810	0.60	1942	0.70	2190	0.93	2416	1.16	2625	1.41	3006	1.93	3351	2.48	3669	3.05	3965	3.64	4376	4.57
1100	4247	1966	0.77	2086	0.89	2317	1.13	2531	1.38	2730	1.64	3094	2.20	3426	2.78	3734	3.40	4022	4.03	4424	5.01
1200	4633	2124	0.98	2234	1.10	2449	1.36	2652	1.63	2841	1.92	3190	2.50	3510	3.12	3807	3.77	4087	4.44	4479	5.48
1300	5019	2284	1.23	2385	1.35	2586	1.63	2778	1.92	2958	2.22	3293	2.85	3601	3.50	3888	4.18	4159	4.89	4541	5.99
1400	5405	2445	1.51	2538	1.65	2726	1.94	2907	2.25	3080	2.57	3402	3.23	3698	3.92	3976	4.63	4239	5.38	4611	6.53
1500	5792	2607	1.84	2693	1.98	2869	2.29	3041	2.62	3206	2.96	3515	3.65	3801	4.37	4070	5.13	4326	5.90	4687	7.11
1600	6178	2770	2.21	2850	2.36	3015	2.69	3178	3.03	3335	3.39	3633	4.12	3909	4.88	4170	5.67	4418	6.48		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 156

WHEEL DIAMETER . . . . . 15.625 IN.  
MAX WHEEL SPEED . . . . . 3670 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			.5	1	2	3	4	6	8	10	12	15	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
800	1882	851	0.18	1023	0.28	1309	0.49	1551	0.73	1764	0.98	2132	1.52	2449	2.11	2731	2.75	2987	3.44	3336	4.56
900	2118	912	0.23	1073	0.34	1345	0.57	1578	0.82	1785	1.09	2146	1.67	2459	2.29	2738	2.96	2993	3.67	3340	4.82
1000	2353	976	0.29	1127	0.41	1386	0.66	1610	0.93	1811	1.22	2164	1.83	2472	2.49	2748	3.18	3001	3.92	3346	5.11
1100	2588	1042	0.36	1184	0.49	1431	0.75	1647	1.05	1841	1.35	2186	2.00	2489	2.70	2761	3.43	3011	4.20	3353	5.42
1200	2824	1111	0.45	1244	0.58	1480	0.87	1687	1.17	1875	1.50	2211	2.19	2508	2.92	2777	3.69	3024	4.49	3363	5.76
1400	3294	1252	0.66	1371	0.81	1586	1.13	1778	1.47	1954	1.83	2272	2.60	2557	3.41	2817	4.25	3058	5.13	3390	6.50
1600	3765	1399	0.93	1504	1.10	1701	1.46	1880	1.84	2045	2.23	2346	3.07	2618	3.95	2869	4.88	3102	5.83	3426	7.31
1800	4235	1549	1.28	1643	1.46	1823	1.86	1990	2.27	2146	2.70	2431	3.61	2690	4.56	2931	5.56	3156	6.59	3471	8.20
2000	4706	1702	1.71	1786	1.91	1951	2.34	2108	2.79	2254	3.26	2524	4.23	2772	5.25	3003	6.33	3220	7.44	3525	9.15
2200	5176	1857	2.23	1932	2.44	2084	2.91	2230	3.40	2369	3.90	2626	4.94	2862	6.04	3084	7.18	3293	8.36	3588	10.20
2400	5647	2012	2.85	2081	3.08	2221	3.58	2358	4.11	2489	4.65	2733	5.76	2960	6.93	3173	8.13	3374	9.39	3659	11.33
2600	6118	2169	3.59	2232	3.83	2361	4.36	2489	4.92	2613	5.50	2846	6.69	3063	7.92	3268	9.20	3462	10.52		
2800	6588	2327	4.44	2385	4.69	2505	5.25	2624	5.85	2741	6.47	2964	7.73	3172	9.04	3369	10.39	3556	11.77		
3000	7059	2485	5.42	2539	5.69	2650	6.28	2762	6.91	2873	7.56	3085	8.90	3285	10.29	3475	11.70	3656	13.16		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 191

WHEEL DIAMETER ..... 19.125 IN.  
MAX WHEEL SPEED ..... Class 15 - 3420 RPM; Class 30 - 3900 RPM

		STATIC PRESSURE (in. WG)																			
		1		2		3		4		5		10		15		20		25		30	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
1600	2516	952	0.65	1157	1.02	1335	1.43	1496	1.85	1643	2.30	2252	4.74	2737	7.53	3152	10.67	3519	14.11	3852	17.84
1800	2830	1017	0.82	1210	1.23	1379	1.66	1532	2.13	1674	2.61	2269	5.23	2748	8.17	3159	11.41	3524	14.96	3856	18.77
2000	3145	1086	1.03	1267	1.47	1427	1.94	1574	2.43	1711	2.95	2290	5.75	2762	8.85	3169	12.23	3531	15.89	3862	19.81
2200	3459	1157	1.28	1327	1.75	1480	2.25	1621	2.78	1752	3.32	2315	6.31	2778	9.59	3181	13.12	3541	16.90	3869	20.94
2400	3774	1230	1.56	1391	2.07	1537	2.60	1672	3.16	1798	3.74	2344	6.91	2799	10.37	3196	14.06	3552	17.99	3878	22.16
2600	4088	1305	1.89	1457	2.44	1596	3.01	1726	3.60	1847	4.21	2377	7.55	2823	11.19	3214	15.06	3567	19.15	3889	23.46
2800	4403	1382	2.28	1525	2.85	1659	3.46	1783	4.08	1900	4.73	2414	8.23	2850	12.06	3235	16.11	3583	20.37	3903	24.83
3000	4717	1461	2.71	1596	3.32	1723	3.96	1843	4.62	1956	5.30	2454	8.97	2880	12.98	3259	17.22	3603	21.66		
3200	5031	1540	3.20	1668	3.85	1790	4.52	1905	5.22	2014	5.93	2498	9.76	2914	13.95	3286	18.37	3625	22.99		
3400	5346	1621	3.76	1742	4.44	1858	5.15	1969	5.88	2074	6.62	2544	10.62	2951	14.97	3316	19.58	3650	24.39		
3800	5975	1785	5.07	1893	5.81	2000	6.59	2102	7.39	2201	8.21	2644	12.53	3032	17.21	3384	22.18	3707	27.36		
4200	6604	1951	6.68	2049	7.47	2146	8.32	2242	9.19	2334	10.08	2754	14.74	3124	19.74	3462	25.05	3774	30.59		
4600	7233	2120	8.61	2208	9.46	2298	10.37	2386	11.31	2472	12.27	2870	17.27	3225	22.60	3549	28.23	3851	34.11		
5000	7862	2289	10.90	2371	11.80	2453	12.77	2535	13.77	2616	14.80	2993	20.16	3332	25.82	3644	31.77				

Class 15 = Regular Type Face; Class 30 =    
Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 191

WHEEL DIAMETER ..... 19.125 IN.  
MAX WHEEL SPEED ..... Class 15 - 3000 RPM; Class 30 - 3900 RPM

		STATIC PRESSURE (in. WG)																			
		1		2		3		4		5		10		15		20		25		30	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
1000	1572	764	0.25	1010	0.48																
1200	1887	813	0.32	1039	0.58	1235	0.86	1410	1.15												
1400	2201	870	0.41	1078	0.70	1261	1.01	1427	1.33	1581	1.67										
1600	2516	931	0.53	1125	0.83	1296	1.17	1453	1.53	1599	1.90										
1800	2830	996	0.66	1178	1.00	1339	1.36	1488	1.75	1626	2.16										
2000	3145	1065	0.83	1236	1.19	1388	1.58	1529	1.99	1661	2.43	2237	4.77								
2500	3931	1245	1.38	1394	1.81	1528	2.26	1654	2.74	1771	3.24	2293	5.98	2743	8.94						
3000	4717	1435	2.16	1566	2.67	1687	3.19	1799	3.73	1906	4.29	2383	7.37	2800	10.74	3178	14.28	3526	17.95		
3500	5503	1630	3.21	1748	3.80	1857	4.40	1959	5.01	2057	5.64	2496	9.04	2884	12.77	3238	16.72	3568	20.82	3877	25.04
4000	6289	1829	4.58	1936	5.26	2035	5.94	2129	6.63	2220	7.33	2627	11.04	2989	15.10	3322	19.43	3633	23.93		
4500	7075	2032	6.32	2129	7.09	2220	7.85	2307	8.62	2390	9.39	2771	13.43	3111	17.81	3425	22.47	3719	27.35		
5000	7862	2236	8.47	2325	9.32	2409	10.17	2490	11.02	2568	11.87	2925	16.26	3246	20.95	3543	25.93	3822	31.15		
5500	8648	2442	11.08	2524	12.02	2603	12.95	2678	13.88	2751	14.82	3087	19.57	3391	24.58	3673	29.87				

Class 15 = Regular Type Face; Class 30 =    
Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 226

WHEEL DIAMETER ..... 22.625 IN.

MAX WHEEL SPEED ..... Class 15 - 2500 RPM; Class 30 - 3300 RPM; Class 50 - 3800 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	5	10	15	20	25	30	35	40	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	1798	681	0.49	891	0.88	1346	2.14	1875	4.52	2287	7.22	2636	10.20	2945	13.44	3224	16.93	3481	20.64	3721	24.59
2000	2247	741	0.70	931	1.16	1369	2.67	1891	5.42	2298	8.44	2645	11.71	2951	15.22	3229	18.95	3486	22.89	3725	27.04
2400	2697	810	0.98	982	1.52	1398	3.26	1910	6.40	2313	9.78	2657	13.39	2961	17.20	3238	21.22	3493	25.43	3730	29.83
2800	3146	885	1.34	1043	1.95	1433	3.92	1934	7.47	2332	11.23	2673	15.20	2975	19.35	3249	23.69	3503	28.21	3739	32.90
3200	3596	963	1.79	1111	2.47	1476	4.68	1961	8.63	2354	12.79	2691	17.13	2991	21.65	3264	26.34	3515	31.18	3751	36.19
3600	4045	1044	2.36	1183	3.11	1526	5.53	1994	9.88	2380	14.45	2713	19.18	3010	24.08	3281	29.13	3531	34.34	3765	39.69
4000	4494	1127	3.05	1259	3.87	1583	6.51	2031	11.24	2408	16.21	2737	21.35	3032	26.65	3300	32.08	3549	37.66	3781	43.36
4400	4944	1212	3.89	1337	4.76	1645	7.61	2073	12.73	2441	18.10	2765	23.65	3056	29.34	3322	35.17	3569	41.13	3800	47.21
4800	5393	1298	4.87	1418	5.81	1711	8.87	2120	14.36	2477	20.13	2795	26.08	3083	32.18	3346	38.40	3591	44.75		
5200	5843	1386	6.03	1499	7.03	1781	10.30	2173	16.14	2518	22.30	2829	28.65	3112	35.16	3373	41.79	3615	48.55		
5600	6292	1474	7.38	1582	8.42	1854	11.90	2230	18.11	2563	24.64	2866	31.39	3144	38.30	3402	45.34	3642	52.50		
6000	6742	1564	8.92	1667	10.01	1929	13.69	2291	20.26	2612	27.16	2907	34.30	3180	41.61	3433	49.06	3670	56.62		
6400	7191	1654	10.68	1752	11.82	2005	15.68	2355	22.61	2666	29.88	2952	37.40	3218	45.10	3467	52.95	3702	60.92		
6800	7640	1746	12.67	1838	13.85	2083	17.90	2422	25.18	2722	32.82	3000	40.71	3260	48.81	3505	57.05	3735	65.43		

Class 15 = Regular Type Face; Class 30 =  ; Class 50 = 

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 226

WHEEL DIAMETER ..... 22.625 IN.

MAX WHEEL SPEED ..... Class 15 - 2500 RPM; Class 30 - 3300 RPM; Class 50 - 3800 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	5	10	15	20	25	30	35	40	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	1798	675	0.42	870	0.77																
2000	2247	742	0.60	917	1.00	1338	2.38														
2400	2697	818	0.84	976	1.29	1364	2.86														
2800	3146	900	1.16	1045	1.66	1404	3.40	1891	6.68												
3200	3596	986	1.56	1119	2.12	1454	4.01	1914	7.62												
3600	4045	1075	2.06	1199	2.68	1513	4.73	1948	8.63	2324	12.86										
4000	4494	1167	2.67	1281	3.35	1577	5.55	1990	9.73	2350	14.29	2676	19.07								
4500	5056	1283	3.60	1389	4.37	1665	6.77	2053	11.27	2394	16.21	2705	21.42	2993	26.82						
5000	5618	1402	4.74	1500	5.59	1758	8.21	2126	13.02	2449	18.32	2746	23.93	3023	29.75	3282	35.74	3528	41.87		
5500	6180	1523	6.12	1614	7.05	1856	9.89	2205	15.02	2513	20.65	2797	26.63	3062	32.86	3312	39.27	3550	45.84	3777	52.53
6000	6742	1644	7.75	1729	8.77	1958	11.84	2290	17.30	2585	23.24	2856	29.57	3111	36.18	3352	43.01	3582	50.00	3803	57.13
7000	7865	1891	11.87	1966	13.06	2171	16.63	2473	22.77	2744	29.33	2995	36.30	3231	43.61	3456	51.19	3670	58.98		
8000	8989	2140	17.30	2207	18.66	2393	22.74	2670	29.62	2921	36.83	3155	44.42	3375	52.36	3585	60.62	3786	69.13		
9000	10112	2391	24.23	2452	25.76	2621	30.35	2877	38.02	3111	45.91	3330	54.13	3537	62.70	3734	71.58				

Class 15 = Regular Type Face; Class 30 =  ; Class 50 = 

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 261

WHEEL DIAMETER ..... 26.125 IN.

MAX WHEEL SPEED ..... Class 15 - 2200 RPM; Class 30 - 2850 RPM; Class 50 - 3500 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	1519	755	0.96	1155	2.46	1618	5.35	1977	8.70	2280	12.47	2548	16.61	2791	21.10	3014	25.91	3222	31.03	3417	36.44
2200	1857	775	1.21	1168	2.94	1626	6.17	1982	9.82	2284	13.83	2551	18.20	2793	22.88	3016	27.88	3223	33.16	3418	38.72
2600	2194	801	1.50	1183	3.47	1635	7.07	1989	11.04	2289	15.35	2555	19.98	2796	24.91	3018	30.12	3225	35.61	3420	41.36
3000	2532	833	1.83	1200	4.04	1648	8.03	1998	12.36	2297	16.99	2561	21.91	2801	27.12	3022	32.60	3229	38.33	3423	44.31
3500	2954	879	2.33	1227	4.83	1665	9.32	2012	14.12	2308	19.19	2571	24.52	2809	30.11	3029	35.95	3235	42.03	3428	48.34
4000	3376	932	2.93	1259	5.72	1686	10.72	2029	16.00	2322	21.53	2583	27.31	2820	33.33	3039	39.56	3243	46.02	3436	52.70
4500	3797	989	3.65	1296	6.71	1710	12.21	2048	18.00	2339	24.02	2597	30.26	2833	36.72	3050	43.39	3253	50.27	3445	57.33
5000	4219	1049	4.50	1339	7.84	1738	13.83	2070	20.12	2357	26.64	2614	33.37	2847	40.29	3064	47.42	3266	54.73	3456	62.22
5500	4641	1111	5.51	1387	9.12	1770	15.59	2094	22.39	2378	29.41	2632	36.63	2864	44.04	3079	51.63	3280	59.40	3469	67.34
6000	5063	1175	6.68	1438	10.55	1805	17.50	2121	24.79	2401	32.33	2652	40.05	2882	47.96	3096	56.03	3295	64.27	3483	72.67
6500	5485	1241	8.04	1493	12.17	1845	19.58	2152	27.36	2426	35.40	2674	43.63	2902	52.04	3114	60.61	3312	69.33	3499	78.22
7000	5907	1307	9.59	1550	13.98	1888	21.84	2185	30.11	2454	38.65	2698	47.39	2924	56.30	3134	65.37	3331	74.60		
7500	6329	1375	11.35	1609	16.00	1934	24.31	2222	33.06	2484	42.09	2725	51.34	2948	60.76	3155	70.33	3351	80.06		
8000	6751	1443	13.35	1670	18.25	1984	27.01	2262	36.22	2518	45.73	2754	55.48	2973	65.41	3179	75.50	3373	85.73		
8500	7173	1513	15.60	1733	20.74	2036	29.94	2305	39.60	2554	49.61	2785	59.85	3001	70.28	3204	80.86	3396	91.61		
9000	7595	1583	18.11	1796	23.48	2090	33.13	2351	43.25	2593	53.72	2819	64.45	3031	75.37	3231	86.47	3421	97.71		

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 261

WHEEL DIAMETER ..... 26.125 IN.

MAX WHEEL SPEED ..... Class 15 - 2200 RPM; Class 30 - 2850 RPM; Class 50 - 3500 RPM

		STATIC PRESSURE (in. WG)																			
		1		2		5		10		15		20		25		30		35		40	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1688	746	0.95																		
2500	2110	780	1.23	1154	2.99																
3000	2532	825	1.57	1171	3.57																
3500	2954	878	1.99	1200	4.21																
4000	3376	936	2.51	1237	4.93	1647	9.52														
5000	4219	1065	3.90	1331	6.70	1700	12.04	2020	17.85	2309	23.94										
6000	5063	1203	5.82	1442	9.02	1778	15.03	2074	21.62	2343	28.57	2592	35.76								
7000	5907	1348	8.39	1565	12.02	1874	18.65	2148	25.94	2399	33.67	2634	41.71	2855	49.98	3064	58.44				
8000	6751	1498	11.69	1696	15.79	1983	23.06	2238	30.99	2474	39.42	2694	48.24	2903	57.34	3102	66.66	3293	76.17	3476	85.84
9000	7595	1651	15.83	1833	20.42	2101	28.37	2340	36.91	2562	46.00	2770	55.53	2968	65.39	3157	75.52	3339	85.88		
10000	8439	1807	20.92	1975	26.01	2226	34.69	2452	43.86	2661	53.57	2858	63.74	3046	74.31	3226	85.18	3400	96.33		
11000	9283	1964	27.06	2121	32.66	2356	42.09	2570	51.93	2769	62.26	2957	73.05	3136	84.28	3307	95.84	3473	107.70		
12000	10127	2123	34.35	2270	40.46	2492	50.69	2694	61.22	2884	72.19	3063	83.60	3234	95.44	3398	107.70				

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 296

WHEEL DIAMETER ..... 29.625 IN.

MAX WHEEL SPEED ..... Class 15 - 1930 RPM; Class 30 - 2515 RPM; Class 50 - 3100 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
2000	1296	656	1.1	1014	2.8	1424	6.3	1741	10.4	2010	15.1	2246	20.3	2460	25.9	2658	32.0	2841	38.5	3013	45.3
2500	1620	671	1.4	1022	3.4	1429	7.3	1745	11.7	2012	16.6	2248	22.1	2461	27.9	2658	34.2	2841	40.8	3014	47.9
3000	1944	691	1.7	1034	4.0	1436	8.3	1749	13.1	2015	18.4	2250	24.1	2464	30.3	2660	36.8	2843	43.7	3015	50.9
3500	2268	714	2.1	1047	4.7	1445	9.5	1756	14.7	2020	20.4	2255	26.4	2467	32.9	2663	39.7	2845	46.8	3016	54.3
4000	2592	743	2.5	1063	5.4	1456	10.7	1765	16.4	2027	22.5	2260	28.9	2471	35.7	2666	42.8	2848	50.3	3019	58.1
4500	2916	775	3.0	1082	6.2	1469	12.0	1774	18.2	2035	24.7	2267	31.5	2477	38.7	2671	46.2	2853	54.0	3023	62.2
5500	3564	849	4.3	1128	8.0	1498	14.8	1798	22.0	2056	29.4	2284	37.2	2493	45.2	2685	53.6	2865	62.2	3034	71.0
6500	4213	931	5.9	1186	10.3	1536	18.0	1828	26.2	2081	34.6	2307	43.4	2512	52.3	2703	61.6	2881	71.0	3049	80.7
7500	4861	1017	8.1	1253	12.9	1581	21.7	1862	30.8	2110	40.3	2333	50.0	2536	60.0	2725	70.1	2901	80.5	3068	91.1
8500	5509	1107	10.8	1328	16.1	1635	25.8	1904	35.9	2145	46.4	2363	57.2	2563	68.1	2750	79.3	2924	90.6	3089	102.2
9500	6157	1199	14.1	1407	20.0	1696	30.5	1952	41.6	2184	53.1	2397	64.9	2595	76.8	2778	89.0	2951	101.3		
10500	6805	1293	18.1	1491	24.5	1764	35.9	2007	48.0	2231	60.4	2437	73.2	2630	86.2	2810	99.3	2981	112.7		
11500	7453	1389	22.9	1577	29.8	1838	42.1	2069	55.1	2283	68.5	2482	82.2	2670	96.2	2847	110.4	3014	124.7		

Class 15 = Regular Type Face; Class 30 =  ; Class 50 = 

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 296

WHEEL DIAMETER ..... 29.625 IN.

MAX WHEEL SPEED ..... Class 15 - 1930 RPM; Class 30 - 2515 RPM; Class 50 - 3100 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
2500	1620	655	1.2																		
3000	1944	676	1.5																		
3500	2268	704	1.8	1023	4.2																
4000	2592	737	2.1	1038	4.8																
5000	3240	814	3.1	1083	6.1	1448	11.9														
6000	3889	900	4.3	1144	7.8	1481	14.4	1771	21.5												
7000	4537	992	6.0	1215	9.8	1527	17.1	1800	25.0	2047	33.4										
8000	5185	1089	8.1	1295	12.4	1586	20.3	1842	29.0	2076	38.1	2292	47.6	2496	57.4						
9000	5833	1189	10.8	1380	15.5	1653	24.0	1894	33.4	2116	43.3	2323	53.6	2517	64.3	2702	75.1				
10000	6481	1291	14.0	1469	19.1	1726	28.3	1955	38.3	2166	49.0	2363	60.1	2549	71.6	2727	83.3	2897	95.3	3060	107.5
11000	7129	1395	17.8	1562	23.5	1805	33.3	2023	43.9	2223	55.2	2411	67.1	2590	79.4	2761	91.9	2925	104.7	3082	117.8
12000	7777	1501	22.4	1658	28.5	1889	39.0	2096	50.3	2287	62.2	2468	74.8	2639	87.8	2803	101.1	2961	114.8		
13000	8425	1608	27.7	1756	34.3	1975	45.6	2173	57.5	2357	70.0	2530	83.2	2695	96.9	2853	111.0	3005	125.4		

Class 15 = Regular Type Face; Class 30 =  ; Class 50 = 

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 330

WHEEL DIAMETER ..... 33 IN.

MAX WHEEL SPEED ..... Class 15 - 1740 RPM; Class 30 - 2250 RPM; Class 50 - 2770 RPM

		STATIC PRESSURE (in. WG)																					
		2	5	10	15	20	25	30	35	40	45												
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1563	608	1.6	923	4.2	1291	9.2	1577	15.0	1817	21.4	2030	28.5	2222	36.0	2399	44.1	2564	52.6	2718	61.5		
3500	1824	624	2.0	931	4.7	1296	10.2	1580	16.4	1821	23.2	2033	30.6	2225	38.5	2402	46.8	2566	55.7	2721	64.9		
4000	2084	642	2.3	941	5.4	1302	11.2	1584	17.8	1824	25.1	2036	32.8	2228	41.1	2405	49.8	2569	58.9	2723	68.5		
5000	2606	686	3.3	969	6.8	1318	13.5	1596	20.9	1833	29.0	2044	37.6	2235	46.6	2411	56.1	2575	66.0	2729	76.3		
6000	3127	736	4.4	1003	8.6	1340	16.1	1611	24.4	1846	33.2	2054	42.6	2244	52.5	2419	62.8	2582	73.5	2736	84.6		
7000	3648	791	5.8	1044	10.7	1368	19.1	1632	28.2	1862	37.8	2068	48.1	2256	58.8	2429	69.9	2592	81.4	2745	93.3		
8000	4169	851	7.6	1089	13.1	1401	22.5	1658	32.4	1883	42.9	2085	53.9	2271	65.5	2442	77.4	2604	89.8	2755	102.5		
9000	4690	914	9.7	1138	15.9	1439	26.4	1688	37.2	1908	48.5	2106	60.3	2289	72.7	2459	85.4	2618	98.6	2768	112.1		
10000	5211	980	12.3	1191	19.1	1481	30.7	1723	42.4	1937	54.6	2131	67.3	2311	80.4	2478	94.0	2635	108.0				
11000	5732	1048	15.4	1247	22.7	1526	35.5	1761	48.3	1970	61.4	2160	74.9	2336	88.9	2501	103.2	2656	118.0				
12000	6253	1119	19.1	1306	26.9	1573	40.8	1803	54.7	2006	68.8	2192	83.2	2365	98.0	2527	113.2	2679	128.8				
13000	6774	1191	23.4	1367	31.7	1624	46.6	1847	61.6	2046	76.8	2228	92.1	2397	107.8	2556	123.9	2706	140.3				
14000	7295	1264	28.4	1430	37.1	1677	53.0	1893	69.2	2088	85.4	2266	101.8	2432	118.5	2587	135.4	2735	152.7				
15000	7817	1338	34.1	1495	43.2	1732	60.1	1942	77.4	2132	94.8	2306	112.2	2469	129.8	2622	147.7	2767	165.9				

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 330

WHEEL DIAMETER ..... 33 IN.

MAX WHEEL SPEED ..... Class 15 - 1740 RPM; Class 30 - 2250 RPM; Class 50 - 2770 RPM

		STATIC PRESSURE (in. WG)																					
		2	5	10	15	20	25	30	35	40	45												
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3000	1563	588	1.4																				
3500	1824	601	1.7																				
4000	2084	620	1.9	917	4.7																		
5000	2606	666	2.6	936	5.9																		
6000	3127	721	3.5	967	7.2	1301	14.1																
7000	3648	782	4.7	1009	8.8	1321	16.5	1589	24.8														
8000	4169	847	6.2	1058	10.6	1351	19.0	1605	28.2	1834	37.8												
9000	4690	915	8.0	1112	12.8	1388	21.9	1630	31.8	1849	42.3	2051	53.2										
10000	5211	986	10.1	1170	15.4	1431	25.1	1661	35.8	1871	47.0	2066	58.7	2249	70.8	2421	83.2						
11000	5732	1058	12.7	1232	18.4	1480	28.8	1699	40.1	1900	52.1	2088	64.6	2264	77.5	2431	90.8	2591	104.3				
12000	6253	1132	15.8	1296	21.9	1532	32.9	1741	44.9	1934	57.6	2115	70.9	2286	84.6	2448	98.7	2603	113.0	2751	127.7		
13000	6774	1207	19.3	1363	25.9	1588	37.5	1788	50.1	1974	63.6	2148	77.6	2312	92.1	2470	106.9	2620	122.1	2765	137.6		
14000	7295	1283	23.3	1431	30.4	1647	42.7	1839	56.0	2017	70.0	2185	84.8	2344	100.0	2496	115.6	2643	131.6				
15000	7817	1360	27.9	1501	35.5	1708	48.5	1893	62.4	2065	77.1	2226	92.5	2380	108.4	2528	124.8	2670	141.6				
16000	8338	1437	33.2	1572	41.2	1771	55.0	1949	69.5	2115	84.8	2271	100.9	2421	117.5	2563	134.6	2701	152.1				

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 365

WHEEL DIAMETER ..... 36.5 IN.

MAX WHEEL SPEED ..... Class 15 - 1570 RPM; Class 30 - 2050 RPM; Class 50 - 2500 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1276	537	1.6	828	4.4	1164	10.0	1422	16.6	1640	24.0	1833	32.1	2007	41.0	2166	50.4	2315	60.5	2455	71.1
4000	1701	557	2.2	838	5.5	1170	11.9	1427	19.2	1645	27.4	1837	36.2	2010	45.7	2170	55.7	2319	66.3	2459	77.4
5000	2127	584	3.0	853	6.7	1178	14.0	1433	22.1	1650	31.1	1841	40.6	2015	50.8	2174	61.6	2323	72.9	2463	84.6
6000	2552	616	3.9	873	8.2	1190	16.2	1442	25.2	1657	35.0	1847	45.4	2020	56.3	2179	67.8	2328	79.9	2467	92.4
7000	2977	652	5.0	898	9.9	1205	18.8	1453	28.6	1665	39.2	1854	50.4	2026	62.2	2185	74.5	2333	87.3	2472	100.6
8000	3403	692	6.3	926	11.8	1224	21.6	1467	32.2	1676	43.6	1863	55.7	2034	68.3	2192	81.4	2339	95.0	2478	109.1
9000	3828	734	7.8	958	14.1	1247	24.8	1484	36.2	1690	48.4	1875	61.3	2044	74.7	2200	88.7	2347	103.1	2485	118.1
10000	4254	779	9.7	992	16.6	1272	28.3	1504	40.6	1706	53.6	1888	67.3	2056	81.6	2211	96.3	2356	111.6	2493	127.4
11000	4679	826	11.9	1029	19.4	1301	32.2	1526	45.4	1725	59.2	1904	73.7	2069	88.8	2223	104.4	2367	120.5		
12000	5104	874	14.4	1068	22.6	1331	36.5	1552	50.6	1746	65.3	1922	80.6	2085	96.5	2237	112.9	2379	129.8		
13000	5530	924	17.4	1108	26.1	1364	41.1	1579	56.3	1770	71.9	1943	88.1	2103	104.7	2253	122.0	2394	139.7		
14000	5955	976	20.8	1151	30.0	1398	46.2	1609	62.4	1795	79.0	1966	96.0	2123	113.6	2271	131.6	2410	150.1		
16000	6806	1082	29.1	1240	39.2	1472	57.6	1673	76.1	1852	94.7	2017	113.6	2169	132.9	2313	152.7	2448	172.8		
18000	7656	1190	39.6	1335	50.6	1552	70.9	1743	91.8	1916	112.6	2074	133.6	2222	154.7	2361	176.3	2493	198.2		

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 365

WHEEL DIAMETER ..... 36.5 IN.

MAX WHEEL SPEED ..... Class 15 - 1570 RPM; Class 30 - 2050 RPM; Class 50 - 2500 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	2127	563	2.4	830	5.9																
6000	2552	598	3.1	844	7.1																
7000	2977	637	4.0	865	8.3	1173	16.5														
8000	3403	681	5.1	894	9.8	1185	18.8	1433	28.5												
9000	3828	728	6.4	927	11.5	1203	21.2	1441	31.8												
10000	4254	776	7.9	964	13.4	1226	23.8	1455	35.2	1660	47.2										
11000	4679	827	9.7	1005	15.6	1254	26.7	1473	38.9	1672	51.7	1855	65.0								
12000	5104	879	11.9	1048	18.2	1286	29.9	1496	42.8	1687	56.4	1865	70.5	2031	85.1	2187	100.1				
14000	5955	986	17.1	1140	24.3	1358	37.3	1552	51.6	1731	66.7	1898	82.4	2055	98.6	2204	115.3	2347	132.3	2482	149.7
16000	6806	1096	23.9	1237	32.0	1440	46.4	1621	61.9	1787	78.4	1944	95.6	2093	113.4	2235	131.6	2370	150.3	2501	169.3
18000	7656	1209	32.5	1339	41.5	1528	57.2	1697	74.0	1854	91.8	2002	110.4	2142	129.6	2277	149.4	2406	169.7		
20000	8507	1324	43.0	1444	53.0	1621	70.2	1781	88.2	1929	107.3	2069	127.2	2202	147.8	2330	169.0	2453	190.8		
22000	9358	1440	55.7	1552	66.7	1718	85.3	1869	104.7	2010	125.1	2143	146.2	2269	168.1	2391	190.7	2509	213.9		
24000	10208	1557	70.8	1661	82.8	1819	103.0	1962	123.8	2096	145.4	2222	167.8	2343	191.0	2459	214.9				

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 400

WHEEL DIAMETER .....40 IN.

MAX WHEEL SPEED .....Class 15 - 1430 RPM; Class 30 - 1860 RPM; Class 50 - 2290 RPM

CFM	OV	RPM	2		5		10		15		20		25		30		35		40		45	
			BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3000	1059	479	1.5	750	4.3	1059	10.1	1297	17.1	1497	25.0	1674	33.8	1833	43.4	1980	53.7	2116	64.6	2244	76.2	
4000	1411	490	2.0	753	5.3	1060	11.8	1298	19.3	1498	27.8	1675	37.2	1834	47.2	1981	58.0	2117	69.4	2246	81.5	
5000	1764	505	2.6	760	6.4	1062	13.6	1299	21.9	1499	31.0	1675	40.9	1835	51.6	1982	62.9	2118	74.9	2246	87.4	
6000	2117	526	3.3	770	7.6	1067	15.7	1301	24.7	1500	34.5	1676	45.1	1835	56.3	1982	68.3	2119	80.8	2247	93.9	
7000	2470	549	4.1	784	9.0	1074	17.9	1305	27.7	1502	38.3	1677	49.5	1836	61.5	1983	74.0	2119	87.2	2247	100.9	
8000	2823	575	5.1	801	10.5	1083	20.3	1311	31.0	1506	42.3	1680	54.3	1838	67.0	1984	80.2	2120	94.1	2248	108.4	
10000	3529	632	7.6	843	14.1	1110	25.7	1329	38.1	1519	51.1	1690	64.8	1846	79.0	1990	93.7	2125	109.0	2252	124.8	
12000	4234	694	10.8	892	18.6	1146	32.0	1356	46.2	1540	61.0	1706	76.4	1859	92.2	2000	108.6	2134	125.5	2259	142.8	
14000	4940	760	15.0	946	24.0	1189	39.4	1390	55.4	1568	72.0	1729	89.1	1878	106.7	2017	124.8	2147	143.3	2271	162.3	
16000	5646	829	20.3	1005	30.6	1237	47.9	1430	65.8	1602	84.2	1758	103.1	1903	122.5	2038	142.4	2166	162.6	2288	183.3	
18000	6351	901	27.0	1066	38.4	1289	57.7	1476	77.5	1641	97.8	1793	118.6	1934	139.8	2066	161.4	2191	183.4			
20000	7057	976	35.1	1130	47.6	1344	69.1	1525	90.8	1685	113.0	1833	135.6	1969	158.6	2098	182.1	2220	205.9			
22000	7763	1053	44.9	1197	58.5	1402	82.0	1577	105.7	1733	129.8	1876	154.3	2009	179.2	2135	204.5	2254	230.1			

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 400

WHEEL DIAMETER .....40 IN.

MAX WHEEL SPEED .....Class 15 - 1430 RPM; Class 30 - 1860 RPM; Class 50 - 2290 RPM

CFM	OV	RPM	2		5		10		15		20		25		30		35		40		45	
			BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
5000	1764	494	2.4																			
6000	2117	514	2.9	757	7.1																	
7000	2470	540	3.6	767	8.2																	
8000	2823	569	4.4	782	9.5	1068	19.0															
9000	3176	601	5.4	802	10.8	1075	21.2															
10000	3529	635	6.6	825	12.4	1086	23.5	1309	35.5													
12000	4234	708	9.5	880	16.1	1119	28.6	1327	42.3	1515	56.7											
14000	4940	786	13.3	942	20.7	1163	34.6	1357	49.7	1534	65.8	1698	82.4	1851	99.6							
16000	5646	866	18.2	1011	26.5	1216	41.6	1398	58.2	1564	75.7	1720	94.0	1866	112.8	2005	132.1	2136	151.9			
18000	6351	949	24.4	1083	33.5	1275	49.9	1446	67.8	1604	86.8	1751	106.6	1891	127.0	2024	147.9	2150	169.4	2272	191.2	
20000	7057	1034	31.9	1159	42.0	1339	59.7	1501	78.8	1650	99.1	1790	120.3	1923	142.3	2051	164.9	2173	187.9	2290	211.4	
22000	7763	1120	40.9	1237	51.9	1407	71.0	1561	91.4	1702	113.0	1836	135.6	1963	159.0	2085	183.1	2202	207.7			
24000	8469	1207	51.5	1317	63.6	1479	84.1	1624	105.8	1759	128.7	1887	152.5	2009	177.3	2125	202.8	2238	228.9			
26000	9174	1295	64.0	1398	77.0	1552	99.1	1691	122.1	1821	146.2	1943	171.4	2059	197.4	2171	224.2	2280	251.8			
28000	9880	1384	78.5	1481	92.5	1628	116.1	1761	140.5	1885	165.9	2002	192.3	2114	219.6	2222	247.7					

Class 15 = Regular Type Face; Class 30 =  ; Class 50 =  

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses

## IRO 451

WHEEL DIAMETER .....45.125 IN.

MAX WHEEL SPEED .....Class 15 - 1270 RPM; Class 30 - 1650 RPM; Class 50 - 2000 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
5000	1426	433	2.5	667	6.6	940	14.8	1150	24.4	1328	35.1	1484	47.0	1626	59.7	1756	73.4	1877	87.9	1991	103.2
7000	1996	457	3.8	677	8.9	943	18.6	1152	29.6	1329	41.6	1485	54.7	1627	68.6	1757	83.4	1878	99.0	1992	115.3
9000	2566	488	5.4	696	11.6	952	23.0	1157	35.5	1332	49.1	1487	63.5	1628	78.7	1758	94.8	1879	111.6	1992	129.1
11000	3137	525	7.4	721	14.8	967	28.0	1166	42.2	1338	57.3	1492	73.3	1631	90.0	1760	107.4	1881	125.6	1994	144.4
13000	3707	566	10.0	751	18.5	987	33.6	1180	49.6	1348	66.4	1499	84.0	1637	102.2	1765	121.2	1884	140.9	1997	161.2
15000	4277	609	13.3	786	23.0	1012	39.9	1199	57.6	1363	76.2	1510	95.5	1646	115.5	1772	136.1	1890	157.3		
17000	4847	654	17.2	823	28.2	1041	47.0	1222	66.6	1381	87.0	1525	108.0	1658	129.7	1782	152.0	1899	174.9		
19000	5418	702	22.1	863	34.2	1073	55.0	1248	76.4	1403	98.6	1544	121.5	1674	145.0	1796	169.0	1911	193.6		
21000	5988	751	27.8	904	41.2	1107	63.9	1277	87.3	1428	111.3	1566	136.0	1693	161.2	1812	187.1	1925	213.4		
23000	6558	801	34.7	947	49.2	1144	74.0	1309	99.2	1456	125.1	1590	151.6	1715	178.7	1832	206.3	1943	234.5		
25000	7129	853	42.7	991	58.4	1183	85.2	1344	112.4	1487	140.2	1618	168.5	1740	197.4	1854	226.9	1963	256.8		
27000	7699	906	52.0	1037	68.8	1222	97.6	1380	126.8	1519	156.5	1647	186.7	1767	217.5	1879	248.7	1986	280.5		
29000	8269	960	62.7	1084	80.5	1264	111.4	1417	142.6	1554	174.3	1679	206.4	1796	239.0	1906	272.1				
31000	8839	1015	74.9	1133	93.7	1306	126.6	1456	159.9	1590	193.5	1712	227.5	1827	262.0	1935	297.0				
37000	10550	1183	121.4	1283	143.0	1440	181.8	1579	221.3	1705	261.0	1821	300.9	1929	341.2						

Class 15 = Regular Type Face; Class 30 = ; Class 50 =   
Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 451

WHEEL DIAMETER .....45.125 IN.

MAX WHEEL SPEED .....Class 15 - 1270 RPM; Class 30 - 1650 RPM; Class 50 - 2000 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
6000	1711	434	2.8																		
8000	2281	462	4.0	673	9.4																
10000	2851	500	5.5	691	11.8	946	23.8														
12000	3422	545	7.5	719	14.6	957	28.2	1158	42.9												
14000	3992	595	10.1	754	18.0	976	33.0	1167	49.4	1338	66.7										
16000	4562	647	13.3	795	22.0	1002	38.5	1183	56.4	1347	75.3	1497	95.0								
18000	5133	701	17.4	840	26.9	1034	44.6	1206	64.0	1362	84.6	1506	105.9	1641	127.9	1768	150.5				
20000	5703	757	22.2	887	32.6	1071	51.6	1233	72.4	1382	94.5	1521	117.4	1652	141.1	1775	165.4	1893	190.2		
22000	6273	815	28.0	937	39.3	1111	59.6	1266	81.7	1408	105.2	1542	129.7	1667	155.0	1787	181.0	1901	207.5		
24000	6843	873	34.9	989	47.0	1154	68.7	1302	92.1	1438	116.9	1566	142.9	1688	169.8	1803	197.3	1914	225.5		
26000	7414	933	42.8	1042	55.9	1200	78.9	1341	103.6	1472	129.8	1595	157.2	1712	185.5	1824	214.6	1931	244.4		
28000	7984	993	52.0	1096	66.1	1248	90.4	1383	116.4	1509	143.8	1627	172.6	1740	202.3	1848	233.0	1952	264.3		
30000	8554	1054	62.5	1152	77.5	1297	103.3	1427	130.6	1549	159.3	1663	189.3	1771	220.5	1876	252.5	1977	285.4		
32000	9125	1115	74.4	1208	90.4	1348	117.7	1473	146.2	1590	176.2	1701	207.5	1806	240.0	1907	273.4	2004	307.7		

Class 15 = Regular Type Face; Class 30 = ; Class 50 =   
Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 505

IRO/IRT PERFORMANCE DATA

WHEEL DIAMETER ..... 50.5 IN.

MAX WHEEL SPEED ..... Class 15 - 1130 RPM; Class 30 - 1480 RPM; Class 50 - 1800 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	1338	385	3.1	596	8.0	840	18.1	1028	29.9	1186	43.2	1326	57.9	1453	73.8	1569	90.8	1677	108.8	1779	127.8
8000	1784	401	4.2	602	10.2	842	21.8	1029	34.9	1187	49.5	1327	65.3	1453	82.3	1570	100.4	1678	119.5	1779	139.5
10000	2230	421	5.6	613	12.7	846	25.9	1031	40.6	1188	56.6	1328	73.7	1454	92.0	1570	111.2	1678	131.5	1780	152.6
12000	2676	446	7.4	628	15.6	854	30.6	1036	46.9	1191	64.3	1330	82.9	1455	102.5	1571	123.1	1679	144.7	1781	167.1
14000	3122	473	9.5	647	18.9	865	35.6	1043	53.6	1196	72.8	1333	92.9	1458	114.0	1573	136.0	1681	158.9	1782	182.7
16000	3568	501	12.1	668	22.6	880	41.2	1053	61.0	1204	81.8	1339	103.6	1462	126.3	1576	149.8	1683	174.2	1784	199.4
18000	4014	532	15.2	692	26.9	897	47.3	1066	68.9	1213	91.5	1346	115.0	1468	139.3	1581	164.5	1687	190.4	1787	217.2
20000	4460	564	18.9	718	31.8	916	54.1	1081	77.5	1225	101.8	1356	127.1	1476	153.1	1588	180.0	1693	207.5	1792	235.8
22000	4906	596	23.2	745	37.3	938	61.5	1098	86.7	1239	112.9	1367	139.9	1486	167.7	1596	196.3	1700	225.5	1798	255.5
24000	5352	631	28.2	774	43.5	961	69.7	1117	96.8	1255	124.8	1381	153.6	1497	183.2	1606	213.5	1708	244.4		
26000	5798	666	33.9	803	50.5	986	78.6	1138	107.6	1273	137.4	1397	168.0	1511	199.4	1618	231.5	1719	264.3		
28000	6244	701	40.5	834	58.3	1012	88.5	1161	119.3	1293	151.0	1414	183.4	1526	216.6	1631	250.5	1731	285.0		
30000	6690	738	48.0	865	66.9	1039	99.2	1184	132.0	1314	165.5	1433	199.8	1543	234.8	1646	270.5	1744	306.8		
32000	7136	776	56.5	897	76.6	1066	110.8	1209	145.6	1336	181.0	1453	217.2	1561	254.0	1663	291.5	1759	329.6		
34000	7583	813	66.0	930	87.2	1095	123.5	1235	160.2	1360	197.6	1474	235.6	1581	274.3	1681	313.6	1776	353.6		
36000	8029	852	76.7	964	98.9	1124	137.2	1262	176.0	1384	215.3	1497	255.2	1601	295.8	1700	336.9	1794	378.7		

Class 15 = Regular Type Face; Class 30 = ■; Class 50 = ■

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 505

WHEEL DIAMETER ..... 50.5 IN.

MAX WHEEL SPEED ..... Class 15 - 1130 RPM; Class 30 - 1480 RPM; Class 50 - 1800 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1784	391	3.8																		
10000	2230	412	4.9	602	11.8																
12000	2676	439	6.4	614	14.1																
14000	3122	470	8.2	631	16.8	850	33.0														
16000	3568	504	10.5	654	19.9	861	37.6	1037	56.8												
18000	4014	540	13.3	681	23.4	876	42.6	1045	63.5	1196	85.5										
20000	4460	577	16.6	710	27.5	895	48.1	1057	70.5	1203	94.2	1337	118.8								
22000	4906	616	20.6	741	32.2	918	54.1	1072	78.1	1213	103.3	1344	129.6	1465	156.7						
24000	5352	656	25.2	775	37.7	943	60.8	1091	86.2	1227	113.0	1353	140.9	1472	169.7	1583	199.2				
26000	5798	696	30.5	809	43.9	970	68.3	1113	95.0	1244	123.3	1366	152.8	1481	183.2	1590	214.4	1694	246.4	1793	279.0
28000	6244	737	36.6	845	50.8	1000	76.5	1137	104.6	1263	134.3	1381	165.3	1493	197.4	1599	230.2	1700	263.8	1797	298.0
30000	6690	779	43.5	882	58.7	1031	85.7	1163	115.0	1285	146.1	1399	178.6	1507	212.2	1611	246.7	1710	281.9	1805	317.8
32000	7136	822	51.3	920	67.4	1063	95.8	1191	126.3	1308	158.8	1419	192.7	1524	227.8	1625	263.8	1722	300.7		
34000	7583	864	60.1	959	77.1	1097	106.9	1220	138.7	1334	172.4	1442	207.7	1544	244.2	1642	281.8	1736	320.2		
36000	8029	907	69.8	998	87.9	1131	119.0	1251	152.2	1361	187.2	1466	223.8	1565	261.6	1660	300.7	1752	340.6		
38000	8475	951	80.7	1038	99.7	1167	132.3	1282	166.7	1390	203.0	1491	240.9	1588	280.2	1681	320.6	1770	362.0		

Class 15 = Regular Type Face; Class 30 = ■; Class 50 = ■

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 575

WHEEL DIAMETER .....57.5 IN.

MAX WHEEL SPEED .....Class 15 -970 RPM; Class 30 - 1300 RPM; Class 50 - 1600 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1364	339	4.1	523	10.7	737	23.8	903	39.3	1042	56.7	1165	75.8	1276	96.5	1378	118.7	1473	142.1	1562	166.9
10000	1705	350	5.2	528	12.8	739	27.5	903	44.3	1042	63.0	1165	83.3	1276	105.1	1378	128.3	1473	152.8	1563	178.6
12000	2046	363	6.6	534	15.2	741	31.6	905	49.8	1043	69.8	1166	91.4	1277	114.4	1379	138.8	1474	164.5	1563	191.4
14000	2387	378	8.2	543	17.9	746	36.0	907	55.8	1045	77.3	1167	100.2	1277	124.6	1379	150.2	1474	177.1	1563	205.2
16000	2728	395	10.0	554	20.9	752	40.7	911	62.2	1047	85.2	1168	109.6	1278	135.4	1380	162.4	1475	190.6	1564	220.0
18000	3069	414	12.2	567	24.2	759	45.8	916	69.0	1050	93.7	1171	119.7	1280	146.9	1381	175.4	1476	205.0	1565	235.6
20000	3409	433	14.7	581	27.9	769	51.3	922	76.3	1055	102.6	1174	130.2	1283	159.1	1384	189.0	1477	220.0	1566	252.2
24000	4091	474	20.9	614	36.4	792	63.5	939	92.1	1068	122.0	1184	153.0	1291	185.1	1390	218.3	1483	252.4	1570	287.6
28000	4773	518	28.9	650	46.9	820	77.8	961	110.0	1086	143.4	1199	178.0	1303	213.6	1400	250.1	1491	287.6	1578	326.0
32000	5455	564	39.0	688	59.4	851	94.2	987	130.1	1108	167.2	1217	205.4	1319	244.5	1414	284.6	1503	325.5	1588	367.3
36000	6137	612	51.5	729	74.3	886	113.1	1017	152.9	1133	193.6	1240	235.4	1339	278.2	1431	321.8	1519	366.3		
40000	6819	662	66.8	772	92.0	922	134.8	1049	178.4	1162	223.0	1266	268.5	1362	314.9	1452	362.1	1537	410.2		
44000	7501	713	85.2	816	112.6	961	159.6	1084	207.2	1194	255.5	1294	304.7	1388	354.8	1476	405.7	1559	457.4		
48000	8183	766	107.1	862	136.5	1001	187.6	1121	239.2	1227	291.5	1325	344.5	1416	398.3	1502	452.9	1584	508.3		

Class 15 = Regular Type Face; Class 30 = ; Class 50 = 

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 575

WHEEL DIAMETER .....57.5 IN.

MAX WHEEL SPEED .....Class 15 -970 RPM; Class 30 - 1300 RPM; Class 50 - 1600 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
10000	1705	342	4.7																		
12000	2046	355	5.8	526	14.2																
14000	2387	371	7.1	532	16.4																
16000	2728	390	8.7	541	18.9	742	38.1														
20000	3409	434	12.7	568	24.5	753	47.0	910	71.3												
24000	4091	483	18.3	604	31.6	773	57.0	920	84.6	1052	113.6										
28000	4773	534	25.6	645	40.5	802	68.5	939	99.2	1064	131.5	1179	165.1	1286	199.9						
32000	5455	588	34.8	691	51.5	836	82.0	965	115.5	1082	151.0	1192	187.9	1295	225.9	1392	265.0	1485	304.9		
36000	6137	643	46.4	739	64.8	875	97.9	996	134.0	1107	172.4	1211	212.4	1310	253.7	1403	296.0	1493	339.3	1578	383.5
40000	6819	700	60.5	789	80.8	917	116.5	1031	155.2	1137	196.3	1236	239.2	1330	283.6	1420	329.2	1506	375.8	1588	423.2
44000	7501	758	77.5	841	99.6	962	138.1	1071	179.3	1171	223.0	1265	268.7	1355	316.0	1441	364.6	1524	414.4	1604	465.1
48000	8183	816	97.6	894	121.6	1009	163.0	1113	206.7	1208	252.9	1299	301.3	1385	351.3	1467	402.9	1547	455.7		
52000	8865	875	121.0	949	147.1	1058	191.3	1157	237.8	1248	286.5	1335	337.4	1417	390.1	1497	444.4	1573	500.1		

Class 15 = Regular Type Face; Class 30 = ; Class 50 = 

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 643

WHEEL DIAMETER ..... 64.375 IN.  
MAX WHEEL SPEED ..... Class 15 -890 RPM; Class 30 - 1160 RPM; Class 50 - 1420 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
9000	1225	300	4.6	467	12.3	658	28.1	806	46.9	931	68.1	1040	91.5	1139	116.9	1231	144.2	1315	173.1	1395	203.6
11000	1497	306	5.6	469	14.4	659	31.6	806	51.6	931	74.0	1041	98.5	1140	125.0	1231	153.3	1316	183.2	1395	214.7
13000	1769	314	6.8	472	16.6	660	35.4	807	56.8	931	80.5	1041	106.2	1140	133.8	1231	163.2	1316	194.1	1396	226.7
15000	2041	324	8.2	477	19.1	662	39.5	808	62.3	932	87.4	1041	114.4	1140	143.2	1232	173.8	1316	205.9	1396	239.6
20000	2722	353	12.5	494	26.1	671	50.9	813	77.8	935	106.6	1043	137.2	1142	169.4	1233	203.2	1317	238.5	1397	275.3
25000	3402	386	18.3	519	34.8	686	64.1	823	95.3	942	128.3	1049	162.9	1146	198.9	1236	236.4	1320	275.3	1399	315.5
30000	4083	423	26.0	548	45.5	707	79.4	838	115.1	954	152.5	1058	191.3	1153	231.5	1241	273.0	1324	315.7	1403	359.7
35000	4763	462	36.0	580	58.5	732	97.1	858	137.4	969	179.2	1070	222.4	1163	267.0	1250	312.7	1332	359.6	1409	407.6
40000	5444	503	48.5	614	74.1	760	117.6	881	162.5	989	208.9	1087	256.6	1178	305.6	1263	355.7	1342	406.9	1418	459.2
45000	6124	546	64.1	650	92.7	790	141.2	908	190.9	1012	241.9	1107	294.2	1195	347.6	1278	402.2	1356	457.9		
50000	6805	590	83.1	688	114.6	823	168.2	937	222.7	1037	278.4	1130	335.3	1216	393.3	1296	452.5	1373	512.6		
55000	7485	636	106.1	728	140.2	857	199.0	967	258.5	1065	319.0	1155	380.5	1239	443.2	1317	506.8	1392	571.5		
60000	8165	682	133.2	768	170.0	893	233.9	1000	298.5	1095	363.8	1183	430.1	1264	497.4	1341	565.7	1414	634.9		

Class 15 = Regular Type Face; Class 30 = ; Class 50 =

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 643

WHEEL DIAMETER ..... 64.375 IN.  
MAX WHEEL SPEED ..... Class 15 -890 RPM; Class 30 - 1160 RPM; Class 50 - 1420 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
12000	1633	303	5.6																		
16000	2177	322	7.9	471	18.9																
20000	2722	348	10.8	483	23.6																
24000	3266	379	14.7	502	29.1	670	56.4														
28000	3811	413	19.8	526	35.7	682	66.0	817	98.9												
32000	4355	448	26.1	553	43.6	700	76.7	828	112.8	943	150.8	1049	190.4								
36000	4899	486	33.9	584	53.0	721	88.7	842	127.8	953	169.1	1055	212.0	1150	256.3						
40000	5444	524	43.4	616	64.2	746	102.4	861	144.3	966	188.7	1064	234.8	1156	282.4	1243	331.3				
44000	5988	564	54.7	650	77.2	773	118.0	883	162.6	983	209.8	1078	259.1	1167	310.0	1251	362.2	1331	415.4	1408	469.9
48000	6532	604	67.9	685	92.3	803	135.7	907	182.8	1004	232.9	1094	285.1	1180	339.1	1261	394.6	1339	451.2	1414	509.0
52000	7077	644	83.3	722	109.6	834	155.7	934	205.3	1026	258.0	1113	313.1	1196	370.2	1275	428.7	1351	488.6	1423	549.6
56000	7621	686	101.1	759	129.2	866	178.1	962	230.3	1051	285.6	1135	343.4	1215	403.3	1291	464.9	1364	527.9		
60000	8165	727	121.4	797	151.5	900	203.2	992	257.9	1078	315.8	1159	376.2	1236	438.9	1310	503.4	1381	569.4		
64000	8710	770	144.4	836	176.4	935	231.1	1024	288.5	1106	348.8	1184	411.8	1259	477.1	1330	544.4	1399	613.4		

Class 15 = Regular Type Face; Class 30 = ; Class 50 =

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 712

WHEEL DIAMETER ..... 71.25 IN.

MAX WHEEL SPEED ..... Class 15 -800 RPM; Class 30 - 1050 RPM; Class 50 - 1280 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
15000	1659	281	7.8	425	19.3	596	41.6	729	67.1	841	95.5	940	126.4	1030	159.7	1112	195.2	1189	232.7	1261	272.0
20000	2212	299	11.3	434	25.5	600	51.9	731	81.1	842	113.0	941	147.2	1031	183.5	1113	222.0	1190	262.3	1262	304.5
25000	2765	321	15.8	448	32.8	607	63.6	735	96.9	845	132.6	943	170.5	1032	210.4	1114	252.1	1190	295.8	1262	341.1
30000	3317	346	21.6	466	41.5	618	76.7	743	114.4	851	154.3	947	196.1	1035	239.8	1116	285.3	1192	332.5	1264	381.2
35000	3870	372	28.9	487	51.7	633	91.6	753	133.8	858	178.0	953	224.0	1039	271.8	1120	321.2	1195	372.2	1266	424.7
40000	4423	400	38.0	510	63.8	650	108.3	766	155.1	869	203.7	961	254.1	1046	306.2	1125	359.7	1200	414.8	1270	471.2
45000	4976	430	49.0	534	77.9	670	127.2	782	178.6	882	231.7	972	286.6	1055	343.0	1133	400.8	1206	460.1	1276	520.7
50000	5529	461	62.3	560	94.2	691	148.5	800	204.5	897	262.2	985	321.6	1066	382.5	1143	444.7	1215	508.4	1283	573.3
55000	6082	492	78.1	587	113.0	714	172.3	820	233.1	914	295.4	1000	359.3	1079	424.7	1154	491.5	1225	559.5		
60000	6635	525	96.7	615	134.5	737	199.0	841	264.5	932	331.5	1016	400.1	1094	470.0	1168	541.3	1237	613.8		
65000	7188	558	118.4	643	159.1	762	228.6	863	299.1	953	370.9	1035	444.1	1111	518.6	1183	594.4	1251	671.5		
70000	7741	592	143.5	673	186.8	788	261.5	886	337.0	974	413.6	1054	491.5	1129	570.7	1199	651.1	1266	732.7		
75000	8294	627	172.2	703	218.0	815	297.9	911	378.5	996	460.0	1075	542.6	1148	626.5	1217	711.4	1282	797.7		

Class 15 = Regular Type Face; Class 30 =      ; Class 50 =      

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 712

WHEEL DIAMETER ..... 71.25 IN.

MAX WHEEL SPEED ..... Class 15 -800 RPM; Class 30 - 1050 RPM; Class 50 - 1280 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
15000	1659	275	7.0																		
18000	1990	284	8.6	424	21.1																
21000	2322	297	10.4	428	24.4																
24000	2654	312	12.7	435	28.0																
27000	2986	328	15.3	444	31.8	601	63.0														
30000	3317	346	18.5	456	36.1	606	69.7	734	105.8												
35000	3870	377	24.9	478	44.4	618	81.7	739	122.1	847	164.4										
40000	4423	410	33.0	504	54.4	635	95.1	750	139.5	853	186.1	948	234.4								
45000	4976	445	43.0	533	66.3	656	110.2	764	158.3	863	209.1	954	261.6	1040	315.7	1120	371.1				
50000	5529	481	55.1	563	80.5	679	127.4	782	179.0	876	233.6	964	290.3	1046	348.7	1125	408.3	1199	469.3		
55000	6082	517	69.5	594	97.2	705	147.1	802	201.8	892	260.1	977	320.8	1056	383.3	1132	447.2	1204	512.4	1273	578.8
60000	6635	554	86.5	627	116.4	732	169.4	825	227.3	912	288.9	993	353.4	1069	419.9	1142	487.9	1212	557.4	1280	628.0
65000	7188	592	106.3	661	138.5	761	194.8	851	255.6	933	320.4	1011	388.3	1085	458.6	1155	530.8	1223	604.4		
75000	8294	669	155.0	731	192.2	823	255.4	905	322.3	982	393.1	1054	467.4	1123	544.6	1189	624.1	1252	705.5		
85000	9400	747	217.6	803	259.8	888	330.5	965	403.8	1036	480.6	1104	560.9	1168	644.4	1230	730.5				

Class 15 = Regular Type Face; Class 30 =      ; Class 50 =      

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 782

WHEEL DIAMETER ..... 78.25 IN.

MAX WHEEL SPEED ..... Class 15 - 725 RPM; Class 30 - 950 RPM; Class 50 - 1175 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	1372	250	7.6	385	19.9	542	44.5	663	73.2	766	105.5	856	141.1	938	179.5	1013	220.6	1082	264.2	1148	310.1
20000	1830	261	10.6	389	25.5	544	53.9	664	86.0	766	121.5	856	160.1	938	201.3	1013	245.2	1083	291.4	1148	339.9
25000	2287	275	14.3	397	31.9	547	64.5	666	100.5	767	139.5	857	181.4	938	225.9	1013	272.8	1083	322.0	1149	373.4
30000	2745	292	18.9	408	39.3	553	76.3	669	116.4	770	159.3	859	204.9	940	252.8	1014	303.1	1084	355.6	1149	410.2
35000	3202	310	24.6	421	47.8	561	89.3	675	133.7	773	180.8	861	230.3	942	282.1	1016	336.0	1085	392.0	1150	450.0
40000	3660	330	31.4	436	57.6	571	103.6	682	152.5	779	203.9	865	257.5	945	313.3	1018	371.1	1087	430.9	1152	492.6
45000	4117	351	39.7	453	68.8	583	119.5	691	172.9	786	228.7	871	286.6	949	346.5	1022	408.5	1090	472.2	1154	537.8
50000	4575	372	49.4	471	81.6	597	137.0	702	195.0	794	255.2	878	317.6	955	381.8	1027	448.0	1094	515.8	1158	585.4
55000	5032	395	60.9	489	96.1	612	156.4	714	218.9	804	283.7	886	350.6	962	419.3	1033	489.7	1099	561.8	1162	635.5
60000	5490	418	74.2	509	112.5	628	177.7	728	244.9	816	314.3	896	385.7	970	458.8	1040	533.7	1106	610.2	1168	688.1
65000	5947	442	89.7	529	131.0	645	201.2	742	273.2	828	347.1	907	423.0	980	500.7	1049	579.9	1113	660.8	1175	743.3
70000	6405	466	107.4	550	151.7	663	226.9	758	303.7	842	382.4	919	462.8	991	545.0	1058	628.8	1122	714.2	1182	801.0
75000	6862	491	127.6	571	174.7	681	255.1	774	336.8	857	420.1	932	505.2	1003	591.9	1069	680.3	1132	770.2		
80000	7320	517	150.5	593	200.3	700	285.9	791	372.5	872	460.6	947	550.4	1016	641.7	1081	734.7	1142	829.1		
85000	7777	542	176.2	615	228.7	720	319.4	809	411.0	889	504.0	962	598.4	1029	694.5	1093	792.0	1154	890.9		

Class 15 = Regular Type Face; Class 30 =      ; Class 50 =        
 Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 782

WHEEL DIAMETER ..... 78.25 IN.

MAX WHEEL SPEED ..... Class 15 - 725 RPM; Class 30 - 950 RPM; Class 50 - 1175 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			2	5	10	15	20	25	30	35	40	45	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
15000	1372	245	7.0																		
18000	1647	250	8.4																		
21000	1921	257	9.9	386	24.7																
24000	2196	266	11.7	388	27.9																
27000	2470	277	13.8	393	31.4																
30000	2745	288	16.1	398	35.0	546	70.4														
35000	3202	310	21.0	411	41.8	550	81.4														
40000	3660	333	26.9	428	49.7	558	93.1	671	139.9												
50000	4575	383	43.1	466	69.5	583	119.7	686	174.7	779	232.4	865	292.1								
60000	5490	436	65.7	511	96.2	617	152.5	711	214.6	797	280.3	877	348.4	952	418.5	1024	490.2	1091	563.5		
70000	6405	491	95.9	559	130.9	657	193.3	743	261.7	823	334.5	898	410.4	969	488.8	1036	568.9	1101	650.7	1163	733.9
80000	7320	548	135.1	610	174.8	700	243.8	781	318.1	855	397.2	925	480.2	992	566.1	1056	654.4	1117	744.4	1176	836.0
90000	8235	606	184.4	663	229.0	747	305.0	822	385.4	892	470.5	958	559.9	1021	652.6	1081	748.2	1139	846.0		
100000	9150	665	245.2	718	294.8	796	378.1	867	464.9	933	556.0	995	651.4	1055	750.5	1112	852.7	1167	957.8		

Class 15 = Regular Type Face; Class 30 =      ; Class 50 =        
 Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRO 852

WHEEL DIAMETER ..... 85.25 IN.

MAX WHEEL SPEED ..... Class 15 -660 RPM; Class 30 - 870 RPM; Class 50 - 1070 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
20000	1532	232	10	354	26	498	57	609	92	703	132	786	175	861	222	930	272	994	325	1054	381
25000	1915	242	13	359	32	499	66	610	106	703	149	786	195	861	245	930	298	994	353	1054	412
30000	2298	253	17	365	38	502	77	611	120	704	167	787	217	861	270	930	326	994	384	1054	446
35000	2681	266	22	373	46	507	89	614	136	706	187	788	240	862	297	931	356	995	418	1055	482
40000	3064	280	27	383	54	513	102	618	153	709	208	790	265	864	326	932	388	996	454	1056	522
45000	3447	295	34	394	63	520	116	623	172	712	230	793	292	866	356	934	423	997	492	1057	563
50000	3830	311	41	407	74	529	131	629	191	717	254	796	320	869	388	936	459	999	532	1058	607
55000	4213	327	50	420	86	539	147	637	212	723	280	801	350	872	422	939	497	1001	574	1060	653
60000	4596	344	60	434	99	549	165	645	234	730	307	807	381	877	458	943	537	1005	618	1063	701
65000	4979	361	72	448	113	561	185	655	259	738	335	813	414	883	495	948	579	1009	664	1067	751
70000	5362	379	85	463	129	573	206	665	284	747	365	821	449	889	535	953	623	1014	712	1071	804
80000	6128	416	116	495	167	600	253	688	341	766	432	838	524	904	619	967	716	1026	814		
90000	6894	455	156	527	212	628	309	713	407	789	506	858	608	922	712	983	818	1040	926		
100000	7660	494	204	562	266	658	373	740	481	813	590	880	702	943	815	1002	930	1058	1046		

Class 15 = Regular Type Face; Class 30 =       ; Class 50 =       

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRT 852

WHEEL DIAMETER ..... 85.25 IN.

MAX WHEEL SPEED ..... Class 15 -660 RPM; Class 30 - 870 RPM; Class 50 - 1070 RPM

		STATIC PRESSURE (in. WG)																			
		2		5		10		15		20		25		30		35		40		45	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
20000	1532	228	9.3																		
25000	1915	236	11.8	354	29.4																
30000	2298	248	14.9	358	34.9																
35000	2681	263	18.7	365	40.8	501	82.3														
45000	3447	296	28.8	386	54.9	509	104.5	614	158.0												
55000	4213	334	43.3	414	73.0	526	129.8	623	191.6	711	256.4	791	323.6								
65000	4979	374	62.9	447	96.5	549	159.6	640	229.0	722	302.1	798	377.8	869	455.7	936	535.5				
75000	5745	416	88.3	483	126.2	577	195.3	661	271.4	738	352.2	810	436.2	878	522.6	943	610.9	1004	701.0	1062	792.9
85000	6511	459	120.6	521	163.0	609	238.3	687	320.6	760	408.2	828	499.9	892	594.4	954	691.1	1012	789.8	1069	890.2
95000	7277	504	160.6	560	207.7	643	289.6	717	377.8	785	471.8	849	570.3	911	672.3	969	777.0	1025	884.0		
105000	8044	548	209.1	601	261.1	679	349.9	749	444.2	813	544.2	875	649.1	933	758.1	988	870.2	1042	985.0		
115000	8810	594	267.1	643	324.1	716	420.2	783	520.8	844	626.8	902	737.7	958	853.1	1011	972.0	1063	1094.1		
125000	9576	640	335.4	686	397.5	755	501.2	818	608.4	877	720.5	933	837.4	986	958.9	1037	1084.2				

Class 15 = Regular Type Face; Class 30 =       ; Class 50 =       

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRW 191

WHEEL DIAMETER ..... 19.125 IN.  
MAX WHEEL SPEED ..... Class 30 - 3900 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	3	4	5	10	15	20	25	30	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
800	1258	762	0.23	1035	0.45	1248	0.71	1430	1.00	1591	1.33	2228	3.34	2721	5.90	3139	8.90	3507	12.29	3840	16.03
1000	1572	793	0.30	1060	0.56	1270	0.85	1450	1.16	1609	1.50	2240	3.57	2730	6.17	3145	9.21	3512	12.63	3845	16.39
1200	1887	832	0.39	1087	0.69	1295	1.01	1472	1.35	1630	1.71	2255	3.86	2741	6.51	3154	9.59	3520	13.05	3851	16.85
1400	2201	881	0.50	1119	0.84	1321	1.20	1497	1.58	1653	1.97	2273	4.21	2756	6.93	3167	10.06	3530	13.56	3860	17.40
1600	2516	937	0.64	1156	1.02	1351	1.42	1524	1.83	1678	2.25	2294	4.63	2773	7.43	3181	10.62	3543	14.17	3871	18.06
1800	2830	999	0.81	1200	1.22	1385	1.66	1553	2.11	1705	2.57	2316	5.10	2793	8.00	3198	11.27	3558	14.88	3884	18.82
2000	3145	1066	1.01	1251	1.45	1424	1.93	1586	2.42	1734	2.92	2340	5.62	2814	8.64	3217	12.00	3575	15.69	3900	19.70
2200	3459	1136	1.26	1307	1.73	1469	2.23	1623	2.76	1767	3.31	2365	6.19	2837	9.35	3238	12.82	3593	16.60		
2600	4088	1282	1.87	1431	2.40	1573	2.97	1711	3.57	1843	4.19	2419	7.46	2885	10.95	3282	14.69	3635	18.68		
3000	4717	1434	2.67	1567	3.27	1693	3.90	1816	4.56	1936	5.25	2480	8.92	2937	12.79	3331	16.85	3680	21.12		
3400	5346	1590	3.71	1711	4.37	1825	5.06	1935	5.79	2043	6.54	2550	10.57	2994	14.84	3382	19.27	3730	23.88		
3800	5975	1749	5.00	1859	5.73	1964	6.48	2065	7.27	2163	8.08	2632	12.45	3058	17.13	3439	21.96	3782	26.93		
4200	6604	1909	6.58	2012	7.37	2108	8.19	2201	9.04	2292	9.91	2726	14.61	3130	19.66	3500	24.90	3837	30.27		
4600	7233	2071	8.47	2167	9.33	2257	10.22	2344	11.13	2428	12.07	2831	17.07	3212	22.48	3568	28.11	3898	33.88		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRW 226

WHEEL DIAMETER ..... 22.625 IN.  
MAX WHEEL SPEED ..... Class 30 - 3300 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	3	4	5	10	15	20	25	30	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
1000	1124	634	0.28	867	0.58	1048	0.93	1203	1.33	1339	1.77	1880	4.56	2298	8.12	2651	12.31	2963	17.03	3245	22.24
1200	1348	651	0.35	881	0.68	1060	1.05	1213	1.46	1349	1.92	1886	4.76	2302	8.35	2654	12.57	2965	17.33	3247	22.56
1400	1573	670	0.42	896	0.79	1074	1.19	1225	1.62	1360	2.10	1893	5.00	2308	8.63	2659	12.88	2969	17.67	3250	22.95
1600	1798	693	0.51	912	0.92	1088	1.35	1239	1.81	1372	2.31	1902	5.28	2314	8.96	2664	13.26	2973	18.08	3254	23.39
2000	2247	751	0.73	950	1.21	1120	1.72	1268	2.25	1400	2.81	1924	5.98	2332	9.79	2678	14.19	2985	19.10	3264	24.48
2400	2697	822	1.03	998	1.58	1158	2.17	1302	2.78	1431	3.41	1950	6.84	2354	10.84	2697	15.37	3002	20.39	3278	25.87
2800	3146	901	1.42	1057	2.04	1204	2.70	1340	3.39	1466	4.09	1978	7.86	2379	12.09	2720	16.80	3022	21.96	3296	27.57
3200	3596	986	1.92	1126	2.60	1259	3.33	1386	4.09	1506	4.88	2009	9.02	2406	13.54	2745	18.47	3045	23.81		
3800	4270	1120	2.91	1242	3.68	1358	4.50	1470	5.37	1579	6.26	2059	11.00	2451	16.04	2786	21.39	3083	27.08		
4400	4944	1259	4.23	1368	5.09	1471	6.00	1570	6.96	1668	7.96	2117	13.28	2499	18.90	2831	24.76	3126	30.90		
5000	5618	1402	5.92	1500	6.89	1593	7.89	1682	8.94	1770	10.03	2185	15.89	2553	22.11	2879	28.55	3171	35.21		
5600	6292	1546	8.06	1636	9.12	1721	10.22	1803	11.37	1883	12.55	2264	18.90	2615	25.71	2932	32.76	3220	39.98		
6200	6966	1692	10.68	1776	11.84	1854	13.04	1930	14.28	2003	15.55	2355	22.37	2685	29.73	2991	37.38	3273	45.22		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRW 261

WHEEL DIAMETER ..... 26.125 IN.  
 MAX WHEEL SPEED ..... Class 30 - 2850 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	3	4	5	10	15	20	25	30	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
1200	1013	543	0.34	746	0.72	903	1.17	1038	1.70	1156	2.28	1626	5.98	1989	10.70	2295	16.25	2565	22.53	2809	29.46
1600	1350	564	0.46	763	0.90	918	1.40	1051	1.95	1168	2.56	1633	6.35	1994	11.14	2299	16.76	2568	23.10	2812	30.08
2000	1688	590	0.62	783	1.13	936	1.69	1067	2.29	1183	2.93	1643	6.84	2001	11.72	2305	17.42	2573	23.83	2816	30.88
2400	2025	624	0.82	805	1.41	956	2.04	1085	2.70	1200	3.39	1656	7.48	2011	12.47	2313	18.26	2580	24.74	2822	31.86
2800	2363	665	1.07	832	1.73	978	2.44	1105	3.17	1219	3.93	1672	8.24	2024	13.38	2323	19.28	2589	25.86	2829	33.06
3200	2700	712	1.37	864	2.11	1003	2.89	1127	3.71	1240	4.54	1689	9.12	2038	14.45	2336	20.49	2599	27.18	2839	34.49
3600	3038	763	1.75	902	2.55	1032	3.41	1152	4.30	1262	5.22	1707	10.13	2055	15.68	2350	21.89	2612	28.73	2850	36.15
4000	3376	817	2.21	945	3.07	1066	4.00	1180	4.97	1286	5.96	1726	11.23	2072	17.05	2366	23.47	2626	30.48		
4400	3713	873	2.75	991	3.67	1104	4.67	1212	5.71	1314	6.79	1746	12.44	2090	18.57	2383	25.23	2642	32.43		
4800	4051	931	3.39	1041	4.38	1146	5.43	1247	6.54	1345	7.69	1768	13.75	2109	20.21	2400	27.15	2659	34.58		
5200	4388	990	4.14	1093	5.18	1192	6.30	1287	7.48	1379	8.70	1791	15.15	2129	21.98	2419	29.22	2676	36.91		
5600	4726	1050	5.00	1148	6.10	1240	7.28	1330	8.52	1417	9.81	1815	16.65	2150	23.87	2438	31.45	2695	39.43		
6000	5063	1111	5.97	1203	7.15	1291	8.39	1375	9.69	1458	11.04	1842	18.25	2172	25.88	2458	33.82	2713	42.11		
6400	5401	1173	7.08	1260	8.32	1343	9.62	1424	10.98	1502	12.40	1871	19.97	2195	28.00	2479	36.33	2733	44.96		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRW 296

WHEEL DIAMETER ..... 29.625 IN.  
 MAX WHEEL SPEED ..... Class 30 - 2515 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	3	4	5	10	15	20	25	30	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
1500	972	470	0.40	647	0.84	785	1.36	903	1.93	1006	2.55	1414	6.25	1728	10.75	1992	15.88	2225	21.55	2436	27.73
2000	1296	491	0.55	661	1.07	796	1.65	912	2.29	1015	2.97	1421	7.02	1734	11.85	1998	17.33	2231	23.36	2442	29.88
2500	1620	516	0.74	680	1.34	811	2.00	925	2.70	1026	3.46	1429	7.83	1742	13.01	2005	18.83	2238	25.20	2448	32.06
3000	1944	545	0.97	702	1.67	830	2.41	940	3.19	1040	4.01	1439	8.72	1750	14.23	2013	20.39	2245	27.10	2455	34.30
3500	2268	575	1.24	728	2.06	852	2.89	960	3.75	1057	4.65	1450	9.70	1759	15.55	2021	22.03	2253	29.09	2462	36.62
4000	2592	607	1.56	756	2.50	877	3.44	982	4.39	1076	5.37	1463	10.79	1769	16.96	2030	23.79	2261	31.16	2470	39.04
4500	2916	642	1.94	785	3.00	904	4.06	1006	5.11	1099	6.19	1479	11.98	1781	18.50	2041	25.65	2270	33.37	2479	41.58
5500	3564	724	2.97	848	4.19	961	5.50	1060	6.79	1150	8.08	1516	14.72	1811	21.96	2065	29.80	2292	38.18	2499	47.07
6500	4213	819	4.47	918	5.72	1023	7.24	1119	8.79	1206	10.32	1560	17.97	1847	26.01	2096	34.57	2319	43.64		
7500	4861	921	6.52	999	7.74	1090	9.36	1181	11.13	1265	12.92	1611	21.71	1890	30.66	2132	40.01	2351	49.81		
8500	5509	1027	9.19	1090	10.40	1167	12.01	1248	13.91	1328	15.92	1666	25.96	1937	35.92	2175	46.15	2389	56.75		
9500	6157	1136	12.56	1188	13.77	1252	15.36	1322	17.28	1395	19.42	1723	30.70	1990	41.80	2222	53.00	2431	64.46		
10500	6805	1246	16.71	1291	17.94	1344	19.51	1404	21.41	1469	23.59	1783	35.95	2045	48.29	2273	60.57	2478	72.99		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRW 330

WHEEL DIAMETER ..... 33 IN.  
MAX WHEEL SPEED ..... Class 30 - 2250 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	3	4	5	10	15	20	25	30	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
2000	1042	426	0.5	583	1.1	707	1.8	812	2.5	905	3.3	1271	8.0	1552	13.6	1790	20.1	1999	27.3	2188	35.0
2500	1303	441	0.7	594	1.3	715	2.1	819	2.9	912	3.7	1276	8.7	1557	14.8	1794	21.6	2003	29.1	2192	37.2
3000	1563	460	0.9	607	1.6	726	2.4	828	3.3	919	4.2	1282	9.6	1562	15.9	1799	23.1	2008	30.9	2197	39.3
3500	1824	480	1.1	623	1.9	738	2.8	839	3.7	929	4.7	1289	10.4	1568	17.1	1804	24.6	2013	32.8	2202	41.6
4000	2084	501	1.4	641	2.3	753	3.2	852	4.3	940	5.3	1296	11.4	1574	18.4	1810	26.2	2018	34.7	2207	43.8
4500	2345	523	1.6	660	2.7	770	3.8	866	4.9	953	6.0	1305	12.4	1581	19.7	1816	27.9	2024	36.7	2212	46.2
5000	2606	546	2.0	680	3.1	788	4.3	882	5.5	967	6.7	1314	13.5	1589	21.2	1823	29.7	2030	38.8	2218	48.6
5500	2866	572	2.3	701	3.6	808	4.9	900	6.2	984	7.5	1325	14.7	1598	22.7	1830	31.5	2037	41.0	2224	51.2
6000	3127	599	2.8	723	4.2	828	5.6	919	7.0	1001	8.4	1338	15.9	1607	24.3	1839	33.5	2044	43.3	2231	53.8
7000	3648	661	3.9	769	5.4	871	7.1	959	8.8	1039	10.4	1366	18.8	1630	27.9	1858	37.8	2061	48.3	2246	59.4
8000	4169	730	5.4	821	7.0	915	8.9	1002	10.8	1080	12.7	1399	22.1	1656	32.0	1880	42.6	2080	53.8		
9000	4690	804	7.4	878	8.9	963	10.9	1046	13.0	1122	15.2	1435	25.7	1686	36.5	1906	47.9	2103	59.8		
10000	5211	880	9.8	942	11.4	1016	13.4	1093	15.7	1167	18.0	1473	29.8	1720	41.6	1935	53.8	2129	66.5		
11000	5732	957	12.8	1010	14.3	1074	16.3	1144	18.7	1213	21.3	1514	34.3	1756	47.2	1967	60.3	2158	73.8		
12000	6253	1036	16.4	1082	17.9	1137	19.9	1199	22.3	1263	24.9	1556	39.2	1794	53.2	2002	67.3	2189	81.7		
13000	6774	1116	20.6	1157	22.1	1205	24.1	1259	26.4	1317	29.2	1599	44.4	1835	59.7	2039	74.9	2224	90.3		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

## IRW 365

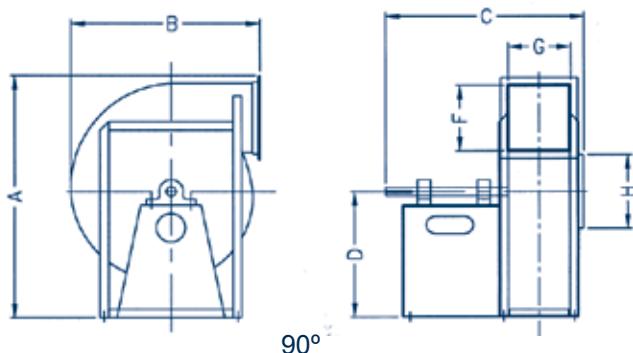
WHEEL DIAMETER ..... 36.5 IN.  
MAX WHEEL SPEED ..... Class 30 - 2050 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																		
			1	2	3	4	5	10	15	20	25	30	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
3000	1276	397	0.8	536	1.6	646	2.5	740	3.4	823	4.5	1153	10.6	1407	17.9	1622	26.2	1811	35.3	1981	45.2
4000	1701	425	1.2	556	2.2	662	3.2	754	4.3	836	5.5	1162	12.2	1415	20.2	1629	29.2	1818	39.0	1988	49.6
5000	2127	456	1.7	582	2.9	684	4.1	772	5.3	852	6.6	1173	14.1	1424	22.8	1637	32.4	1826	42.9	1996	54.1
6000	2552	490	2.3	611	3.7	710	5.1	795	6.6	872	8.1	1187	16.2	1435	25.5	1647	35.9	1835	47.0	2004	58.9
7000	2977	528	3.1	643	4.7	738	6.4	821	8.0	896	9.7	1203	18.6	1448	28.6	1658	39.6	1845	51.4	2014	64.0
8000	3403	571	4.1	676	5.9	769	7.8	850	9.7	923	11.6	1223	21.3	1464	32.1	1671	43.7	1856	56.2	2024	69.5
9000	3828	620	5.4	712	7.3	801	9.4	881	11.6	952	13.7	1245	24.4	1482	35.9	1686	48.2	1869	61.4	2036	75.3
10000	4254	672	7.0	751	8.9	835	11.2	912	13.6	983	16.0	1270	27.7	1502	40.1	1703	53.2	1884	67.0	2050	81.6
11000	4679	726	9.0	794	10.9	871	13.3	945	15.9	1014	18.6	1297	31.5	1524	44.7	1723	58.5	1901	73.1		
12000	5104	782	11.4	840	13.3	909	15.7	980	18.5	1047	21.4	1325	35.5	1549	49.7	1744	64.4	1920	79.7		
13000	5530	839	14.2	890	16.1	951	18.5	1016	21.4	1081	24.5	1355	39.8	1575	55.1	1767	70.7	1941	86.9		
14000	5955	897	17.5	942	19.4	996	21.8	1056	24.7	1117	27.9	1385	44.5	1603	60.9	1792	77.5	1963	94.5		
15000	6380	956	21.3	996	23.2	1044	25.6	1098	28.5	1154	31.8	1417	49.5	1632	67.1	1819	84.7	1987	102.6		
16000	6806	1015	25.6	1051	27.5	1094	29.9	1142	32.8	1194	36.1	1449	54.9	1662	73.7	1846	92.4	2013	111.3		

Performance shown is for arrangement 1 fans with outlet duct and with inlet bell. BHP does not include drive losses.

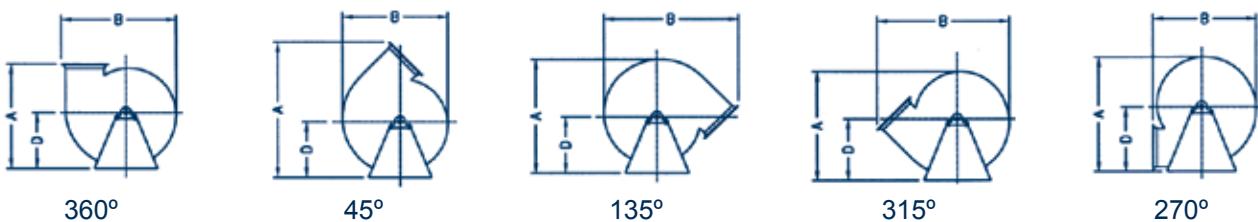
**Sizes 122 - 852 IE**

Arrangements 1 and 9, Clockwise 90° (top horizontal) Shown Below



**Angular**

**Discharge Dimensions, (viewed from drive side)**



SIZE	A						B				C	D			F	G	H
	45	90	135	270	315	360	45	90	135	270		90	360	270			
122	31	28	28	26	26	25	21	20	25	22	26	18	18	18	6 13/16	5 7/8	7
156	37	34	33	32	31	31	26	25	31	27	28	22	22	22	8 5/8	7 1/2	9
191	44	40	39	37	36	36	31	30	38	33	39	25	25	25	10 9/16	9 3/8	11
226	51	46	45	43	42	41	36	35	44	39	44	32	32	32	12 7/16	11	13 1/4
261	59	53	52	49	48	48	97	40	51	44	48	32	32	32	14 5/16	12 5/8	15 1/4
296	66	59	58	55	53	53	47	45	57	49	51	33	33	33	16 1/4	14 3/8	17 1/4
330	72	65	63	60	59	58	52	50	63	55	54	34	34	34	18 1/16	16	19 1/4
365	81	74	72	68	66	64	57	53	68	60	58	34	35	36	20	17 5/8	21 1/4
400	88	80	78	74	72	70	62	59	75	66	60	36	38	40	22	19 1/4	23 3/8
451	97	89	86	81	79	77	69	66	83	74	66	38	41	44	24	21 3/4	26 3/8
505	104	98	95	90	88	85	77	73	90	82	69	41	45	49	27 11/16	24 1/4	29 3/8
575	115	100	98	100	98	90	88	83	178	93	77	445	50	54	31 1/2	27 3/4	33 3/8
643	127	111	108	111	109	100	99	92	118	104	82	51	55	61	35 3/16	31	37 1/2
712	142	122	119	122	119	110	109	229	132	115	90	56	61	67	38 15/16	34 3/8	41 1/2
782	154	133	130	133	131	119	119	112	145	126	99	63 1/2	69	77	42 3/4	37 3/4	45 1/2
852	166	144	140	144	141	129	130	122	156	137	107	68 1/2	74 1/2	83	46 5/8	41 1/4	49 1/2

1. Columns A, B, and C have been rounded up to the nearest 1". Dimensions F, G and H, are outside dimensions. Dimension C is max from all available construction classes.
2. All dimensions shown on this and other pages are for general information only and should not be used for precise construction/installation purposes. Only prints marked certified should be used for this purpose. All fans are shown in clockwise rotation (as viewed from side opposite fan inlet) and are viewed from the drive side of fan. Counter clockwise fans are dimensionally equal but viewed in a mirror image.
3. Due to continuous product improvement at Air Tech, dimensions are subject to change. For more complete dimensional information, refer to the applicable Air Tech submittal drawing.



# INDUSTRIAL FANS & BLOWERS

**Industrial**  
*Air* Technology Corp.

## Type RTS Technical Data & Performance Tables Radial Tipped



Radial  
Tipped

## RTS 270

WHEEL DIAMETER ..... 27 IN.  
MAX WHEEL SPEED ..... Class 30 - 3470 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
10000	2375	1538	13.11																		
12000	2850	1623	16.21	1952	26.13	2101	31.42														
14000	3325	1721	19.92	2029	30.88	2170	36.69	2430	48.84												
16000	3800	1834	24.44	2118	36.33	2251	42.66	2499	55.86	2728	69.71	2837	76.89								
18000	4275	1958	29.96	2118	42.61	2343	49.44	2579	63.69	2799	78.59	2903	86.26	3054	98.01	3199	110.1				
20000	4749	2092	36.63	2329	49.94	2445	57.17	2668	72.42	2878	88.37	2979	96.57	3124	109.1	3264	121.9	3354	130.6	3443	
22000	5224	2234	44.57	2449	58.49	2556	66.07	2766	82.18	2967	99.15	3063	107.9	3203	121.2	3338	134.8	3426	144.1	139.5	
24000	5699	2381	53.90	2578	68.44	2677	76.33	2873	93.17	3063	111.1	3155	120.3	3290	134.4	3420	148.8				
26000	6174	2531	64.71	2714	79.92	2805	88.11	2987	105.6	3166	124.3	3254	133.9	3383	148.8						

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 300

WHEEL DIAMETER ..... 30 IN.  
MAX WHEEL SPEED ..... Class 30 - 3120 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
12000	2323	1375	15.7																		
14000	2711	1434	18.67	17.37	30.5																
16000	3098	1501	22.1	1789	34.98	1919	41.8														
18000	3485	1577	26.1	1849	39.98	1973	47.34	2204	62.71												
20000	3872	1661	30.8	1915	45.58	2034	53.46	2256	69.88	2461	87.11	2558	96.01								
22000	4259	1752	36.33	1988	51.86	2101	60.23	2314	77.72	2513	96	2607	105.4	2743	119.8	2874	134.7				
24000	4647	1849	42.77	2067	58.98	2174	67.78	2378	86.26	2570	105.6	2661	115.5	2793	130.8	2920	146.3	3003	156.9	3083	
26000	5034	1950	50.21	2152	67.04	2253	76.22	2447	95.61	2632	116	2720	126.5	2849	142.5	2972	158.8	3052	169.9		
28000	5421	2055	58.74	2243	76.18	2337	85.68	2521	105.9	2698	127.2	2784	138.2	2909	155	3029	172.2	3107	183.8		
30000	5808	2163	68.42	2338	86.49	2426	96.3	2600	117.2	2770	139.4	2852	150.9	2973	168.5	3090	186.5				
32000	6196	2273	79.32	2437	98.06	2520	108.2	2684	129.7	2846	152.7	2925	164.7	3041	183						
34000	6583	2385	91.52	2540	111	2617	121.4	2772	143.5	2926	167.2	3002	179.6	3114	198.5						

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 330

WHEEL DIAMETER ..... 33 IN.  
MAX WHEEL SPEED ..... Class 30 - 2850 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																			
			6		10		12		16		20		22		25		28		30		32	
			BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
15000	2400	1260	19.67																			
18000	2880	1329	24.34	1599	39.2	1720	47.11															
21000	3360	1411	29.94	1662	46.36	1777	55.05	1990	73.25													
24000	3840	1504	36.76	1736	54.56	1844	64.04	2047	83.81	2234	104.6	2323	115.3									
27000	4320	1606	45.1	1818	64.04	1920	74.26	2113	95.61	2292	117.9	2377	129.4	2500	147	2619	165.1					
30000	4800	1717	55.17	1909	75.08	2004	85.93	2186	108.7	2358	132.7	2443	144.9	2559	163.7	2673	182.9	2747	196	2819	209.2	
33000	5280	1833	67.17	2009	88.01	2096	99.35	2267	123.5	2431	148.9	2509	162	2624	181.9	2734	202.3	2806	216.2			
36000	5760	1954	81.26	2115	103	2195	114.9	2355	140	2510	166.8	2585	180.6	2695	201.8	2802	223.4					
39000	6240	2078	97.6	2226	120.4	2301	132.6	2449	158.8	2595	186.7	2667	201.3	2772	223.5							
42000	6720	2204	116.4	2343	140.2	2412	153	2550	180	2687	209	2755	224.1									

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 365

WHEEL DIAMETER ..... 36.5 IN.  
MAX WHEEL SPEED ..... Class 30 - 2570 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																			
			6		10		12		16		20		22		25		28		30		32	
			BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
17000	2223	1119	22.21																			
20000	2615	1166	26.51	1418	43.64																	
23000	3007	1221	31.47	1460	50.18	1568	60.11															
26000	3400	1282	37.26	1508	57.5	1612	68.21	1803	90.65													
29000	3792	1351	44.08	1563	65.7	1661	77.20	1845	101.2	2015	126.4	2095	139.4									
32000	4184	1425	52.1	1622	74.9	1716	87.16	1893	112.8	2057	139.5	2135	153.3	2247	174.4							
35000	4576	1505	61.51	1687	85.33	1776	98.25	1945	125.4	2103	153.7	2179	168.3	2288	190.6	2393	213.5	2461	229	2527	244.8	
38000	4969	1589	72.41	1757	97.17	1841	110.7	2002	139.2	2155	169.1	2228	184.4	2334	207.9	2436	231.9	2502	248.3	2566	264.8	
41000	5361	1676	84.93	1832	110.6	1910	124.6	2063	154.3	2209	185.7	2280	201.9	2383	226.6	2482	251.8	2546	268.9			
44000	5753	1765	99.2	1911	125.8	1984	140.3	2128	171.1	2268	203.8	2336	220.7	2436	246.6	2532	273					
47000	6145	1857	115.3	1993	142.9	2061	157.8	2197	189.6	2331	223.6	2396	241.1	2492	268.1							
50000	6538	1950	133.4	2078	162	2142	177.4	2270	210.1	2397	245.1	2460	263.3	2553	291.3							

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 402

WHEEL DIAMETER ..... 40.25 IN.  
MAX WHEEL SPEED ..... Class 30 - 2325 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																			
			6		10		12		16		20		22		25		28		30		32	
			BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
20000	2145	1008	26.13																			
24000	2575	1053	31.75	1283	52.41																	
28000	3004	1107	38.88	1324	61.08	1422	73.17															
32000	3433	1169	46.12	1373	70.92	1466	84.05	1639	111.5													
36000	3862	1238	55.44	1427	82.03	1516	96.22	1682	125.8	1834	156.8	1907	172.8									
40000	4291	1314	66.58	1488	94.7	1572	109.9	1730	141.6	1877	174.6	1947	191.7	2048	217.8	2146	244.7					
44000	4720	1394	79.8	1555	109.2	1633	125.2	1784	158.9	1925	194.1	1993	212.2	2091	239.9	2185	268.2	2246	287.5	2305	307	
48000	5149	1479	95.28	1626	125.9	1699	142.6	1842	178.1	1978	215.4	2043	234.5	2138	263.8	2229	293.7	2288	314			
52000	5578	1567	113.2	1703	145.1	1771	162.5	1905	199.4	2034	238.5	2097	258.7	2189	289.6	2277	321.1					
56000	6007	1657	133.8	1783	167	1847	184.9	1972	223.2	2095	264	2156	285.1	2244	317.5							
60000	6436	1749	157.1	1867	191.7	1926	210.3	2044	249.8	2161	292.1	2218	314.1	2302	347.8							
64000	6865	1843	183.5	1954	219.5	2009	238.7	2119	279.5	2230	323.1	2284	345.7									

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 445

WHEEL DIAMETER ..... 44.5 IN.  
MAX WHEEL SPEED ..... Class 30 - 2100 RPM

CFM	OV	RPM	STATIC PRESSURE (in. WG)																			
			6		10		12		16		20		22		25		28		30		32	
			BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
25000	2198	916	32.66																			
30000	2637	959	39.83	1165	65.42																	
35000	3077	1010	48.26	1204	76.47	1292	91.43															
40000	3516	1068	58.29	1250	89.03	1334	105.3	1489	139.3													
45000	3956	1133	70.35	1302	103.3	1381	120.9	1530	157.5	1667	196	1732	215.8									
50000	4396	1204	84.81	1359	119.6	1434	138.3	1576	177.6	1707	218.7	1770	239.8	1861	272.1	1948	305.4	2005	328			
55000	4835	1280	102	1422	138.3	1492	158.1	1626	199.8	1753	243.5	1813	266	1901	300.3	1986	335.4	2040	359.3	2094	383.5	
60000	5275	1359	122.1	1489	160	1554	180.7	1681	224.5	1802	270.7	1861	294.4	1946	330.8	2028	367.9	2081	393			
65000	5714	1441	145.4	1561	184.9	1621	206.3	1740	252	1856	300.4	1912	325.5	1994	363.8	2073	402.9					
70000	6154	1525	172.2	1637	213.3	1693	235.4	1804	282.8	1914	333.2	1967	359.4	2046	399.5							
75000	6593	1611	202.6	1715	245.5	1767	268.4	1872	317.2	1975	369.4	2026	396.6									
80000	7033	1698	236.9	1796	281.6	1845	305.4	1943	355.7	2040	409.5	2088	437.6									

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 490

WHEEL DIAMETER ..... 49 IN.

MAX WHEEL SPEED ..... Class 30 - 1910 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
30000	2178	830	39.19																		
35000	2541	861	46.19	1051	76.54																
40000	2904	898	54.19	1079	87.12	1160	104.7														
45000	3267	939	63.39	1111	98.94	1189	117.7	1333	157.3												
50000	3630	894	74.04	1146	112	1221	132.1	1361	174.2	1489	218.5										
55000	3992	1034	86.47	1186	126.5	1258	148	1392	192.7	1516	239.5	1575	263.7								
60000	4355	1087	100.9	1229	142.8	1297	165.4	1426	212.7	1547	262.2	1604	287.6	1687	326.6	1766	366.7				
65000	4718	1143	117.5	1275	161.1	1340	184.7	1464	234.5	1580	286.6	1636	313.4	1716	354.3	1794	396.3	1844	424.7	1893	453.7
70000	5081	1201	136.5	1324	181.6	1385	206.2	1504	258.2	1616	312.9	1670	341	1748	383.9	1824	427.8	1873	1873		
75000	5444	1262	158.1	1376	204.7	1434	230.1	1546	284.1	1655	341.2	1707	370.6	1783	415.5	1856	461.4	1904	1904		
80000	5807	1324	182.4	1431	230.5	1485	256.7	1592	312.5	1696	371.8	1746	402.4	1820	449.3	1891	497.1				
85000	6170	1387	209.5	1488	259.4	1539	286.3	1640	343.7	1739	404.9	1788	436.6	1859	485.3						
90000	6533	1451	239.6	1547	291.3	1594	318.9	1690	377.8	1785	440.9	1831	473.6	1900	524						

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 542

WHEEL DIAMETER ..... 54.25 IN.

MAX WHEEL SPEED ..... Class 30 - 1800 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
35000	2071	742	45.77																		
40000	2367	764	52.41																		
45000	2663	789	59.83	957	98.09																
50000	2959	816	68.1	979	109	1052	130.7														
55000	3254	847	77.37	1002	120.9	1073	143.9	1204	192.2												
60000	3550	880	87.85	1028	133.8	1097	158.1	1224	209												
65000	3846	916	99.71	1057	147.9	1123	173.5	1246	227.1	1359	283.2	1413	312.2								
70000	4142	954	113.1	1087	163.2	1151	190.1	1270	246.3	1381	305	1433	335.3	1509	381.8						
75000	4438	993	128.2	1119	180.1	1180	208.2	1296	266.9	1404	328.3	1455	359.9	1529	408.2	1601	457.8	1647	491.6		
80000	4734	1035	145.2	1154	198.7	1212	227.8	1324	288.9	1429	353	1479	385.9	1552	436.2	1621	487.7	1667	522.7	1711	558.2
85000	5030	1078	164.1	1190	219.1	1246	249.1	1353	312.5	1455	379.2	1504	413.4	1575	465.7	1644	519.2	1688	555.5	1731	592.1
90000	5325	1122	185.1	1228	241.6	1281	272.5	1384	337.9	1483	407	1531	442.5	1600	496.8	1667	552.4	1711	589.9	1753	628
95000	5621	1167	208.2	1268	266.3	1318	298	1417	365.2	1513	436.6	1559	473.4	1627	529.7	1692	587.2	1735	626.1	1776	665.4
100000	5917	1213	233.7	1309	293.4	1356	325.7	1451	394.7	1544	468.2	1589	506.2	1655	564.3	1719	623.8	1760	664.1		
105000	6213	1260	261.5	1351	322.8	1396	355.9	1487	426.6	1576	502	1620	541	1684	601	1746	662.4	1787	704		
110000	6509	1308	291.7	1394	354.9	1437	388.8	1524	460.9	1610	538	1652	578.1	1715	639.8	1775	703				

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 600

WHEEL DIAMETER ..... 60 IN.

MAX WHEEL SPEED ..... Class 30 - 1560 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
42000	2045	669	54.88																		
48000	2337	687	62.82																		
54000	2629	709	71.56	863	117.8																
60000	2921	733	81.29	881	130.7	947	157														
66000	3214	760	92.17	902	144.7	966	172.5	1085	231												
72000	3506	789	104.4	924	159.9	987	189.3	1102	250.9												
78000	3798	820	118.2	949	176.5	1009	207.5	1121	272.1	1225	340.1	1274	375.2								
84000	4090	853	133.8	975	194.5	1033	227	1142	294.9	1243	365.8	1291	402.5	1360	458.8						
90000	4382	888	151.4	1004	214.2	1059	248.2	1165	319.2	1263	393.3	1310	431.4	1378	490	1442	550				
96000	4674	924	171.1	1034	235.9	1087	271.1	1189	345.1	1285	422.5	1331	462.1	1397	523	1460	585.3	1501	627.6	1542	670.6
102000	4966	962	193	1065	259.7	1116	296.1	1215	372.8	1308	453.2	1352	494.6	1417	557.8	1479	622.5	1520	666.3	1559	710.7
108000	5259	1001	217.4	1099	285.9	1147	323.3	1242	402.5	1332	486	1376	528.9	1439	594.5	1500	661.5	1539	706.9		
114000	5551	1041	244.2	1133	314.6	1179	352.9	1270	434.5	1358	520.7	1400	565.3	1462	633.2	1522	702.7				
120000	5843	1081	273.7	1169	346	1213	385.2	1300	468.8	1385	557.7	1426	603.7	1486	674	1545	745.7				
126000	6135	1123	305.9	1206	380.2	1248	420.3	1331	505.9	1413	597.2	1453	644.5	1512	717						
132000	6427	1164	341	1244	417.4	1284	458.4	1364	545.8	1443	639.3	1481	687.9	1539	762.4						

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

## RTS 660

WHEEL DIAMETER ..... 66 IN.

MAX WHEEL SPEED ..... Class 30 - 1420 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
52000	2081	610	67.99																		
58000	2321	625	75.9																		
64000	2562	641	84.56	781	139.9																
70000	2802	659	94.01	795	152.4	856	183.6														
76000	3042	678	104.3	809	165.9	869	198.6														
82000	3282	698	115.7	826	180.4	883	214.6	991	286.4												
88000	3522	720	128.2	843	195.8	899	231.7	1004	306.6												
94000	3762	744	142.1	861	212.4	916	249.9	1018	327.9	1112	409.8	1157	452.3								
100000	4002	768	157.4	881	230.2	934	269.2	1034	350.4	1126	435.4	1170	479.3	1233	546.8						
106000	4243	794	174.4	902	149.4	953	289.8	1051	374.3	1141	462.4	1184	507.8	1246	577.5	1305	649.2				
112000	4483	821	193	924	270.1	974	311.9	1068	399.3	1157	490.7	1199	537.6	1260	609.6	1318	683.4	1356	733.7		
118000	4723	849	213.5	947	292.5	995	335.5	1087	425.9	1173	520.4	1214	568.9	1274	643.2	1332	719.3	1369	771.1	1405	823.5
124000	4963	877	235.8	971	316.7	1017	360.8	1106	453.8	1191	551.6	1231	601.8	1290	678.5	1346	756.9	1383	810	1419	864
130000	5203	907	260.1	996	342.8	1040	388	1127	483.6	1209	584.2	1249	636.1	1306	715.1	1362	796	1398	850.6		
136000	5443	936	286.5	1022	371	1064	417.1	1148	515.1	1228	618.6	1267	671.9	1323	753.4	1378	836.6	1413	893		
142000	5683	967	315	1048	401.5	1089	448.5	1170	548.6	1248	654.8	1286	709.6	1341	793.4	1395	879.1				

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

**RTS 730**

WHEEL DIAMETER ..... 73 IN.  
MAX WHEEL SPEED ..... Class 30 - 1280 RPM

		STATIC PRESSURE (in. WG)																			
		6		10		12		16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
65000	2126	554	54.92																		
75000	2453	573	98.57																		
85000	2780	594	113.9	717	185.1	773	223.1														
95000	3107	618	131.3	736	207.7	789	248.2														
105000	3434	644	151.2	756	232.6	808	275.7	903	365.9												
115000	3761	672	173.9	779	259.9	828	305.7	921	401.2	1006	501.4	1046	553.4								
125000	4088	703	199.9	803	290	851	338.3	940	439.9	1023	544.4	1062	598.8	1119	682.4						
135000	4415	736	229.6	830	323.3	875	373.9	961	479.9	1042	590.6	1080	647.6	1135	734.8	1188	824.4	1223	885.4		
145000	4742	770	263.4	858	360.3	901	413	984	523.9	1062	639.9	1099	699.5	1153	790.6	1205	883.9	1239	947.4	1272	
155000	5069	805	301.5	888	401.5	929	456	1008	571.3	1084	692.5	1120	754.7	1173	850	1223	947.2	1256	1013.1		
165000	5396	842	344.2	919	447.3	958	503.4	1034	622.7	1107	748.8	1142	813.6	1194	912.8	1243	1014	1275	1082.6		
175000	5723	879	391.8	952	497.9	989	555.6	1061	678.5	1132	809	1166	876.3	1216	979.5	1264	1084.7				
185000	6050	917	444.4	986	553.8	1021	613	1090	739.2	1157	873.8	1191	943.4	1239	1050.2						

Performance shown is for installation type B - Free inlet, Ducted outlet with an evase.

Power rating (BHP) does not include drive losses.

Performance ratings do not include the effects of appurtenances in the air stream.

RTS 807

WHEEL DIAMETER ..... 80.75 IN.

MAX WHEEL SPEED ..... Class 30 - 1200 RPM

		STATIC PRESSURE (in. WG)																							
6				10				12				16		20		22		25		28		30		32	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
80000	2137	502	104.5																						
90000	2404	515	118.1																						
100000	2672	530	133	644	217.9																				
110000	2939	547	149.5	656	239.7	706	287.6																		
120000	3206	565	167.8	671	263.2	718	313.7	807	419.9																
130000	3473	585	188.2	686	288.6	732	341.8	818	452.9																
140000	3740	606	211	702	316	748	371.8	831	488.2	908	610.6														
150000	4007	629	236.5	721	345.6	764	404	849	525.8	921	653.2	957	718.9	1008	820.1										
160000	4275	652	265	740	377.8	782	438.6	861	565.6	934	698.2	969	766.6	1020	871.5	1068	979.1								
170000	4542	677	296.6	760	412.8	800	475.8	877	607.9	949	745.9	983	816.9	1033	925.4	1080	1037	1111	1112.5	1141	1189.5				
180000	4809	702	331.7	781	451.1	820	516	894	652.8	964	796.2	998	869.8	1046	982.4	1093	1097.6	1123	1175.7	1153	1255.1				
190000	5076	729	370.4	803	492.8	840	559.5	912	700.8	980	849.2	1013	925.5	1061	1042.1	1107	1161.2	1136	1241.9	1165	1323.9				
200000	5343	756	412.7	827	538.2	862	606.6	931	751.9	998	905.3	1030	984.1	1076	1104.7	1121	1227.7	1150	1311.3	1179	1395.8				
210000	5610	783	459.1	851	587.6	884	657.6	951	806.6	1015	964.4	1047	1045.8	1092	1170.4	1136	1297.5	1165	1383.5	1193	1470.5				
220000	5878	811	509.5	875	641.3	908	712.7	972	865.1	1034	1027.2	1064	1110.9	1109	1239.3	1152	1370.3	1180	1459.1						

Performance shown is for installation type B - Free inlet. Ducted outlet with an evase.

Performance shown is for installation type B - Free. Power rating (BHP) does not include drive losses.

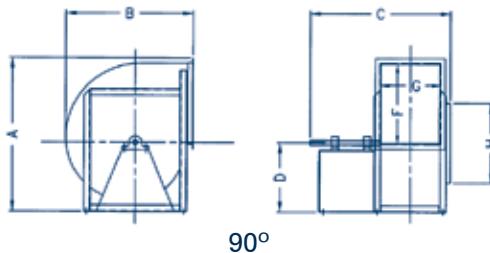
Performance ratings do not include the effects of appurtenances in the air stream.

# RTS WR<sup>2</sup> VALUES

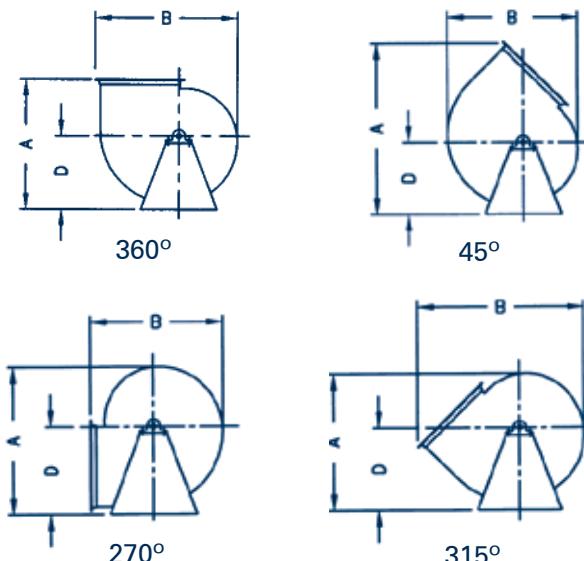
The following chart is a listing of the WR<sup>2</sup> (lb. ft<sup>2</sup>) values of the RTS fans. The values can be plugged into the previously given formulas above for calculating the motor capabilities in regards to direct drive as well as belt drive fan units.

RTS	
Fan Size	Class 30 WR <sup>2</sup> (lb. ft. <sup>2</sup> )
270	82
300	132
330	183
365	299
402	450
445	706
490	1135
542	2004
600	2949
660	4606
730	7570
807	10999

Sizes 270 - 807      Arrangement 1



Angular Discharge Dimensions,  
(viewed from drive side)



SIZE	A				B				C	D					F	G	H
	90	90	90	90	90	45	360	315		90	45	360	315	270			
	270	45	360	315	270	45	360	315		90	45	360	315	270			
270	60	69	55	55	51	51	56	65	57	27 1/4	31 3/4	31 3/8	37 1/4	37 1/4	31 3/4	19 5/8	28 1/2
300	67	77	61	61	57	57	62	72	60	30	35	35	40 3/4	40 3/4	35 5/16	21 5/8	31 3/4
330	73	84	67	66	62	62	68	79	64	32 1/4	37 3/4	37 3/4	44 1/2	44 1/2	38 13/16	23 3/4	34 7/8
365	80	92	73	73	69	68	76	88	68	35 1/4	41 1/4	41 1/4	48 1/2	48 1/2	42 15/16	26 1/4	38 1/2
402	88	101	80	80	75	75	83	96	72	38 1/2	45 1/2	45 1/2	53 1/2	53 1/2	47 3/8	28 15/16	42
445	96	111	88	89	83	83	92	106	78	42	49 1/2	49 1/2	58	58	52 3/8	31 7/8	46 1/2
490	105	121	96	95	91	91	101	117	85	45 1/2	54	54	63 1/2	63 1/2	57 11/16	35 3/16	51
542	116	134	106	105	101	100	111	129	94	49 1/2	58 1/2	58 1/2	69 1/2	69 1/2	63 7/8	38 15/16	56 1/2
600	128	147	116	116	111	111	123	142	104	54 1/2	64 1/2	64 1/2	76 1/2	76 1/2	70 5/8	42 3/4	62 1/2
660	140	162	128	127	122	122	134	156	114	60	71	71	84	84	77 11/16	47 3/16	69
730	154	178	141	140	135	134	149	173	124	66	78	78	92	92	85 15/16	52 3/16	76
807	170	196	155	154	149	148	164	191	135	71 3/4	78	85 5/8	93 3/16	103 1/16	95 1/16	57 11/16	84 1/2

1. Columns A, B, and C have been rounded up to the nearest 1". Dimensions F, G and H, are outside dimensions. Dimension C is max from all available construction classes.
2. All dimensions shown on this and other pages are for general information only and should not be used for precise construction/installation purposes. Only prints marked certified should be used for this purpose. All fans are shown in clockwise rotation (as viewed from side opposite fan inlet) and are viewed from the drive side of fan. Counter clockwise fans are dimensionally equal but viewed in a mirror image.
3. Due to continuous product improvement at Air Tech, dimensions are subject to change. For more complete dimensional information, refer to the applicable Industrial Air Tech submittal drawing.

# INDUSTRIAL FANS & BLOWERS

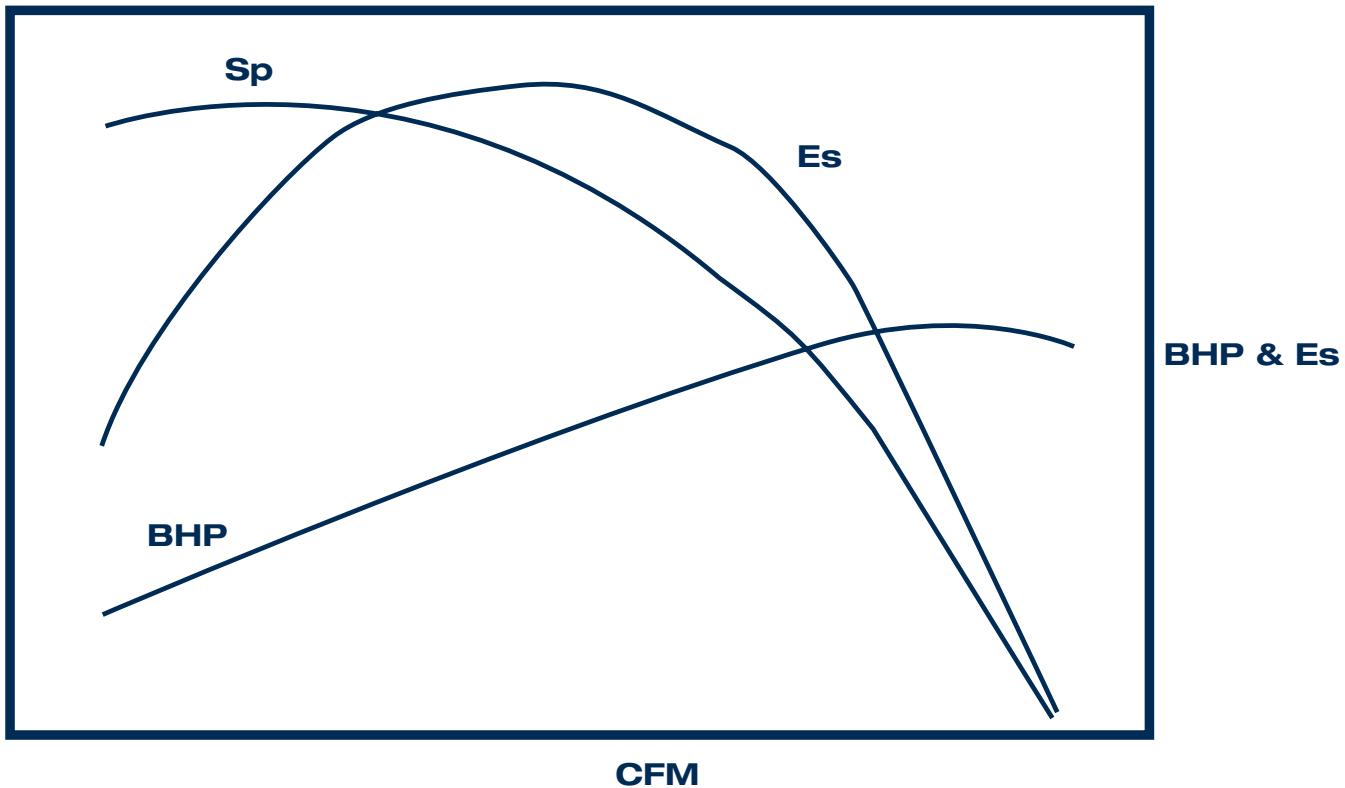
**Industrial**  
*Air* Technology Corp.

**Type BCLS**

**Arrangements 1 & 8**  
**Sizes 270-730**

**Static Pressures to 100" Wg**

Backward  
Curved

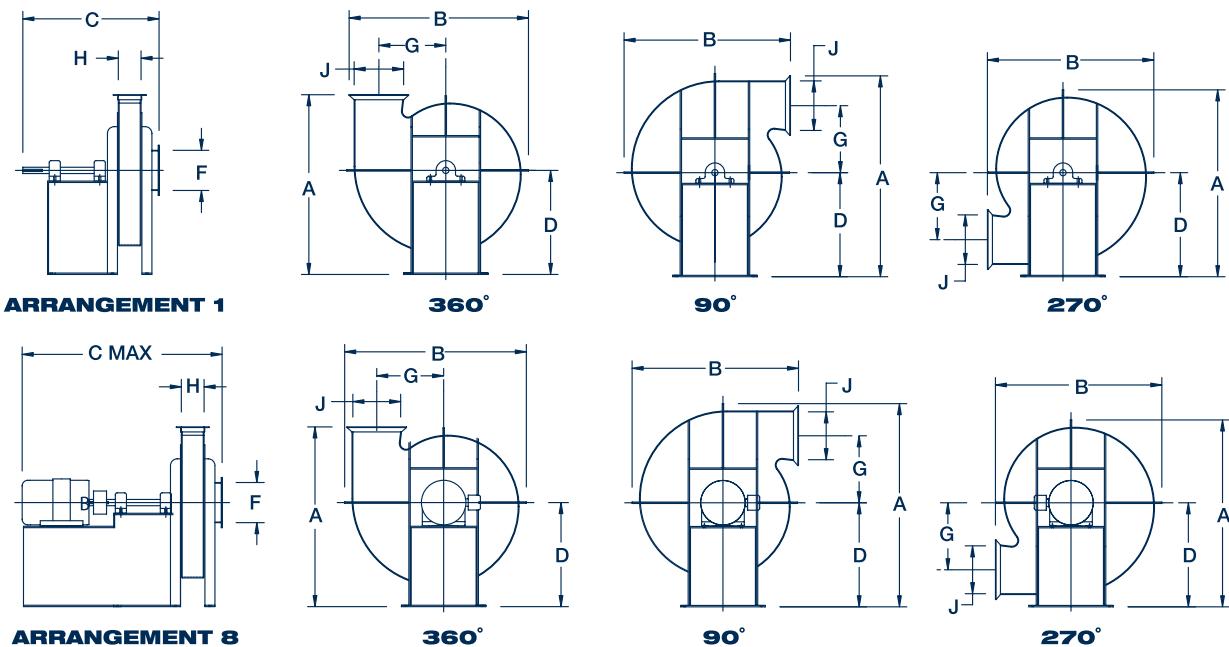


## PERFORMANCE RANGE

SIZE	CFM	Sp In Wg	CFM	Sp In Wg
270	4400	53	8000	30
300	5100	47	9250	27
330	6300	50	11550	28
365	8500	61	15600	35
402	8800	44	16000	25
445	12000	53	21700	30
490	15800	65	28900	37
542	16800	48	30700	27
600	22700	59	41600	34
660	30300	72	55400	41
730	38000	78	70800	45

# DIMENSIONAL DATA

## Sizes 270-730 BCLS



SIZE	A			B			C		D			F Dia	G	H	J	BARE FAN WT	
	90°	270°	360°	90°	270°	360°	ARR 1	ARR 8	90°	270°	360°					ARR 1	ARR 8
270	52	55	47	46	46	51	36	79	24	31	26	10.88	18	6.19	13.38	760	890
300	57	61	52	51	51	56	42	85	26	35	29	12	21	6.81	14.81	900	1380
330	62	65	56	56	56	61	45	99	28	37	31	13.25	22	7.44	16.19	1200	1580
365	68	71	62	61	61	67	50	106	31	40	34	14.63	25	6.31	17.88	1600	2070
402	74	77	68	67	67	73	55	115	34	43	37	16.13	27	9.13	19.69	1900	2550
445	83	85	75	75	75	82	57	106	38	47	41	17.88	30	10	21.69	2400	3080
490	90	91	81	82	82	90	62	119	41	50	44	19.63	33	10.94	23.81	2800	3860
542	99	101	90	90	90	98	69	133	45	56	49	21.75	37	12.06	26.31	3600	4410
600	111	113	100	100	100	110	77	143	51	63	55	24.13	40	13.25	29.06	4800	5950
660	121	124	110	109	109	120	84	156	55	69	60	26.5	45	14.69	32.06	6600	7700
730	133	135	121	120	120	131	93	173	61	75	66	29.38	49	16.13	35.38	7700	9160

- Dimensions have been rounded up to the nearest 1".
- All dimensions shown on this and other pages are for general information only and should not be used for precise construction/installation purposes. Only prints marked certified should be used for this purpose. All fans are shown in clockwise rotation (as viewed from side opposite fan inlet) and are viewed from the drive side of fan. Counter clockwise fans are dimensionally equal but viewed in a mirror image.
- Due to continuous product improvement at Industrial Air Tech. Corp., dimensions are subject to change. For more complete dimensional information, refer to the applicable Industrial Air Tech. Corp. submittal drawing.

## Applications

- **Combustion**
- **Air Cooling**
- **Gas Boosting**
- **Aeration**
- **Process Systems**
- **Fume Exhaust**
- **Conveying**
- **Water Stripping**
- **Fluid Beds**
- **Glass Blowing**
- **Textile Fiber Stripping**
- **Product Drying**

## Design Features

*Backward Curved Blades in a Shrouded Wheel*

### **High Efficiency and Low Noise**

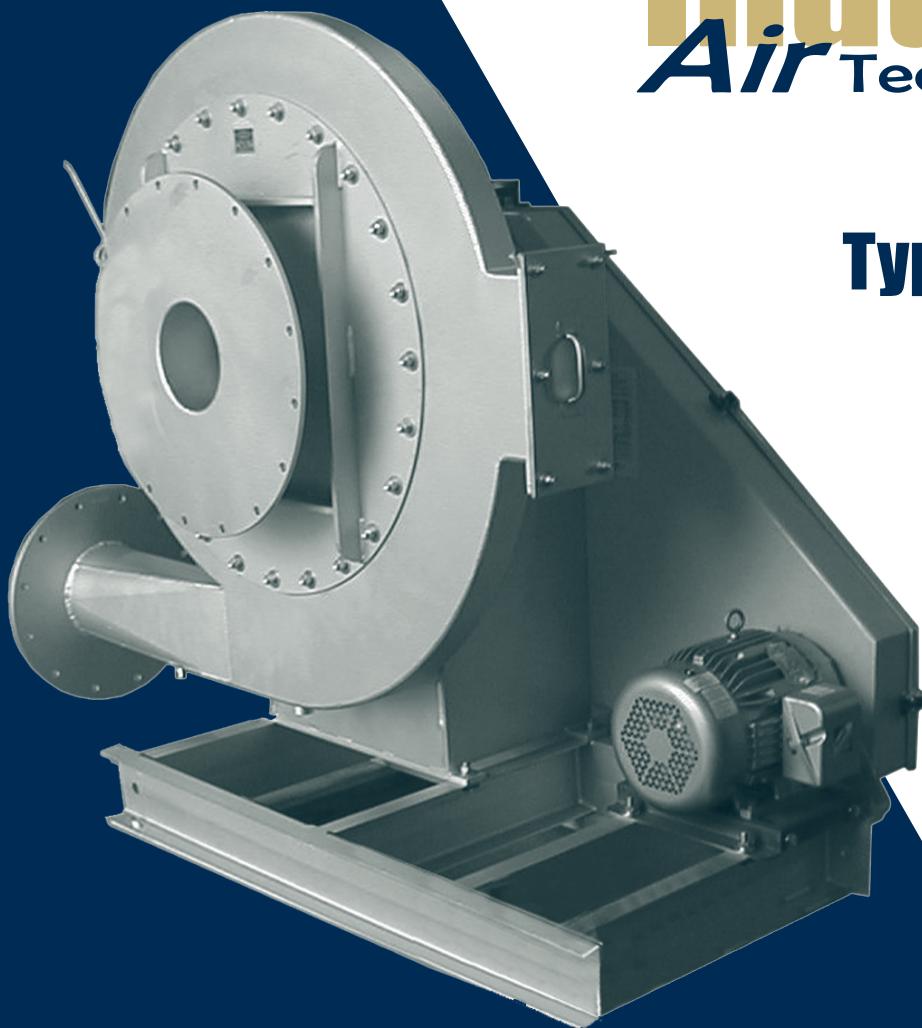
*Suitable for High Temperature Applications  
Extremely Rugged High Pressure Construction*

## Markets

<i>Chemical</i>	<i>Plastics</i>
<i>Cement</i>	<i>Glass</i>
<i>Food Processing</i>	<i>Rubber</i>
<i>Knitting</i>	<i>Tobacco</i>
<i>Paper</i>	<i>Salt</i>
<i>Textile</i>	<i>Foundries</i>
<i>Pharmaceutical</i>	<i>Breweries</i>
<i>Steel</i>	<i>Candy</i>

# INDUSTRIAL FANS & BLOWERS

**Industrial**  
*Air* Technology Corp.



## Type TROL and TROH

**Arrangement 4**

**Sizes 20 - 36**

**Arrangement 1 & 8**

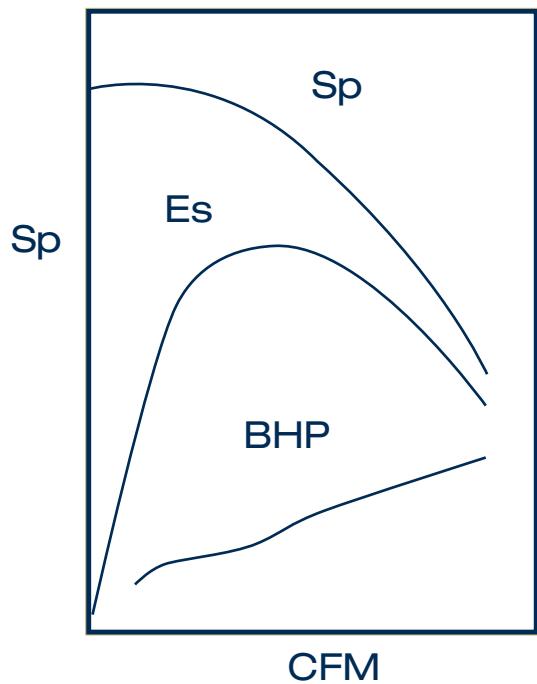
**Sizes 20 - 58**

**Static Pressures  
to 140" Wg**

TROL  
TROH

# HIGH PRESSURE INDUSTRIAL BLOWERS

## DIMENSIONAL DATA



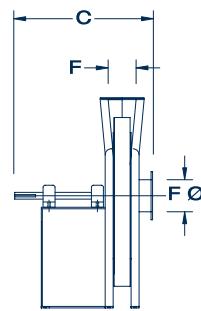
BHP & Es

## Performance Range

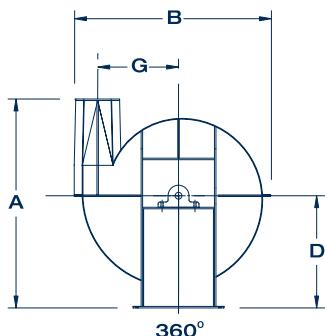
SIZE	TYPE TROL				TYPE TROH			
	CFM	Sp In Wg	CFM	Sp In Wg	CFM	Sp In Wg	CFM	Sp In Wg
20	500	31	1000	30	1000	29	2400	26
22	800	38	1300	35	1300	36	3200	31
24	1000	45	1700	41	1700	43	4100	36
26	1300	52	2100	48	2200	50	5100	42
28	1600	61	2600	55	2700	58	6300	48
30	2000	70	3200	62	3300	67	7700	55
32	2400	80	3800	71	4000	76	9300	62
34	2800	89	4600	79	4800	85	11000	70
36	3300	100	5400	88	5700	96	13000	78
38	4000	111	6300	98	6700	107	15200	86
40	4600	123	7300	108	7900	118	17600	95
42	4000	78	6400	69	6700	75	15400	26
44	4600	87	7300	75	7900	82	17600	28
46	5300	94	8300	82	9100	90	20200	31
48	4700	62	7300	54	8000	59	17600	33
50	5300	67	8300	58	9100	64	19900	36
52	5400	59	8400	52	9200	57	20200	38
54	6000	64	9400	55	10300	61	22500	42
56	6400	62	9900	53	10900	59	23700	45
58	7100	66	10900	57	12100	63	26300	48

# ARRANGEMENT 4

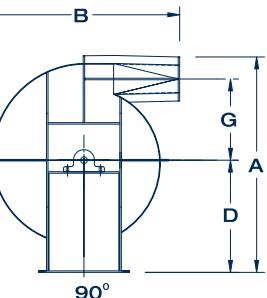
## Sizes 20 - 36 TROL & TROH



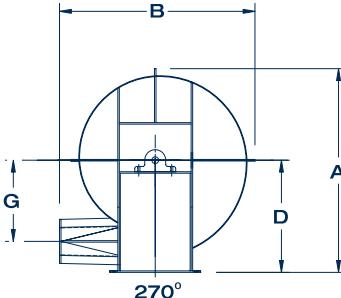
ARRANGEMENT 1



360°



90°



270°

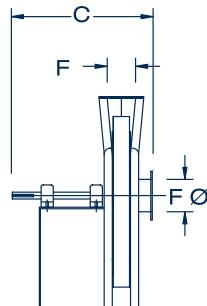
SIZE	TYPE TROL												MAX HP	SIZE	
	A			B			C	D			F Dia.	G	BARE FAN WEIGHT		
	90°	270°	36°	90°	270°	360°		90°	270°	360°					
20	41	43	40	39	39	40	27	19	25	21	6	16	240	10 20	
22	44	47	44	43	43	43	31	21	27	22	6	17	290	15 22	
24	48	50	47	46	46	47	34	22	29	24	8	19	370	25 24	
26	51	54	51	50	50	50	37	24	31	26	8	20	450	40 26	
28	54	56	54	53	53	53	38	25	32	27	8	2	590	50 28	
30	57	61	58	57	57	57	39	26	35	29	10	23	730	75 30	
32	61	64	62	60	60	60	43	28	37	31	10	25	800	100 32	
34	66	68	65	64	64	65	48	30	39	32	12	26	870	125 34	
36	68	71	68	68	68	67	52	31	40	34	12	28	1100	200 36	

SIZE	TYPE TROH												MAX HP	SIZE	
	A			B			C	D			F Dia.	G	BARE FAN WEIGHT		
	90°	270°	36°	90°	270°	360°		90°	270°	360°					
20	41	43	41	40	40	40	31	19	25	21	8	15	280	20 20	
22	44	46	44	43	43	43	35	21	27	22	8	17	340	30 22	
24	48	50	48	47	47	47	37	22	29	24	10	18	440	50 24	
26	52	53	51	50	50	50	39	24	31	26	10	20	530	75 26	
28	54	56	55	54	54	53	44	25	32	27	10	21	690	100 28	
30	58	61	58	57	57	58	49	26	35	29	12	23	860	150 30	
32	61	63	62	61	61	60	53	28	37	31	12	24	940	200 32	
34	66	67	65	64	64	64	58	30	39	32	14	25	1020	250 34	
36	68	70	69	68	68	67	62	31	40	34	14	27	1290	300 36	

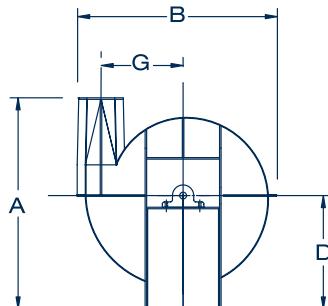
1. Dimensions have been rounded up to the nearest 1"

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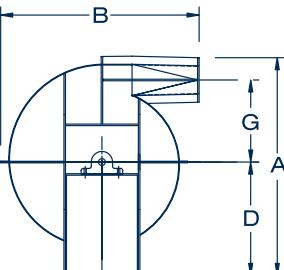
## Sizes 20 - 58 TROL



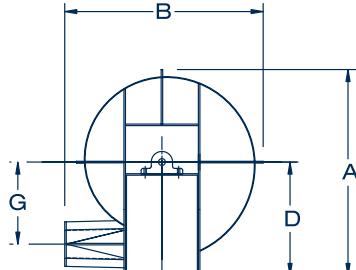
ARRANGEMENT 1



360°



90°



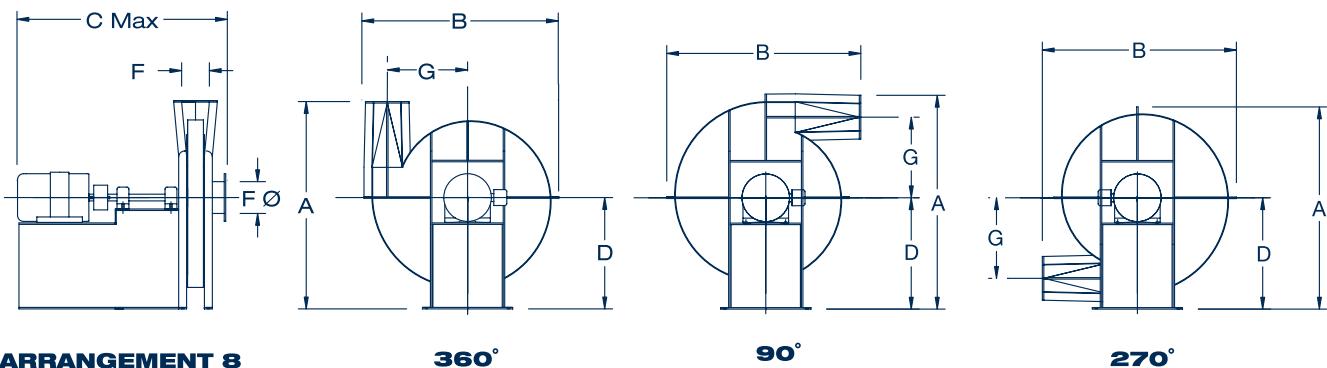
270°

SIZE	TYPE TROL												SIZE	
	A			B			C	D			F Dia.	G	BARE FAN WEIGHT	
	90°	270°	360°	90°	270°	360°		90°	270°	360°				
20	41	43	40	39	39	40	26	19	25	21	6	16	290	20
22	44	47	44	43	43	43	28	21	27	22	6	17	360	22
24	48	50	47	46	46	47	31	22	29	24	8	19	460	24
26	51	54	51	50	50	50	33	24	31	26	8	20	550	26
28	54	56	54	53	53	53	35	25	32	27	8	2	720	28
30	57	61	58	57	57	57	38	26	35	29	10	23	900	30
32	61	64	62	60	60	60	40	28	37	31	10	25	990	32
34	66	68	65	64	64	65	42	30	39	32	12	26	1070	34
36	68	71	68	68	68	67	45	31	40	34	12	28	1350	36
38	71	75	73	72	72	71	47	33	42	36	13	29	1500	38
40	74	78	75	75	75	74	49	34	43	37	13	30	1670	40
42	78	81	79	79	79	78	52	36	45	39	14	32	1820	42
44	81	84	83	82	82	81	54	38	47	41	14	33	2010	44
46	84	88	86	86	86	84	56	39	49	42	15	35	2210	46
48	87	91	90	89	89	87	59	41	50	44	15	36	2410	48
50	91	94	93	93	93	91	61	42	52	45	16	38	2570	50
52	94	98	96	96	96	94	63	44	54	47	17	39	2720	52
54	98	101	100	100	100	98	66	45	56	49	18	41	2880	54
56	101	104	103	103	103	101	68	47	58	50	18	42	3290	56
58	104	108	107	107	107	104	70	48	60	52	19	44	3710	58

- Dimensions have been rounded up to the nearest 1"
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- Due to continuous product improvement at Industrial Air Tech. Corp., dimensions are subject to change. For more complete dimensional information, refer to the applicable Industrial Air Tech. Corp. submittal drawing.

# ARRANGEMENT 8

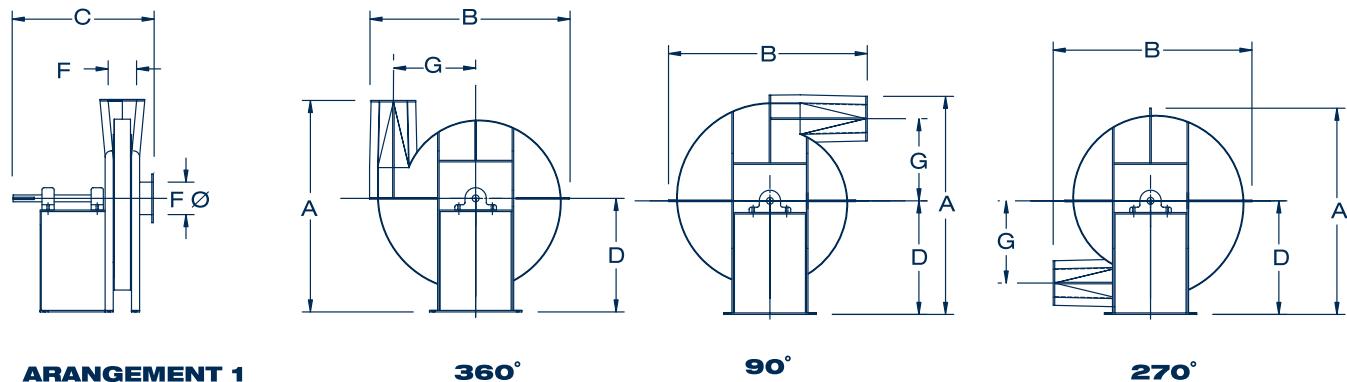
**Sizes 20 - 58 TROL**



SIZE	TYPE TROL												MAX HP	SIZE	
	A			B			C	D			F Dia.	G	BARE FAN WEIGHT		
	90°	270°	360°	90°	270°	360°		90°	270°	360°					
20	41	43	40	39	39	40	47	19	25	21	6	16	370	10 20	
22	44	47	44	43	43	43	53	21	27	22	6	17	470	15 22	
24	48	50	47	46	46	47	58	22	29	24	8	19	600	25 24	
26	51	54	51	50	50	50	62	24	31	26	8	20	720	40 26	
28	54	56	54	53	53	53	65	25	32	27	8	2	940	50 28	
30	57	61	58	57	57	57	68	26	35	29	10	23	1170	75 30	
32	61	64	62	60	60	60	75	28	37	31	10	25	1280	100 32	
34	66	68	65	64	64	65	82	30	39	32	12	26	1390	125 34	
36	68	71	68	68	68	67	88	31	40	34	12	28	1760	200 36	
38	71	75	73	72	72	71	90	33	42	36	13	29	1960	200 38	
40	74	78	75	75	75	74	97	34	43	37	13	30	2170	250 40	
42	78	81	79	79	79	78	80	36	45	39	14	32	2360	40 42	
44	81	84	83	82	82	81	82	38	47	41	14	33	2620	50 44	
46	84	88	86	86	86	84	86	39	49	42	15	35	2870	60 46	
48	87	91	90	89	89	87	88	41	50	44	15	36	3130	75 48	
50	91	94	93	93	93	91	96	42	52	45	16	38	3340	100 50	
52	94	98	96	96	96	94	104	44	54	47	17	39	3540	125 52	
54	98	101	100	100	100	98	106	45	56	49	18	41	3750	150 54	
56	101	104	103	103	103	101	111	47	58	50	18	42	4280	200 56	
58	104	108	107	107	107	104	113	48	60	52	19	44	4820	200 58	

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## Sizes 20 - 58 TROH

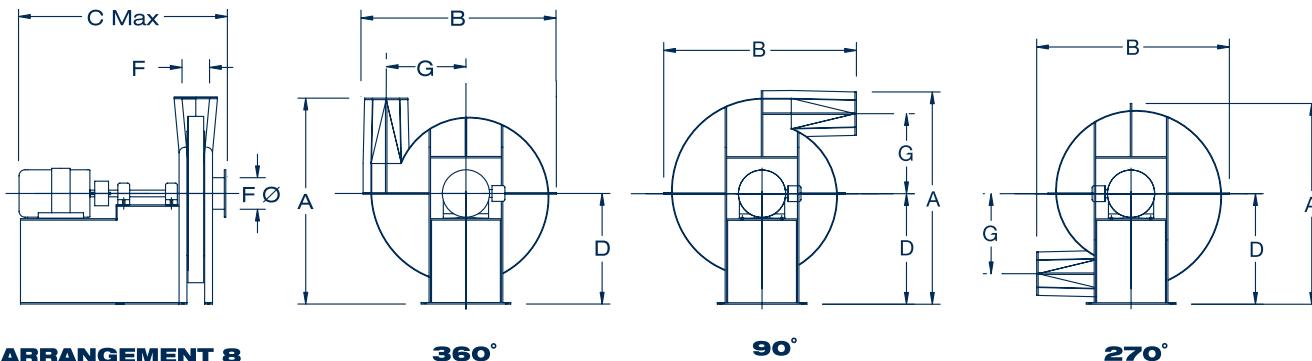


SIZE	TYPE TROH									BARE FAN WEIGHT	SIZE			
	A			B			C	D						
	90°	270°	360°	90°	270°	360°		90°	270°	360°	F Dia.	G		
20	41	43	41	40	40	40	28	19	25	21	8	15	340	20
22	44	46	44	43	43	43	30	21	27	22	8	17	420	22
24	48	50	48	47	47	47	33	22	29	24	10	18	540	24
26	52	53	51	50	50	50	35	24	31	26	10	20	650	26
28	54	56	55	54	54	53	38	25	32	27	10	21	850	28
30	58	61	58	57	57	58	40	26	35	29	12	23	1060	30
32	61	63	62	61	61	60	43	28	37	31	12	24	1160	32
34	66	67	65	64	64	64	45	30	39	32	14	25	1260	34
36	68	70	69	68	68	67	48	31	40	34	14	27	1590	36
38	72	74	72	72	72	71	50	33	42	36	15	28	1770	38
40	74	77	76	76	76	74	53	34	43	37	15	30	1960	40
42	79	81	79	79	79	78	55	36	45	39	16	31	2140	42
44	82	84	83	83	83	81	57	38	47	41	17	33	2370	44
46	85	87	86	86	86	84	60	39	49	42	18	34	2600	46
48	88	90	90	90	90	87	62	41	50	44	18	35	2830	48
50	91	94	93	93	93	91	65	42	52	45	19	37	3020	50
52	95	97	97	97	97	94	67	44	54	47	20	38	3200	52
54	98	101	100	100	100	98	70	45	56	49	21	40	3390	54
56	102	104	104	104	104	101	72	47	58	50	22	41	3870	56
58	105	107	107	107	107	104	75	49	60	52	22	43	4360	58

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# ARRANGEMENT 8

**Sizes 20 - 58 TROH**



SIZE	TYPE TROH												MAX HP	SIZE	
	A			B			C	D			F Dia.	G	BARE FAN WEIGHT		
	90°	270°	360°	90°	270°	360°		90°	270°	360°					
20	41	43	41	40	40	40	62	19	25	21	8	15	370	20	
22	44	46	44	43	43	43	68	21	27	22	8	17	470	30	
24	48	50	48	47	47	47	72	22	29	24	10	18	600	50	
26	52	53	51	50	50	50	76	24	31	26	10	20	850	75	
28	54	56	55	54	54	53	83	25	32	27	10	21	940	100	
30	58	61	58	57	57	58	91	26	35	29	12	23	1170	150	
32	61	63	62	61	61	60	97	28	37	31	12	24	1280	200	
34	66	67	65	64	64	64	104	30	39	32	14	25	1390	250	
36	68	70	69	68	68	67	110	31	40	34	14	27	1760	300	
38	72	74	72	72	72	71	113	33	42	36	15	28	1960	400	
40	74	77	76	76	76	74	120	34	43	37	15	30	2170	500	
42	78	81	79	79	79	78	104	36	45	39	16	31	2360	100	
44	82	84	83	83	83	81	107	38	47	41	17	33	2620	100	
46	85	87	86	86	86	84	115	39	49	42	18	34	2870	125	
48	88	90	90	90	90	87	117	41	50	44	18	35	3130	150	
50	91	94	93	93	93	91	124	42	52	45	19	37	3340	200	
52	95	97	97	97	97	94	131	44	54	47	20	38	3540	250	
54	98	101	100	100	100	98	134	45	56	49	21	40	3750	300	
56	102	104	104	104	104	101	136	47	58	50	22	41	4280	300	
58	105	107	107	107	107	104	141	48	60	52	22	43	4820	400	
														58	

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# TROH & TROL High Pressure Industrial Blowers

## Applications

- Combustion
- Air Cooling
- Gas Boosting
- Aeration
- Process Systems
- Fume Exhaust
- Conveying
- Water Stripping
- Fluid Beds
- Glass Blowing
- Textile Fiber Stripping
- Product Drying

## Design Features

*Radial Bladed Open Type Wheel*

**Very Stable Operation all the way to Shut Off**

*Suitable for High Temperature Applications*

*Extremely Rugged High Pressure Construction*

*Round Flanged Inlet and Outlet Connections*

## Markets

*Chemical  
Food Processing  
Knitting  
Paper  
Textile  
Pharmaceutical  
Steel*

*Plastics  
Rubber  
Tobacco  
Salt  
Foundries  
Breweries  
Candy*

## General Information

Industrial Air Technology Industrial Fans and Blowers are designed for continuous duty in an industrial environment. They are engineered for predictable performance and trouble free operation. Each fan is thoroughly inspected and tested by trained factory personnel prior to shipping. When properly installed and maintained, your fan will be trouble free. It is the industries finest.

## Performance

Industrial Air Technology performance rating tables and curves were derived from tests made in accordance with AMCA Standard 210. The test procedure utilizes an open inlet and a straight outlet duct. Any installation with inlet or outlet configurations that deviate from this standard may result in fan performance different from the published data. Restricted or unstable flow at the fan inlet can cause prerotation of incoming air or uneven loading of the fan wheel yielding large system losses and increased sound levels. Likewise, free discharge or turbulent flow in the outlet ductwork will result in system losses. Refer to AMCA Standard 201 for additional information regarding system effect factors and losses.

## Safety

The responsibility for providing safety accessories for Industrial Air Technology supplied equipment is that of the installer and user of the equipment. Industrial Air Technology sells its equipment with and without safety accessories, depending on the specific customer purchase order. Users and installers of this equipment should carefully read all accompanying literature provided with this equipment regarding safe operation.

## AMCA Standards

AMCA International, backed by almost 80 years of standards development, is the world's leading authority in the development of the science and art of engineering as relates to air movement and air control devices. AMCA International publishes and distributes standards, references, and application manuals for specifiers, engineers, and others with an interest in air systems to use in the selection, evaluation, and troubleshooting of air system components. Many of AMCA International's standards are accepted as American National Standards. A description of AMCA International's publications is contained in the Publications Catalogue.



# Industrial

Air Technology Corp.

P.O. Box 2317, Gaylord, MI 49734  
Phone: 989-705-1768 • Fax: 989-732-1641  
[www.indairtech.com](http://www.indairtech.com)