

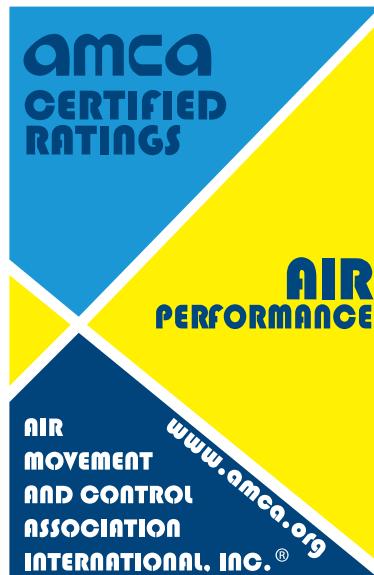


## FRP Fans:

### CLUB Series 1500-7300

#### Performance and Technical Information

Verantis Environmental Solutions Group provides solutions for most common and complex situations including repair, rebuilding, field balancing, service and installation.



VERANTIS CORPORATION CERTIFIES THAT THE CLUB SERIES CENTRIFUGAL FANS SHOWN HEREIN ARE LICENSED TO BEAR THE AMCA SEAL. THE RATINGS SHOWN ARE BASED ON TESTS MADE IN ACCORDANCE WITH AMCA PUBLICATION 211 AND COMPLY WITH THE REQUIREMENTS OF THE AMCA RATINGS PROGRAM.

**OTHER VERANTIS FANS INCLUDE:**

- CMHB Centrifugal High Efficiency Low to Medium Pressure
- CLM Centrifugal Low to Medium Pressure
- CMH Centrifugal Medium to High Pressure
  - CH/CHP Centrifugal High Pressure
  - FL/FLR Tube Axial Low Pressure

# FRP Centrifugal Fans



## Wide choice of sizes and performance characteristics.

The CLUB series is available in sizes 1500 through 7200 providing exhaust volumes up to 76,885 CFM and static pressures up to 10" WG.

## Every unit pretested.

Impellers are statically and dynamically balanced prior to assembly. Each fan is factory tested before shipment to ensure proper function and service. Fan performance data is obtained from tests conducted in accordance with AMCA standards.

## Using this bulletin.

The following pages include information to select a CLUB Series fan for most applications. If you require technical assistance, call your Verantis representative or the Verantis Corporate Office. Phone numbers are listed at [www.verantis.com](http://www.verantis.com).

Verantis CLUB Series fiberglass fans offer the widest range of performance from any Fiberglass Reinforced Plastic (FRP) fan on the market. For over 40 years, Verantis fans have provided industry leading reliability and service in corrosive environments.

## Designed and built to the highest standards.

Housings are made of premium corrosion-resistant, fire retardant vinyl ester resin systems. Impellers are manufactured using premium vinyl ester to assure structural integrity under the intense dynamic forces of rotation. All fiberglass components are fabricated in accordance with ASTM C582 and ASTM 4167 specifications for fiberglass laminates and fiberglass blowers.

All metal parts exposed to the process gasses are fully encapsulated in FRP to assure maximum protection against chemical attack. Fan and motor bases are heavy-gauge steel coated with polyurethane. Other Verantis protective coatings are available for other severe service conditions.

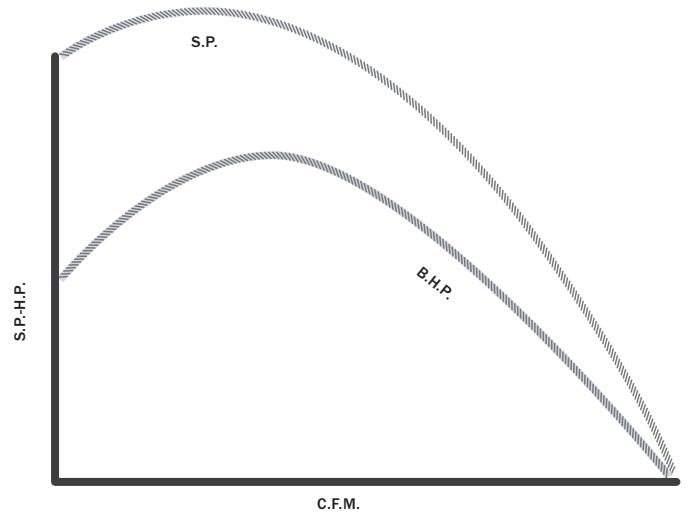
# Engineering Features

- Low noise
- Lower operating speeds for increased service life
- Oversized shafts
- Optimized impeller and housing designs for greater efficiency
- Robust base design
- Taper lock mounting of impeller to shaft for ease of service

# High Strength FRP Impellers

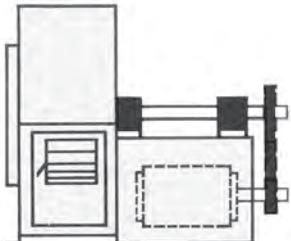
## CLUB Backward Curved Impeller

- For forced draft and non-abrasive induced draft applications
- Non-overloading horsepower characteristic
- Increased efficiency
- Stable operation



# Arrangement Versatility

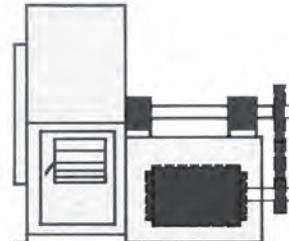
## Standard for sizes 1500 through 2550



ARR. 10 SWSI - For belt drive. Wheel over-hung, two bearings, with prime mover inside base.

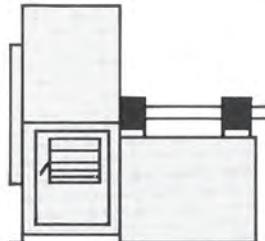
Size 1500 through 2550 are offered in Arrangement 10 as standard, while Arrangement 9 is standard in sizes 3000 through 7300. Other arrangements are available if required. Fans are available in clockwise or counter-clockwise rotation and all 8 standard discharge positions.

## Standard for sizes 3000 through 7300

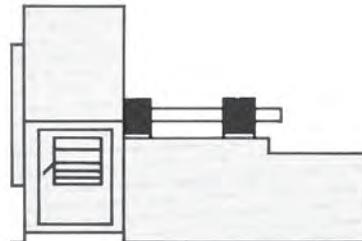


ARR. 9 SWSI - For belt drive. Wheel over-hung, two bearings, with prime mover outside base.

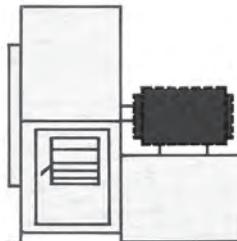
### Optional arrangements available for special requirements.



ARR. 1 SWSI - For belt drive or direct connection. Wheel over-hung. Two bearings on base.



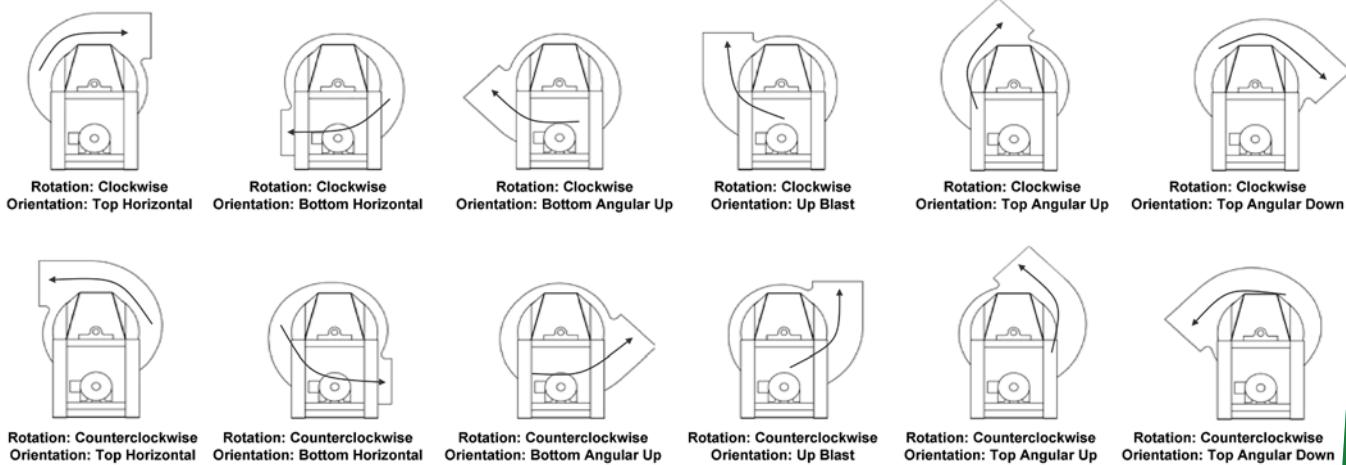
ARR. 8 SWSI - For belt drive or direct connection. Arrangement 1 plus extended base for prime mover.



ARR. 4 SWSI - For direct drive. Wheel overhung on prime mover shaft. No bearings on fan. Prime mover base mounted or directly connected.

## Rotation and Discharge Options

Direction of rotation is determined from drive side of fan. On single inlet fans, drive side is always considered as the side opposite fan inlet. Direction of discharge is determined in accordance with diagrams (below). Angle of discharge is referred to the horizontal axis of fan and designated in degrees above or below such standard reference axis. For fan inverted for ceiling suspension or side wall mounting, direction of rotation and discharge is determined when the fan is resting on floor.



# Features Available for Design Flexibility

## Carbon gel coating.

All FRP surfaces exposed to the gas stream are coated with a graphite-impregnated layer to eliminate static buildup. Grounding connectors are located externally.

## Access doors.

Stud-mounted bolted access doors available on all sizes.

## Flanges.

Standard and custom available for inlet or outlet. Drilled or undrilled.

## Drains.

PVC coupling or flanged FRP.

## Discharge transition.

Rectangular to round are available and can be made integral to the fan or separate.

## Shaft seals.

Single Teflon® is standard. Depending on application severity, other options available include double and triple Teflon, stuffing box and single or double mechanical.

Hinged & Latch access door.



Weather canopy on Arrangement 10 fan.



Custom transition



Split housing for impeller removed without disconnecting ductwork



## Class Construction

Verantis fans are designed and fabricated to provide safe and reliable performance throughout the full range listed in the tables. In order to assure an adequate safety factor, we have established the following maximum speeds at 70°F. For recommendations on applications above 180°F please contact your Verantis representative.

	CL-II	CL-III	CL-IV
SFPM	10,500	13,500	18,000

# How to Select a CLUB Series Fan

## Rating table information

Performance ratings shown in the tables for CLUB Series fans are based on:

1. Standard air at the fan inlet, with a density of 0.075 pounds per cubic foot. This corresponds to 70°F and 29.92 inches barometric pressure at sea level.
2. Excluding V-belt drive losses.

## Effect of temperature and altitude

For selection of fans handling other than standard air, temperature and altitude must be taken into consideration. Since a fan is a constant volume machine, it will deliver the same volume regardless of the air density. The fan static pressure developed and horsepower required will vary directly with the density.

The density of air is inversely proportional to the absolute temperature (rise in temperature gives a lower density) and directly proportional to the absolute pressure (rise in pressure gives a higher density). For example: The ratio to standard conditions for air at 3,000 ft. altitude (26.81" Hg) and at 250°F would be 0.669.

The temperature-pressure relationship is tabulated below. For gases other than air, the gas density, in relationship to standard air density of 0.075 pound per cubic foot, must also be taken into consideration.

**Table of Air Density Factors for Various Temperatures and Altitudes**

Air Temp °F	Altitude in Feet Above Sea Level							
	0	1,000	2,000	3,000	4,000	5,000	6,000	7,000
29.29	28.86	27.82	26.82	25.84	24.90	23.98	23.09	
70	1.000	0.0964	0.0930	0.0896	0.864	0.832	0.801	0.772
100	0.946	0.912	0.880	0.848	0.818	0.787	0.758	0.730
125	0.908	0.875	0.846	0.809	0.784	0.755	0.721	0.700
150	0.869	0.838	0.808	0.770	0.751	0.723	0.696	0.671
175	0.836	0.806	0.777	0.745	0.722	0.695	0.669	0.645
200	0.803	0.774	0.747	0.720	0.694	0.668	0.643	0.620
225	0.775	0.747	0.721	0.694	0.669	0.645	0.620	0.598
250*	0.747	0.720	0.720	0.669	0.645	0.622	0.598	0.576

\*Maximum allowable operating temperature for FRP construction.

## Fan selection

The cold static method is the most common system for fan selection. This method is based on the assumption that, at constant CFM and RPM, the static pressure and BHP vary inversely as the absolute temperature and directly as the air density.

4. Correct BHP to actual conditions:  $7.03 \times .72 = 5.06$  BHP.
5. BHP at cold start: density factor at 70°F at 3,000 ft.

Elevation is 0.896, Therefore the cold start BHP is:  $7.03 \times 0.896 = 6.30$  BHP

Therefore we would select a CLUB-1825 fan to deliver 5000 ACFM at 5.5" SP rotating at 2574 RPM using 6.30 BHP, hence a 7.5 HP motor must be supplied.

## Example:

A fan is required to handle 5000 ACFM at 5.5" SP at 200°F and 3,000 ft. altitude.

1. Density factor from table 1 = 0.720.
2. Convert sp to standard:  $5.5" \times 0.720 = 5.85$
3. Using the fan performance tables we select a CLUB-1825 fan at a speed of 2574 RPM and 7.03 BHP.

## CLUB-1500 Catalog Table

**CLUB-1500**  
 (BACKWARD CURVED IMPELLER)

 Impeller Dia.  
 15.00 " O.D.  
 Tip Speed (fps) 3.93 \* RPM

 Inlet Dia.  
 14 " I.D.  
 Inlet Area 1.07 sq. ft.

 Outlet Size  
 15-3/4" x 11-3/4"  
 Outlet Area 1.29 ft<sup>2</sup>

VOL CFM	VEL FPM	1" W.G.			2" W.G.			3" W.G.			4" W.G.			5" W.G.			6" W.G.			7" W.G.			8" W.G.			9" W.G.			10" W.G.			11" W.G.			12" W.G.			13" W.G.			14" W.G.		
		BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM										
850	661	1087	0.20	1490	0.47	1801	0.76	2062	1.06	2291	1.37	2498	1.69																														
1000	778	1128	0.24	1507	0.51	1820	0.84	2082	1.19	2314	1.54	2518	1.90	2710	2.26	2887	2.64																										
1150	895	1180	0.28	1528	0.56	1837	0.91	2101	1.29	2333	1.69	2541	2.10	2732	2.50	2907	2.91	3074	3.32	3233	3.75	3382	4.20																				
1300	1012	1250	0.34	1561	0.62	1856	0.98	2117	1.39	2351	1.82	2562	2.27	2752	2.72	2930	3.18	3097	3.64	3253	4.10	3402	4.57	3547	5.03	3684	5.53																
1450	1128	1321	0.39	1606	0.70	1879	1.05	2136	1.48	2367	1.93	2578	2.41	2772	2.91	2950	3.42	3117	3.93	3276	4.44	3426	4.95	3567	5.46	3703	5.98	3836	6.50														
1600	1245	1394	0.46	1657	0.78	1914	1.14	2157	1.56	2386	2.05	2594	2.55	2789	3.07	2968	3.62	3138	4.19	3295	4.74	3445	5.30	3590	5.86	3729	6.42	3859	6.99														
1750	1362	1470	0.52	1725	0.89	1959	1.26	2185	1.67	2407	2.16	2613	2.69	2805	3.24	2986	3.81	3154	4.39	3315	5.00	3467	5.62	3610	6.23	3747	6.84	3880	7.45														
1900	1478	1546	0.60	1796	1.00	2005	1.38	2225	1.81	2431	2.27	2635	2.82	2824	3.40	3002	4.00	3171	4.61	3332	5.23	3483	5.88	3629	6.54	3769	7.21	3900	7.87														
2050	1595	1626	0.69	1867	1.11	2069	1.53	2271	1.97	2467	2.43	2657	2.96	2846	3.55	3021	4.17	3188	4.82	3347	5.47	3501	6.13	3646	6.82	3785	7.52	3920	8.24														
2200	1712	1708	0.79	1941	1.23	2141	1.69	2318	2.14	2512	2.63	2690	3.14	2867	3.71	3044	4.35	3208	5.01	3366	5.70	3516	6.40	3662	7.10	3803	7.82	3936	8.56														
2350	1829	1792	0.89	2015	1.36	2211	1.85	2381	2.33	2557	2.83	2733	3.36	2899	3.91	3064	4.53	3230	5.21	3386	5.91	3535	6.64	3679	7.39	3818	8.13	3953	8.89														
2500	1945	1877	1.02	2091	1.50	2282	2.03	2452	2.54	2608	3.05	2778	3.60	2940	4.16	3096	4.76	3252	5.41	3407	6.13	3556	6.88	3699	7.64	3837	8.43	3969	9.22														
2650	2062	1962	1.15	2168	1.66	2355	2.21	2523	2.76	2673	3.29	2824	3.84	2986	4.44	3136	5.04	3284	5.67	3430	6.37	3577	7.12	3721	7.91	3856	8.71	3988	9.53														
2800	2179	2049	1.29	2246	1.83	2429	2.40	2594	2.99	2744	3.56	2882	4.12	3031	4.72	3182	5.36	3323	5.99	3463	6.66	3602	7.39	3741	8.17	3879	9.00	4009	9.83														
2950	2295	2135	1.45	2327	2.01	2504	2.60	2665	3.22	2815	3.83	2949	4.43	3082	5.03	3227	5.68	3369	6.35	3503	7.01	3635	7.72	3767	8.47	3899	9.28	4031	10.14														
3100	2412	2224	1.63	2410	2.21	2580	2.82	2739	3.47	2885	4.12	3022	4.75	3146	5.37	3274	6.01	3414	6.70	3549	7.41	3676	8.10	3802	8.84	3927	9.63	4052	10.46														
3250	2529	2313	1.81	2493	2.42	2657	3.05	2813	3.72	2957	4.41	3092	5.08	3216	5.73	3335	6.39	3460	7.07	3594	7.80	3721	8.54	3843	9.27	3963	10.04	4083	10.85														
3400	2646	2403	2.01	2577	2.65	2736	3.31	2888	3.99	3030	4.71	3163	5.42	3288	6.12	3403	6.80	3517	7.49	3639	8.21	3766	8.97	3889	9.75	4004	10.51	4120	11.30														
3550	2762	2493	2.23	2662	2.89	2816	3.57	2965	4.28	3104	5.02	3234	5.77	3358	6.50	3475	7.23	3583	7.93	3694	8.66	3812	9.43	3934	10.22	4051	11.03	4162	11.82														
3700	2879	2584	2.47	2748	3.16	2898	3.86	3041	4.59	3178	5.35	3307	6.13	3429	6.90	3546	7.66	3654	8.41	3758	9.15	3864	9.91	3979	10.71	4096	11.54	4208	12.38														
3850	2996	2675	2.72	2824	3.44	2981	4.17	3119	4.92	3254	5.69	3381	6.51	3501	7.32	3616	8.11	3726	8.90	3827	9.67	3928	10.44	4030	11.24	4141	12.08	4253	12.94														
4000	3112	2766	2.99	2920	3.74	3064	4.49	3198	5.26	3330	6.06	3455	6.89	3574	7.74	3687	8.57	3796	9.40	3901	10.22	3996	11.01	4093	11.81	4192	12.64	4299	13.51														
4150	3229	2858	3.28	3007	4.06	3148	4.83	3279	5.63	3407	6.45	3531	7.29	3647	8.17	3759	9.05	3867	9.91	3970	10.76	4069	11.60	4161	12.42	4255	13.26	4350	14.13														
4300	3346	2950	3.60	3095	4.40	3233	5.20	3361	6.02	3484	6.86	3606	7.73	3722	8.62	3832	9.53	3938	10.43	4041	11.32	4140	12.20	4233	13.07	4322	13.92	4412	14.79														
4450	3463	3043	3.92	3184	4.76	3319	5.58	3444	6.43	3564	7.29	3683	8.18	3797	9.09	3906	10.03	4010	10.97	4112	11.90	4210	12.81	4305	13.72	4393	14.61	4479	15.50														
4600	3579	3137	4.26	3273	5.14	3404	5.99	3528	6.86	3645	7.74	3760	8.65	3873	9.58	3980	10.54	4084	11.52	4183	12.49	4281	13.44	4375	14.38	4466	15.33	4550	16.24														
4750	3696	3231	4.62	3363	5.53	3491	6.42	3612	7.31	3727	8.22	3838	9.15	3949	10.10	4056	11.07	4158	12.09	4256	13.09	4357	14.08	4445	15.06	4536	16.04																
4900	3813	3325	5.01	3453	5.96	3577	6.87	3696	7.79	3809	8.72	3918	9.67	4026	10.65	4131	11.64	4232	12.66	4330	13.71	4424	14.74	4516	15.76																		
5050	3929	3419	5.41	3544	6.40	3664	7.35	3782	8.29	3892	9.24	3999	10.22	4103	11.21	4208	12.23	4308	13.26	4404	14.34	4497	15.41																				
5200	4046	3513	5.84	3634	6.87	3751	7.85	3867	8.81	3976	9.79	4080	10.79	4182	11.81	4284	12.84	4383	13.90	4479	14.98																						

 Class I Fans.

 Class II Fans.

 Class III Fans.

 Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

**CLUB-1825**  
 (BACKWARD CURVED IMPELLER)

 Impeller Dia.  
 18.25 " O.D.  
 Tip Speed (fps) 4.78 \* RPM

 18 " I.D.  
 Inlet Area  
 1.77 sq. ft.

 18-5/8" x 13-7/8"  
 Outlet Size  
 1.80 ft<sup>2</sup>

VOL CFM	VEL FPM	1" W.G.			2" W.G.			3" W.G.			4" W.G.			5" W.G.			6" W.G.			7" W.G.			8" W.G.			9" W.G.			10" W.G.			11" W.G.			12" W.G.			13" W.G.			14" W.G.		
		BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM										
1400	780	914	0.33	1233	0.74	1491	1.21	1706	1.70	1894	2.19	2064	2.69																														
1600	892	947	0.39	1248	0.80	1504	1.30	1721	1.85	1909	2.41	2081	2.97	2236	3.54	2382	4.11																										
1800	1003	994	0.45	1266	0.86	1516	1.39	1733	1.97	1925	2.59	2095	3.22	2253	3.85	2399	4.49	2534	5.13	2664	5.77	2788	6.43																				
2000	1114	1047	0.53	1295	0.95	1532	1.48	1745	2.10	1937	2.75	2110	3.43	2268	4.14	2413	4.84	2552	5.54	2680	6.24	2802	6.96	2920	7.67	3034	8.39																
2200	1226	1100	0.60	1329	1.06	1550	1.58	1760	2.21	1949	2.91	2123	3.62	2281	4.37	2429	5.15	2566	5.91	2696	6.68	2821	7.45	2937	8.23	3049	9.01	3157	9.80														
2400	1337	1155	0.69	1369	1.18	1578	1.71	1776	2.33	1963	3.05	2134	3.81	2294	4.59	2442	5.40	2582	6.24	2711	7.08	2834	7.92	2953	8.76	3068	9.60	3175	10.45														
2600	1449	1211	0.78	1421	1.32	1612	1.87	1797	2.48	1979	3.20	2148	3.99	2306	4.81	2455	5.65	2593	6.52	2725	7.42	2850	8.34	2968	9.24	3080	10.15	3190	11.06														
2800	1560	1267	0.88	1473	1.46	1646	2.03	1827	2.66	1996	3.36	2165	4.16	2320	5.02	2466	5.90	2606	6.80	2738	7.72	2862	8.68	2982	9.66	3096	10.65	3205	11.62														
3000	1672	1326	1.00	1526	1.62	1692	2.23	1861	2.88	2022	3.56	2180	4.34	2336	5.22	2480	6.14	2618	7.08	2749	8.04	2876	9.02	2994	10.03	3109	11.06	3220	12.12														
3200	1783	1387	1.13	1580	1.78	1744	2.44	1895	3.09	2054	3.81	2203	4.57	2351	5.42	2497	6.37	2632	7.34	2762	8.35	2887	9.37	3007	10.40	3122	11.46	3232	12.55														
3400	1895	1448	1.27	1634	1.95	1797	2.66	1938	3.34	2088	4.08	2233	4.85	2372	5.68	2512	6.60	2649	7.61	2777	8.64	2901	9.71	3019	10.79	3133	11.88	3245	12.98														
3600	2006	1511	1.42	1690	2.13	1849	2.88	1988	3.61	2122	4.36	2267	5.17	2400	5.98	2532	6.88	2663	7.87	2793	8.94	2915	10.02	3033	11.15	3146	12.28	3256	13.43														
3800	2117	1574	1.59	1747	2.33	1902	3.12	2042	3.91	2166	4.67	2300	5.49	2433	6.34	2559	7.22	2683	8.18	2808	9.22	2932	10.35	3048	11.49	3160	12.66	3270	13.87														
4000	2229	1637	1.77	1804	2.54	1957	3.37	2094	4.20	2217	5.01	2336	5.83	2467	6.72	2591	7.62	2710	8.55	2828	9.57	2946	10.66	3065	11.85	3176	13.04	3284	14.26														
4200	2340	1701	1.97	1863	2.77	2012	3.62	2146	4.51	2270	5.37	2382	6.21	2501	7.10	2625	8.04	2741	8.99	2854	9.98	2967	11.05	3079	12.19	3192	13.42	3300	14.67														
4400	2452	1766	2.19	1923	3.02	2068	3.90	2200	4.83	2322	5.74	2433	6.62	2541	7.52	2658	8.47	2775	9.47	2884	10.46	2992	11.50	3100	12.62	3207	13.81	3315	15.08														
4600	2563	1831	2.42	1984	3.28	2124	4.19	2254	5.15	2374	6.11	2487	7.06	2589	7.97	2693	8.92	2808	9.95	2919	10.99	3023	12.02	3126	13.12	3229	14.28	3332	15.51														
4800	2675	1897	2.67	2046	3.57	2181	4.50	2309	5.49	2427	6.51	2539	7.49	2640	8.46	2739	9.43	2842	10.44	2952	11.52	3057	12.61	3156	13.68	3256	14.82	3354	16.03														
5000	2786	1964	2.94	2108	3.87	2239	4.84	2365	5.85	2481	6.91	2591	7.95	2694	8.97	2788	9.97	2883	10.99	2986	12.06	3090	13.19	3190	14.32	3286	15.44	3381	16.63														
5200	2898	2031	3.22	2171	4.19	2298	5.19	2421	6.23	2536	7.32	2643	8.41	2746	9.48	2841	10.54	2931	11.58	3023	12.65	3124	13.78	3224	14.95	3320	16.13	3412	17.30														
5400	3009	2098	3.53	2234	4.54	2358	5.57	2478	6.63	2591	7.75	2697	8.89	2798	10.01	2894	11.12	2983	12.20	3070	13.29	3159	14.41	3257	15.60	3353	16.82	3446	18.04														
5600	3120	2165	3.86	2297	4.90	2419	5.96	2535	7.06	2647	8.20	2752	9.38	2851	10.56	2946	11.71	3037	12.85	3120	13.96	3205	15.10	3291	16.27	3387	17.52	3479	18.78														
5800	3232	2233	4.21	2361	5.29	2481	6.38	2593	7.51	2703	8.67	2806	9.89	2904	11.11	299	12.32	3089	13.51	3173	14.67	3253	15.83	3336	17.02	3421	18.24	3513	19.54														
6000	3343	2300	4.58	2426	5.70	2543	6.82	2652	7.98	2760	9.17	2862	10.41	2959	11.68	3051	12.94	3141	14.18	3226	15.41	3305	16.60	3384	17.80	3463	19.04	3547	20.31														
6200	3455	2368	4.98	2490	6.14	2605	7.29	2713	8.48	2817	9.70	2918	10.96	3013	12.27	3105	13.58	3193	14.86	3278	16.14	3360	17.40	3435	18.63	3511	19.88	3588	21.16														
6400	3566	2436	5.40	2555	6.59	2668	7.78	2773	9.00	2874	10.25	2974	11.54	3069	12.87	3159	14.23	3246	15.57	3330	16.89	3412	18.20	3488	19.49	3561	20.76	3635	22.06														
6600	3678	2506	5.83	2621	7.07	2732	8.30	2835	9.55	2933	10.83	3031	12.14	3124	13.49	3214	14.89	3300	16.29	3383	17.66	3464	19.02	3541	20.37	3614	21.69	3685	23.00														
6800	3789	2575	6.29	2687	7.58	2795	8.84	2897	10.12	2993	11.43	3088	12.78	3181	14.15	3269	15.58	3354	17.02	3436	18.45	3516	19.85	3593	21.25	3668	22.64	3737	23.99														
7000	3901	2644	6.77	2754	8.11	2859	9.41	2959	10.72	3053	12.07	3145	13.44	3237	14.84	3325	16.28	3409	17.77	3490	19.25	3568	20.71	3645	22.15	3720	23.59																
7200	4012	2714	7.28	2820	8.67	2923	10.01	3021	11.35	3114	12.73	3204	14.13	3294	15.55	3381	17.03	3464	18.54	3544	20.07	3622	21.58	3698	23.07																		

 Class I Fans.

 Class II Fans.

 Class III Fans.

 Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

CLUB-2225 Catalog Table

**CLUB-2225**  
**(BACKWARD CURVED IMPELLER)**

CSD 2222 (BACKWARD CURVED IMPELLER)																
Impeller Dia. Tip Speed (fpm)	22.25 " O.D. 5.83 * RPM		20 " I.D. 2.18 sq. ft.		Inlet Dia. Inlet Area		Outlet Size Outlet Area		22.5/8" x 16.7/8" 2.65 ft <sup>2</sup>							
	VOL	VEL	1" W.G.	2" W.G.	3" W.G.	4" W.G.	5" W.G.	6" W.G.	7" W.G.	8" W.G.	9" W.G.	10" W.G.	11" W.G.	12" W.G.	13" W.G.	14" W.G.
2200	830	760	0.53	1016	1.13	1227	1.85	1404	2.62	1560	3.39	1698	4.17	1827	4.96	
2500	943	791	0.61	1029	1.22	1237	1.99	1415	2.82	1571	3.70	1712	4.57	1840	5.46	1958
2800	1056	834	0.72	1047	1.33	1249	2.12	1426	3.01	1583	3.95	1724	4.93	1852	5.91	1974
3100	1169	877	0.83	1074	1.48	1262	2.26	1437	3.19	1593	4.18	1735	5.22	1866	6.31	1985
3400	1282	922	0.95	1102	1.65	1281	2.43	1450	3.37	1604	4.42	1745	5.50	1876	6.63	1997
3700	1396	967	1.08	1141	1.84	1307	2.65	1463	3.55	1616	4.63	1756	5.79	1886	6.97	2008
4000	1509	1014	1.23	1185	2.06	1335	2.89	1485	3.80	1629	4.85	1768	6.04	1897	7.29	2017
4300	1622	1062	1.39	1228	2.28	1367	3.15	1512	4.11	1647	5.12	1781	6.30	1909	7.59	2028
4600	1735	1111	1.57	1272	2.52	1407	3.45	1539	4.43	1671	5.46	1796	6.60	1922	7.90	2041
4900	1848	1162	1.77	1317	2.76	1452	3.78	1570	4.77	1699	5.86	1818	6.98	1936	8.23	2054
5200	1961	1213	1.99	1363	3.02	1495	4.11	1609	5.16	1726	6.26	1845	7.43	1957	8.65	2068
5500	2074	1265	2.23	1410	3.31	1538	4.46	1653	5.59	1758	6.70	1873	7.91	1982	9.15	2087
5800	2188	1317	2.50	1457	3.62	1583	4.83	1696	6.03	1797	7.19	1901	8.41	2010	9.71	2112
6100	2301	1370	2.78	1504	3.95	1628	5.20	1740	6.48	1841	7.72	1935	8.95	2038	10.27	2140
6400	2414	1423	3.10	1554	4.31	1674	5.60	1783	6.95	1885	8.27	1975	9.55	2067	10.87	2167
6700	2527	1477	3.43	1604	4.69	1721	6.02	1828	7.43	1928	8.82	2019	10.19	2105	11.53	2195
7000	2640	1532	3.80	1655	5.11	1768	6.48	1874	7.93	1971	9.40	2063	10.84	2146	12.24	2229
7300	2753	1587	4.18	1706	5.55	1815	6.96	1919	8.45	2015	10.00	2106	11.51	2191	13.00	2269
7600	2866	1642	4.60	1758	6.02	1864	7.48	1966	9.01	2060	10.61	2149	12.20	2234	13.76	2311
7900	2980	1697	5.05	1810	6.52	1913	8.03	2012	9.60	2106	11.24	2193	12.91	2277	14.55	2356
8200	3093	1753	5.53	1863	7.05	1964	8.61	2060	10.22	2152	11.90	2238	13.64	2320	15.35	2399
8500	3206	1809	6.04	1915	7.62	2014	9.23	2107	10.88	2198	12.60	2284	14.39	2364	16.18	2442
8800	3319	1865	6.58	1969	8.22	2066	9.88	2156	11.58	2245	13.34	2329	15.16	2409	17.03	2485
9100	3432	1921	7.17	2022	8.86	2117	10.56	2206	12.31	2292	14.11	2375	15.96	2454	17.89	2529
9400	3545	1977	7.78	2075	9.54	2169	11.28	2256	13.08	2339	14.92	2422	16.82	2500	18.78	2574
9700	3658	2034	8.43	2130	10.25	2221	12.04	2306	13.88	2388	15.77	2469	17.71	2546	19.70	2619
10000	3772	2091	9.10	2184	10.99	2274	12.84	2357	14.73	2437	16.66	2516	18.65	2592	20.68	2735
10300	3885	2149	9.81	2239	11.77	2327	13.68	2409	15.62	2487	17.60	2553	19.62	2639	21.70	2711
10600	3998	2206	10.56	2295	12.59	2379	14.56	2461	16.55	2537	18.57	2611	20.64	2686	22.76	2757
10900	4111	2264	11.35	2350	13.46	2433	15.49	2513	17.52	2588	19.59	2661	21.71	2733	23.86	2804

Class I Fans.  Class II Fans.  Class III Fans.  Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.  
Performance ratings do not include the effects of appurtenances (accessories).  
For static pressure greater than 14", contact Verantis.

CLUB-2550 Catalog Table

**CLUB-2550**  
 (BACKWARD CURVED IMPELLER)

 Impeller Dia.  
 25.50 " O.D.  
 Tip Speed (fps) 6.68 \* RPM

 24 " I.D.  
 3.14 sq. ft.

 Inlet Dia.  
 26" x 19-5/8"  
 Inlet Area  
 3.54 ft<sup>2</sup>

VOL CFM	VEL FPM	1" W.G.			2" W.G.			3" W.G.			4" W.G.			5" W.G.			6" W.G.			7" W.G.			8" W.G.			9" W.G.			10" W.G.			11" W.G.			12" W.G.			13" W.G.			14" W.G.		
		BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM										
2800	790	658	0.67	884	1.46	1069	2.39	1222	3.37	1358	4.35	1479	5.35	1592	6.37																												
3200	903	683	0.78	896	1.58	1078	2.58	1233	3.66	1369	4.78	1492	5.90	1603	7.03	1706	8.18	1806	9.33																								
3600	1016	720	0.91	910	1.71	1087	2.76	1242	3.90	1379	5.13	1502	6.39	1614	7.65	1720	8.92	1816	10.19	1909	11.48	1998	12.77																				
4000	1129	758	1.06	933	1.91	1099	2.93	1252	4.16	1389	5.44	1512	6.79	1626	8.20	1730	9.59	1829	11.00	1922	12.40	2009	13.82	2092	15.25	2173	16.69																
4400	1242	798	1.22	958	2.13	1114	3.14	1263	4.39	1398	5.75	1521	7.16	1635	8.64	1742	10.19	1839	11.73	1932	13.26	2021	14.80	2106	16.35	2185	17.91	2262	19.48														
4800	1355	838	1.39	990	2.38	1136	3.43	1275	4.62	1408	6.04	1530	7.54	1644	9.08	1750	10.68	1850	12.34	1944	14.03	2032	15.71	2116	17.38	2198	19.07	2276	20.75														
5200	1468	879	1.58	1029	2.66	1161	3.75	1293	4.94	1420	6.33	1541	7.89	1653	9.52	1759	11.18	1859	12.89	1953	14.67	2043	16.50	2128	18.32	2208	20.13	2286	21.95														
5600	1580	921	1.80	1067	2.96	1188	4.09	1316	5.34	1435	6.68	1553	8.24	1664	9.92	1769	11.68	1868	13.47	1963	15.28	2052	17.17	2137	19.11	2220	21.10	2298	23.04														
6000	1693	965	2.04	1106	3.27	1224	4.49	1341	5.77	1455	7.13	1566	8.62	1676	10.34	1779	12.14	1878	14.03	1971	15.92	2061	17.86	2147	19.84	2228	21.88	2307	23.97														
6400	1806	1010	2.30	1146	3.60	1263	4.93	1367	6.22	1480	7.65	1585	9.12	1688	10.77	1791	12.62	1888	14.53	1981	16.53	2070	18.56	2155	20.60	2238	22.68	2316	24.83														
6800	1919	1055	2.59	1186	3.94	1301	5.37	1401	6.74	1505	8.19	1608	9.72	1706	11.32	1803	13.09	1900	15.07	1992	17.10	2080	19.21	2165	21.36	2246	23.52	2325	25.71														
7200	2032	1101	2.91	1227	4.32	1340	5.83	1440	7.30	1532	8.76	1633	10.36	1728	11.98	1820	13.71	1912	15.61	2004	17.69	2091	19.84	2175	22.05	2256	24.33	2334	26.60														
7600	2145	1147	3.26	1269	4.73	1379	6.32	1479	7.89	1567	9.41	1658	11.01	1753	12.73	1841	14.44	1929	16.29	2016	18.30	2103	20.48	2187	22.75	2267	25.06	2345	27.44														
8000	2258	1194	3.64	1311	5.17	1420	6.82	1517	8.49	1605	10.12	1687	11.73	1777	13.47	1866	15.28	1950	17.10	2033	19.05	2115	21.16	2198	23.44	2279	25.83	2356	28.23														
8400	2371	1241	4.06	1355	5.65	1460	7.34	1556	9.12	1644	10.85	1723	12.53	1803	14.26	1891	16.13	1974	18.02	2053	19.95	2132	22.00	2211	24.21	2290	26.56	2368	29.08														
8800	2483	1289	4.51	1400	6.17	1501	7.91	1595	9.76	1682	11.59	1762	13.38	1836	15.14	1915	17.01	1999	18.98	2077	20.96	2153	22.99	2228	25.14	2303	27.43	2378	29.87														
9200	2596	1337	4.99	1445	6.72	1543	8.52	1635	10.43	1721	12.36	1801	14.25	1873	16.09	1945	17.97	2023	19.96	2102	22.03	2177	24.10	2249	26.21	2321	28.46	2393	30.83														
9600	2709	1386	5.51	1490	7.30	1585	9.17	1676	11.12	1760	13.16	1839	15.15	1913	17.10	1980	19.02	2050	21.00	2127	23.11	2202	25.28	2273	27.43	2342	29.63	2411	31.96														
10000	2822	1435	6.07	1536	7.93	1628	9.86	1717	11.87	1800	13.98	1877	16.07	1951	18.12	2018	20.13	2084	22.14	2152	24.23	2226	26.45	2298	28.72	2366	30.95	2433	33.25														
10400	2935	1484	6.67	1582	8.60	1672	10.59	1758	12.66	1840	14.82	1916	17.02	1989	19.17	2058	21.30	2121	23.36	2185	25.48	2251	27.67	2322	29.99	2391	32.35	2457	34.68														
10800	3048	1533	7.31	1629	9.32	1717	11.37	1800	13.49	1881	15.69	1956	17.99	2027	20.24	2096	22.47	2160	24.65	2220	26.80	2282	29.01	2347	31.32	2416	33.73	2482	36.18														
11200	3161	1583	7.99	1676	10.08	1762	12.19	1842	14.37	1922	16.63	1996	18.99	2066	21.35	2134	23.67	2199	25.96	2259	28.20	2317	30.45	2377	32.75	2441	35.16	2507	37.67														
11600	3274	1632	8.73	1723	10.89	1807	13.06	1886	15.30	1963	17.62	2037	20.02	2106	22.48	2173	24.90	2237	27.29	2298	29.67	2355	31.96	2411	34.30	2469	36.70	2531	39.21														
12000	3387	1682	9.51	1770	11.74	1853	13.98	1930	16.28	2005	18.66	2077	21.10	2146	23.64	2212	26.17	2275	28.66	2336	31.12	2394	33.55	2448	35.93	2503	38.36	2559	40.85														
12400	3499	1732	10.34	1817	12.65	1899	14.95	1974	17.32	2047	19.74	2119	22.25	2187	24.83	2251	27.47	2314	30.06	2374	32.61	2433	35.15	2487	37.64	2540	40.11	2593	42.63														
12800	3612	1782	11.20	1865	13.60	1945	15.97	2019	18.40	2090	20.89	2160	23.45	2227	26.06	2291	28.79	2353	31.49	2413	34.14	2471	36.78	2526	39.40	2578	41.94	2629	44.50														
13200	3725	1833	12.10	1914	14.60	1992	17.04	2064	19.54	2134	22.09	2202	24.70	2268	27.38	2332	30.15	2393	32.95	2451	35.72	2509	38.44	2564	41.15	2618	43.85	2667	46.46														
13600	3838	1884	13.06	1963	15.65	2038	18.17	2110	20.73	2178	23.34	2244	26.01	2310	28.75	2373	31.54	2433	34.44	2491	37.31	2547	40.14	2603	42.94	2656	45.73																
14000	3951	1935	14.07	2012	16.76	2085	19.36	2156	21.98	2223	24.66	2287	27.38	2351	30.17	2414	33.02	2473	35.97	2531	38.94	2586	41.88	2641	44.78																		
14400	4064	1986	15.13	2061	17.92	2132	20.61	2202	23.29	2268	26.03	2331	28.81	2393	31.66	2455	34.57	2514	37.53	2571	40.61	2626	43.65	2680	46.66																		

 Class I Fans.

 Class II Fans.

 Class III Fans.

 Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

CLUB-3000 Catalog Table

**CLUB-3000**  
 (BACKWARD CURVED IMPELLER)

VOL CFM	VEL FPM	1" W.G.			2" W.G.			3" W.G.			4" W.G.			5" W.G.			6" W.G.			7" W.G.			8" W.G.			9" W.G.			10" W.G.			11" W.G.			12" W.G.			13" W.G.			14" W.G.		
		Impeller Dia. Tip Speed (fpm)	30.38 " O.D. 7.95 * RPM	30 " I.D. 4.91 sq. ft.	Inlet Dia. Inlet Area																																						
4000	830	557	0.79	737	1.65	889	2.62	1020	3.61																																		
4500	934	577	0.90	748	1.80	896	2.86	1025	3.95	1141	5.07																																
5000	1038	599	1.03	762	1.97	905	3.08	1031	4.28	1146	5.49	1251	6.74																														
5500	1141	622	1.18	781	2.16	916	3.30	1040	4.58	1152	5.91	1256	7.24	1352	8.60																												
6000	1245	646	1.33	802	2.38	929	3.55	1049	4.87	1159	6.29	1261	7.74	1357	9.19	1447	10.67																										
6500	1349	674	1.50	822	2.62	947	3.83	1061	5.18	1169	6.66	1269	8.21	1362	9.77	1451	11.35	1537	12.93	1615	14.57																						
7000	1453	703	1.68	844	2.88	967	4.15	1075	5.51	1180	7.03	1278	8.65	1370	10.32	1457	12.01	1540	13.70	1621	15.40	1696	17.14	1768	18.91																		
7500	1556	732	1.88	867	3.16	988	4.48	1093	5.89	1193	7.43	1289	9.09	1380	10.85	1465	12.63	1547	14.44	1625	16.25	1701	18.06	1774	19.90	1843	21.78																
8000	1660	762	2.10	890	3.46	1009	4.84	1113	6.31	1208	7.87	1301	9.55	1390	11.35	1475	13.23	1555	15.13	1632	17.06	1706	18.99	1778	20.92	1848	22.86	1915	21.95	24.84													
8500	1764	794	2.34	915	3.77	1031	5.23	1134	6.76	1227	8.35	1315	10.05	1402	11.88	1484	13.80	1564	15.81	1640	17.82	1713	19.86	1784	21.92	1852	23.97	1919	26.03														
9000	1868	827	2.60	942	4.10	1053	5.64	1155	7.22	1247	8.88	1332	10.61	1415	12.45	1496	14.41	1574	16.45	1650	18.57	1722	20.70	1791	22.86	1859	25.04	1924	27.21														
9500	1972	860	2.88	971	4.45	1076	6.08	1176	7.72	1268	9.44	1351	11.21	1431	13.07	1509	15.04	1586	17.13	1659	19.28	1731	21.52	1800	23.77	1866	26.03	1931	28.33														
10000	2075	894	3.18	1000	4.82	1099	6.54	1198	8.25	1289	10.02	1372	11.86	1449	13.75	1524	15.74	1598	17.84	1671	20.04	1741	22.30	1810	24.65	1876	27.02	1939	29.40														
10500	2179	927	3.52	1028	5.22	1125	7.02	1221	8.81	1310	10.63	1393	12.53	1469	14.48	1542	16.50	1613	18.61	1684	20.83	1753	23.14	1820	25.51	1885	27.96	1949	30.45														
11000	2283	961	3.87	1058	5.65	1153	7.51	1244	9.40	1332	11.28	1413	13.23	1490	15.26	1561	17.31	1630	19.45	1698	21.68	1765	24.00	1832	26.43	1896	28.90	1958	31.45														
11500	2387	995	4.26	1090	6.11	1182	8.02	1267	10.01	1354	11.97	1435	13.97	1511	16.05	1583	18.18	1649	20.34	1715	22.59	1780	24.94	1844	27.37	1908	29.90	1969	32.48														
12000	2490	1031	4.68	1122	6.59	1210	8.57	1293	10.65	1377	12.69	1457	14.75	1532	16.87	1603	19.07	1670	21.30	1734	23.58	1797	25.94	1859	28.39	1920	30.93	1982	33.56														
12500	2594	1066	5.13	1155	7.10	1239	9.15	1320	11.30	1400	13.44	1479	15.57	1553	17.74	1624	19.99	1691	22.30	1754	24.62	1815	27.01	1875	29.48	1935	32.03	1994	34.67														
13000	2698	1102	5.61	1188	7.64	1268	9.77	1348	11.97	1423	14.22	1502	16.43	1575	18.66	1644	20.95	1712	23.31	1775	25.72	1835	28.15	1894	30.64	1952	33.21	2009	35.87														
13500	2802	1139	6.12	1221	8.21	1298	10.42	1377	12.67	1450	15.02	1525	17.31	1598	19.62	1666	21.96	1732	24.37	1796	26.84	1856	29.35	1914	31.87	1970	34.47	2026	37.14														
14000	2905	1175	6.66	1254	8.82	1329	11.10	1405	13.42	1477	15.83	1548	18.24	1620	20.52	1688	23.02	1753	25.47	1816	27.99	1877	30.57	1935	33.18	1990	35.80	2044	38.50														
14500	3009	1212	7.24	1288	9.47	1361	11.81	1434	14.20	1506	16.67	1573	19.19	1643	21.65	1711	24.12	1775	26.63	1837	29.19	1898	31.83	1955	34.50	2010	37.20	2064	39.93														
15000	3113	1248	7.86	1322	10.15	1394	12.56	1463	15.02	1534	17.54	1600	20.15	1666	22.71	1734	25.27	1798	27.83	1859	30.45	1918	33.12	1976	35.86	2031	38.64	2084	41.43														
15500	3217	1285	8.52	1355	10.87	1427	13.34	1493	15.88	1563	18.46	1627	21.13	1690	23.32	1757	26.44	1820	29.09	1881	31.76	1939	34.48	1997	37.26	2052	40.10	2105	42.98														
16000	3320	1322	9.22	1390	11.64	1460	14.16	1524	16.78	1591	19.42	1656	22.14	1717	24.93	1780	27.66	1843	30.38	1903	33.12	1961	35.89	2017	38.72	2073	41.61	2126	44.55														
16500	3424	1359	9.96	1424	12.44	1493	15.02	1556	17.72	1620	20.43	1685	23.20	1744	26.07	1803	28.92	1866	31.72	1926	34.54	1984	37.36	2039	40.24	2093	43.16	2147	46.16														
17000	3528	1396	10.73	1460	13.28	1526	15.93	1588	18.69	1649	21.48	1713	24.31	1772	27.24	1830	30.19	1889	33.09	1949	35.98	2006	38.89	2061	41.81	2115	44.79	2167	47.82														
17500	3632	1434	11.53	1495	14.17	1560	16.88	1621	19.70	1680	22.57	1742	25.47	1801	28.42	1857	31.49	1913	34.51	1972	37.47	2029	40.46	2084	43.45	2137	46.47	2189	49.55														
18000	3736	1472	12.37	1531	15.10	1593	17.88	1654	20.76	1711	23.71	1770	26.67	1830	29.69	1885	32.81	1939	35.94	1995	39.01	2052	42.06	2106	45.14	2159	48.22	2210	51.35														
18500	3839	1509	13.25	1567	16.08	1627	18.92	1687	21.85	1743	24.88	1799	27.92	1858	31.00	1914	34.16	1966	37.39	2019	40.59	2075	43.72	2129	46.87	2182	50.03	2233	53.21														

 Class I Fans.

 Class II Fans.

 Class III Fans.

 Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verant.

**CLUB-3650**  
(BACKWARD CURVED IMPELLER)

CLUB-3650 Catalog Table

Impeller Dia. 37.00 " O.D. Tip Speed (fps) 9.69 * RPM										Inlet Dia. 36 " I.D. Inlet Area 7.07 sq. ft.									
VOL CFM	VEL FPM	1" W.G. BHP	2" W.G. RPM	3" W.G. BHP	4" W.G. RPM	5" W.G. BHP	6" W.G. RPM	7" W.G. BHP	8" W.G. RPM	9" W.G. BHP	10" W.G. RPM	11" W.G. BHP	12" W.G. RPM	13" W.G. BHP	14" W.G. RPM				
6250	878	500	1.35	639	2.71	756	4.28	863	6.06										
7000	983	526	1.57	657	2.99	770	4.64	870	6.46	965	8.47								
7750	1088	551	1.80	676	3.30	785	5.03	882	6.92	972	8.98	1057	11.20	1139	13.57				
8500	1193	577	2.05	697	3.65	803	5.45	897	7.43	983	9.55	1064	11.81	1143	14.23	1219	16.78		
9250	1299	604	2.33	721	4.05	822	5.91	913	7.96	988	10.16	1076	12.49	1151	14.95	1223	17.57		
10000	1404	631	2.64	747	4.49	842	6.41	931	8.54	1013	10.81	1090	13.22	1162	15.75	1231	18.40		
10750	1509	661	2.99	773	4.95	864	6.96	951	9.16	1031	11.51	1106	14.00	1177	16.60	1244	19.32		
11500	1615	694	3.37	798	5.45	889	7.58	971	9.83	1050	12.26	1123	14.82	1192	17.50	1258	20.30		
12250	1720	727	3.78	825	5.97	915	8.24	993	10.55	1069	13.05	1141	15.69	1209	18.45	1273	21.32		
13000	1825	761	4.23	851	6.53	940	8.94	1017	11.35	1090	13.90	1160	16.62	1227	19.45	1290	22.40		
13750	1931	794	4.73	879	7.13	966	9.67	1043	12.22	1112	14.82	1180	17.60	1245	20.51	1308	23.54		
14500	2036	828	5.28	906	7.79	992	10.44	1068	13.12	1136	15.82	1201	18.65	1265	21.63	1326	24.74		
15250	2141	862	5.87	937	8.49	1019	11.23	1094	14.07	1162	16.89	1224	19.77	1286	22.82	1346	25.99		
16000	2247	897	6.52	969	9.25	1046	12.08	1120	15.06	1187	18.01	1248	20.99	1307	24.07	1366	27.32		
16750	2352	931	7.22	1002	10.05	1073	12.99	1146	16.08	1213	19.18	1274	22.28	1331	25.43	1387	28.72		
17500	2457	966	7.97	1036	10.90	1100	13.96	1173	17.14	1239	20.40	1300	23.63	1356	26.88	1410	30.21		
18250	2562	1001	8.77	1070	11.80	1130	14.99	1199	18.25	1265	21.65	1325	25.02	1382	28.41	1434	31.81		
19000	2668	1036	9.64	1103	12.77	1162	16.08	1226	19.44	1291	22.94	1351	26.47	1407	29.99	1459	33.51		
19750	2773	1071	10.58	1137	13.81	1194	17.23	1254	20.69	1317	24.28	1377	27.97	1433	31.61	1485	35.29		
20500	2878	1106	11.58	1171	14.92	1227	18.44	1281	22.01	1344	25.69	1403	29.50	1459	33.31	1511	37.09		
21250	2984	1141	12.65	1205	16.09	1260	19.70	1312	23.41	1371	27.18	1430	31.09	1485	35.05	1536	38.97		
22000	3089	1177	13.79	1239	17.34	1294	21.03	1344	24.88	1399	28.74	1456	32.72	1511	36.33	1562	40.92		
22750	3194	1212	15.02	1274	18.66	1328	22.44	1376	26.41	1426	30.38	1483	34.46	1537	38.67	1588	42.91		
23500	3300	1248	16.32	1308	20.05	1362	23.94	1409	28.01	1456	32.10	1510	36.28	1563	40.56	1614	44.95		
24250	3405	1284	17.67	1343	21.52	1395	25.51	1442	29.68	1488	33.91	1538	38.17	1590	42.54	1641	47.04		
25000	3510	1320	19.07	1378	23.06	1429	27.16	1476	31.41	1520	35.79	1565	40.15	1617	44.62	1667	49.19		
25750	3616	1356	20.55	1413	24.69	1463	28.90	1510	33.22	1552	37.74	1596	42.22	1645	46.78	1694	51.44		
26500	3721	1393	22.11	1448	26.40	1498	30.73	1544	35.15	1585	39.76	1627	44.38	1672	49.03	1721	53.79		
27250	3826	1429	23.74	1483	28.20	1532	32.64	1577	37.16	1619	41.87	1659	46.63	1701	51.37	1748	56.23		
28000	3931	1466	25.46	1518	30.09	1566	34.65	1611	39.27	1653	44.04	1692	48.95	1731	53.82	1776	58.76		

Class I Fans.     Class II Fans.     Class III Fans.     Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

CLUB-4450 Catalog Table

**CLUB-4450**  
 (BACKWARD CURVED IMPELLER)

 Impeller Dia. 45.00 " O.D.  
 Tip Speed (fps) 11.78 \* RPM

 Inlet Dia. 42 " I.D.  
 Inlet Area 9.62 sq. ft.

 Outlet Size 45-1/4" x 33-3/4"  
 Outlet Area 10.61 ft<sup>2</sup>

VOL CFM	VEL FPM	1" W.G.			2" W.G.			3" W.G.			4" W.G.			5" W.G.			6" W.G.			7" W.G.			8" W.G.			9" W.G.			10" W.G.			11" W.G.			12" W.G.			13" W.G.			14" W.G.		
		BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM										
8400	792	371	1.65	495	3.52	599	5.55																																				
9600	905	386	1.92	503	3.87	603	6.14	692	8.47																																		
10800	1018	402	2.22	513	4.26	610	6.69	695	9.28	774	11.89	844	14.62																														
12000	1131	419	2.56	526	4.72	618	7.22	701	10.02	777	12.90	848	15.81	912	18.80																												
13200	1245	437	2.93	541	5.25	628	7.81	709	10.71	783	13.83	851	17.02	916	20.21	977	23.45																										
14400	1358	457	3.33	557	5.81	641	8.49	717	11.45	790	14.71	857	18.13	920	21.60	980	25.08	1038	28.58	1091	32.19																						
15600	1471	479	3.77	573	6.44	656	9.26	728	12.27	798	15.61	864	19.19	926	22.90	985	26.66	1040	30.42	1094	34.20	1146	38.03	1194	41.97																		
16800	1584	500	4.27	590	7.13	671	10.08	742	13.21	808	16.58	872	20.25	933	24.14	991	28.12	1046	32.16	1098	36.22	1149	40.28	1198	44.36	1245	48.53	1290	52.78														
18000	1697	523	4.81	607	7.87	687	10.96	757	14.24	820	17.68	882	21.39	941	25.37	998	29.53	1052	33.80	1103	38.11	1153	42.47	1201	46.81	1248	51.17	1294	55.54														
19200	1810	547	5.40	627	8.64	703	11.92	772	15.33	835	18.89	893	22.65	950	26.68	1006	30.94	1059	35.38	1110	39.93	1159	44.51	1206	49.15	1252	53.78	1297	58.42														
20400	1924	571	6.05	648	9.44	720	12.94	788	16.48	850	20.21	907	24.05	961	28.11	1015	32.43	1067	36.97	1117	41.66	1166	46.50	1212	51.34	1258	56.24	1302	61.19														
21600	2037	596	6.77	669	10.31	737	14.03	804	17.72	865	21.57	922	25.57	974	29.70	1025	34.05	1076	38.64	1125	43.44	1173	48.39	1220	53.51	1264	58.62	1307	63.78														
22800	2150	621	7.55	690	11.26	755	15.17	821	19.06	881	23.02	937	27.17	989	31.42	1038	35.83	1086	40.45	1134	45.31	1182	50.37	1227	55.56	1271	60.91	1314	66.32														
24000	2263	646	8.40	712	12.28	776	16.34	838	20.45	897	24.57	952	28.84	1004	33.26	1052	37.76	1099	42.44	1145	47.32	1191	52.43	1235	57.74	1279	63.16	1321	68.74														
25200	2376	671	9.32	735	13.36	797	17.56	855	21.93	914	26.22	968	30.60	1019	35.16	1068	39.83	1113	44.58	1157	49.51	1201	54.65	1245	60.00	1288	65.55	1329	71.20														
26400	2489	697	10.32	759	14.52	818	18.88	874	23.45	930	27.94	984	32.47	1035	37.14	1083	41.97	1128	46.87	1171	51.87	1213	57.06	1255	62.44	1297	68.01	1338	73.79														
27600	2602	723	11.40	783	15.75	839	20.29	894	25.01	947	29.75	1001	34.46	1051	39.24	1098	44.18	1144	49.27	1186	54.40	1227	59.65	1268	65.03	1308	70.68	1347	76.48														
28800	2716	750	12.57	807	17.06	860	21.78	915	26.63	965	31.63	1018	36.52	1067	41.46	1114	46.51	1159	51.72	1202	57.05	1242	62.41	1281	67.90	1320	73.56																
30000	2829	777	13.82	832	18.46	883	23.36	936	28.35	985	33.55	1035	38.67	1084	43.80	1130	48.97	1174	54.28	1217	59.75	1258	65.32	1296	70.90	1334	76.62																
31200	2942	804	15.16	856	19.96	907	25.02	957	30.18	1005	35.53	1052	40.93	1100	46.21	1146	51.55	1190	56.98	1232	62.56	1273	68.27	1312	74.07	1349	79.88																
32400	3055	831	16.60	881	21.56	930	26.78	978	32.10	1027	37.56	1071	43.21	1117	48.73	1163	54.26	1206	59.82	1248	65.50	1288	71.33	1327	77.28																		
33600	3168	858	18.14	906	23.25	954	28.62	1000	34.12	1047	39.73	1091	45.55	1135	51.35	1180	57.04	1223	62.78	1264	68.59	1304	74.52	1342	80.60																		
34800	3281	885	19.79	931	25.05	979	30.55	1023	36.25	1069	42.01	1112	47.95	1154	54.01	1197	59.93	1240	65.86	1280	71.82	1320	77.87																				
36000	3394	913	21.54	957	26.95	1003	32.59	1046	38.48	1090	44.40	1133	50.45	1174	56.73	1214	62.94	1257	69.03	1297	75.19	1336	81.36																				
37200	3508	940	23.37	983	28.96	1028	34.76	1070	40.80	1111	46.90	1154	53.11	1194	59.51	1233	65.98	1274	72.32	1314	78.64																						
38400	3621	968	25.28	1009	31.09	1053	37.04	1094	43.23	1134	49.52	1175	55.88	1216	62.36	1253	69.09	1291	75.72	1331	82.21																						
39600	3734	995	27.30	1036	33.33	1078	39.43	1118	45.76	1157	52.25	1197	58.77	1237	65.41	1274	72.26	1310	79.14	1348	85.91																						
40800	3847	1023	29.44	1062	35.69	1103	41.95	1143	48.40	1181	55.09	1218	61.78	1258	68.57	1295	75.51	1330	82.64																								
42000	3960	1051	31.69	1089	38.17	1128	44.59	1167	51.20	1204	58.04	1241	64.92	1279	71.87	1316	78.93																										
43200	4073	1079	34.06	1116	40.79	1153	47.37	1192	54.12	1229	61.11	1264	68.18	1300	75.29	1337	82.50																										

 Class I Fans.

 Class II Fans.

 Class III Fans.

 Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verant.

**CLUB-4850 Catalog Table**

**CLUB-4850  
(BACKWARD CURVED IMPELLER)**

Impeller Dia.    49.00 " O.D.  
Tip Speed (fpm) 12.83 \* RPM

Inlet Dia.    48 " I.D.  
Inlet Area    12.57 sq. ft.

Outlet Size    49-3/8" x 36-3/4"  
Outlet Area    12.60 ft<sup>2</sup>

VOL CFM	VEL FPM	1" W.G.		2" W.G.		3" W.G.		4" W.G.		5" W.G.		6" W.G.		7" W.G.		8" W.G.		9" W.G.		10" W.G.		11" W.G.		12" W.G.		13" W.G.		14" W.G.		
		BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM																	
10000	794	341	1.97	455	4.18	550	6.60																							
11500	913	356	2.30	463	4.62	554	7.34	635	10.12																					
13000	1032	371	2.68	472	5.12	561	8.01	639	11.13	711	14.27	775	17.52																	
14500	1151	388	3.11	486	5.71	569	8.68	645	12.04	715	15.52	779	19.02	839	22.60															
16000	1270	406	3.59	501	6.38	579	9.44	653	12.91	720	16.67	783	20.51	842	24.38	898	28.27													
17500	1389	426	4.10	516	7.11	592	10.33	662	13.85	727	17.75	789	21.88	847	26.08	901	30.31	953	34.55	1003	38.87									
19000	1508	446	4.67	532	7.92	607	11.31	673	14.93	736	18.90	796	23.19	853	27.68	906	32.22	957	36.82	1006	41.41	1054	46.02	1098	50.76					
20500	1627	468	5.31	548	8.80	622	12.36	687	16.15	746	20.17	805	24.56	860	29.20	913	34.05	962	38.93	1010	43.89	1057	48.83	1101	53.80	1145	58.78			
22000	1746	491	6.02	566	9.75	638	13.51	702	17.47	759	21.61	814	26.03	868	30.79	919	35.77	969	40.97	1016	46.19	1061	51.49	1105	56.80	1148	62.12	1189	67.45	
23500	1865	514	6.80	585	10.73	654	14.75	717	18.86	774	23.20	826	27.69	877	32.49	928	37.60	976	42.90	1023	48.43	1068	54.00	1111	59.62	1153	65.31	1193	70.98	
25000	1984	538	7.65	606	11.77	670	16.07	732	20.37	789	24.87	840	29.53	889	34.38	937	39.52	985	44.96	1030	50.59	1074	56.42	1117	62.35	1158	68.30	1198	74.31	
26500	2103	562	8.59	626	12.92	687	17.48	748	21.99	803	26.64	855	31.50	903	36.47	949	41.67	994	47.14	1039	52.89	1082	58.82	1124	64.94	1165	71.24			
28000	2222	586	9.62	647	14.16	706	18.93	764	23.71	819	28.53	870	33.55	918	38.74	962	44.02	1005	49.54	1048	55.32	1091	61.37	1132	67.61	1172	74.01			
29500	2341	610	10.75	669	15.49	727	20.43	781	25.52	835	30.55	885	35.71	932	41.08	977	46.56	1019	52.16	1060	58.00	1100	64.07	1141	70.41	1180	76.95			
31000	2460	635	11.98	692	16.92	747	22.05	798	27.42	851	32.69	901	38.02	947	43.53	992	49.22	1033	54.98	1073	60.90	1112	67.03	1151	73.40	1189	80.00			
32500	2579	661	13.31	715	18.44	768	23.79	818	29.36	868	34.93	917	40.47	962	46.12	1006	51.97	1048	57.96	1087	64.02	1125	70.23	1162	76.65	1199	83.29			
34000	2698	686	14.75	739	20.06	788	25.64	838	31.37	884	37.28	933	43.05	978	48.87	1021	54.85	1063	61.02	1102	67.32	1139	73.65	1175	80.15					
35500	2817	712	16.31	763	21.81	810	27.60	859	33.51	903	39.67	949	45.73	994	51.79	1037	57.91	1077	64.21	1117	70.69	1154	77.28	1190	83.89					
37000	2936	738	17.99	787	23.68	833	29.68	879	35.79	923	42.13	966	48.54	1011	54.81	1053	61.14	1093	67.58	1132	74.19	1169	80.97							
38500	3055	765	19.79	811	25.67	856	31.87	900	38.20	944	44.67	985	51.39	1027	57.95	1069	64.52	1109	71.12	1147	77.88	1184	84.80							
40000	3174	791	21.72	835	27.80	879	34.18	921	40.74	964	47.41	1004	54.33	1044	61.24	1085	68.01	1125	74.85	1162	81.75	1199	88.80							
41500	3293	817	23.80	859	30.07	903	36.61	943	43.42	985	50.28	1025	57.34	1062	64.57	1102	71.65	1141	78.71	1178	85.81									
43000	3412	844	26.02	884	32.47	926	39.20	966	46.22	1005	53.29	1045	60.51	1082	67.99	1119	75.42	1157	82.70	1195	90.05									
44500	3531	870	28.32	909	35.02	950	41.94	989	49.16	1026	56.46	1065	63.86	1102	71.49	1138	79.24	1174	86.85											
46600	3651	897	30.75	935	37.72	974	44.84	1012	52.23	1048	59.77	1086	67.37	1123	75.12	1157	83.15	1191	91.11											
47500	3770	924	33.33	961	40.58	998	47.89	1036	55.44	1071	63.23	1107	71.04	1143	78.98	1177	87.15													
49000	3889	951	36.06	986	43.59	1023	51.10	1059	58.82	1094	66.84	1128	74.87	1164	83.00	1198	91.27													
50500	4008	978	38.94	1012	46.77	1047	54.47	1083	62.39	1117	70.59	1150	78.87	1184	87.49															
52000	4127	1005	41.98	1038	50.12	1071	58.03	1107	66.13	1141	74.50	1173	83.02																	
53500	4246	1032	45.18	1065	53.65	1097	61.75	1131	70.05	1164	78.56	1196	87.34																	

Class I Fans.     Class II Fans.     Class III Fans.     Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantus.

## CLUB-5425 Catalog Table

CLUB-5425  
(BACKWARD CURVED IMPELLER)Impeller Dia.  
Tip Speed (fps) 55.00 " O.D.  
14.40 \* RPMInlet Dia.  
Inlet Area 54 " I.D.  
15.90 sq. ft.Outlet Size  
Outlet Area 55-1/4" x 41-1/8"  
15.78 ft<sup>2</sup>

VOL CFM	VEL FPM	1" W.G. BHP	2" W.G. BHP	3" W.G. BHP	4" W.G. BHP	5" W.G. BHP	6" W.G. BHP	7" W.G. BHP	8" W.G. BHP	9" W.G. BHP	10" W.G. BHP	11" W.G. BHP	12" W.G. BHP	13" W.G. BHP	14" W.G. BHP
13000	824	307	2.56	407	5.39	491	8.52	563	11.77						
14750	935	319	2.96	413	5.90	495	9.37	566	12.93	630	16.63				
16500	1046	332	3.41	421	6.49	500	10.15	570	14.09	633	18.08	691	22.19		
18250	1157	345	3.92	433	7.19	507	10.93	575	15.16	637	19.54	694	23.95	747	28.45
20000	1268	360	4.47	445	7.97	515	11.81	581	16.17	641	20.88	697	25.69	750	30.52
21750	1378	377	5.06	457	8.81	526	12.83	588	17.26	647	22.15	702	27.30	754	32.54
23500	1489	393	5.71	470	9.74	538	13.96	597	18.48	654	23.48	708	28.84	758	34.41
25250	1600	411	6.44	484	10.74	550	15.16	608	19.86	662	24.91	714	30.40	764	36.21
27000	1711	429	7.24	498	11.82	563	16.45	620	21.38	672	26.52	722	32.06	770	38.01
28750	1822	448	8.11	513	12.95	576	17.86	633	22.96	683	28.30	731	33.92	778	39.93
30500	1933	468	9.05	530	14.12	589	19.36	645	24.64	696	30.22	742	35.96	786	42.03
32250	2044	487	10.10	547	15.39	603	20.95	658	26.46	708	32.21	754	38.18	797	44.34
34000	2155	507	11.23	564	16.77	618	22.61	671	28.40	720	34.31	766	40.51	808	46.85
35750	2266	527	12.47	581	18.25	634	24.31	685	30.43	733	36.57	778	42.93	821	49.53
37500	2377	547	13.81	600	19.83	651	26.08	698	32.57	746	38.96	791	45.49	833	52.29
39250	2488	568	15.26	619	21.51	667	28.00	713	34.79	760	41.47	804	48.21	845	55.16
41000	2598	589	16.82	638	23.29	684	30.03	729	37.06	773	44.09	817	51.08	858	58.20
42750	2709	610	18.50	657	25.17	701	32.19	746	39.41	787	46.83	830	54.08	871	61.41
44500	2820	632	20.31	677	27.20	719	34.47	763	41.88	803	49.61	844	57.20	884	64.80
46250	2931	653	22.24	697	29.36	738	36.87	780	44.52	819	52.48	858	60.45	898	68.30
48000	3042	675	24.31	716	31.66	757	39.40	797	47.30	836	55.42	873	63.78	911	71.94
49750	3153	697	26.52	736	34.09	776	42.06	814	50.21	853	58.53	889	67.17	925	75.72
51500	3264	718	28.88	756	36.67	795	44.84	832	53.28	870	61.82	905	70.65	939	79.60
53250	3375	740	31.39	777	39.40	815	47.76	850	56.48	887	65.26	922	74.23	955	83.54
55000	3486	762	34.03	797	42.29	835	50.87	869	59.83	904	68.86	939	78.05	972	87.57
56750	3597	784	36.77	818	45.34	854	54.14	888	63.32	921	72.62	956	82.04	989	91.69
58500	3707	806	39.67	839	48.54	874	57.58	908	66.96	940	76.54	973	86.19	1006	96.02
60250	3818	828	42.72	861	51.92	894	61.18	927	70.74	958	80.62	990	90.52	1022	100.57
62000	3929	851	45.93	882	55.47	914	64.96	947	74.73	977	84.86	1008	95.02	1039	105.30
63750	4040	873	49.32	904	59.20	934	68.92	966	78.91	997	89.26	1026	99.70	1056	110.21

 Class I Fans. Class II Fans. Class III Fans. Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

**CLUB-6000 Catalog Table**

**CLUB-6000  
(BACKWARD CURVED IMPELLER)**

Impeller Dia.  
60.75 " O.D.  
Tip Speed (fps) 15.90 \* RPM

60 " I.D.  
19.63 sq. ft.

Inlet Dia.  
19.22 ft<sup>2</sup>  
Outlet Size  
Outlet Area

VOL CFM	VEL FPM	1" W.G.			2" W.G.			3" W.G.			4" W.G.			5" W.G.			6" W.G.			7" W.G.			8" W.G.			9" W.G.			10" W.G.			11" W.G.			12" W.G.			13" W.G.			14" W.G.		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
15750	819	277	3.10	368	6.54	444	10.33																																				
18000	936	289	3.61	374	7.21	448	11.43	513	15.78	571	20.29																																
20250	1054	301	4.19	382	7.96	453	12.43	516	17.27	573	22.16	626	27.19																														
22500	1171	314	4.85	393	8.87	459	13.45	521	18.63	577	24.02	628	29.46	677	34.98																												
24750	1288	328	5.57	405	9.88	468	14.60	527	19.94	582	25.74	632	31.67	679	37.65	725	43.66	766	49.87																								
27000	1405	344	6.33	417	10.98	478	15.94	534	21.36	587	27.36	637	33.73	683	40.20	727	46.72	769	53.26	809	59.91	847	66.74																				
29250	1522	360	7.20	429	12.20	490	17.42	543	22.98	594	29.09	642	35.68	688	42.59	731	49.59	772	56.66	811	63.73	850	70.82	886	78.10	920	85.53																
31500	1639	377	8.16	442	13.52	502	18.99	554	24.81	602	31.00	649	37.73	693	44.87	736	52.32	776	59.82	815	67.44	852	75.04	888	82.67	924	90.32	957	98.21														
33750	1756	395	9.22	456	14.94	514	20.71	566	26.80	612	33.15	656	39.95	700	47.26	741	54.91	782	62.89	819	70.90	856	79.03	891	87.18	926	95.34	959	103.51														
36000	1873	414	10.38	471	16.41	527	22.57	577	28.88	624	35.53	666	42.43	707	49.79	748	57.64	787	65.78	825	74.28	861	82.80	896	91.42	929	100.14	962	108.82														
38250	1990	432	11.65	487	17.96	540	24.55	589	31.12	635	38.03	677	45.16	716	52.62	755	60.51	794	68.87	830	77.49	866	86.45	901	95.52	934	104.63	966	113.84														
40500	2107	451	13.05	503	19.67	553	26.65	602	33.54	647	40.66	689	48.11	727	55.72	764	63.70	801	72.10	837	80.94	872	90.03	906	99.43	939	109.05																
42750	2224	470	14.59	520	21.52	568	28.81	615	36.11	659	43.48	700	51.16	739	59.09	775	67.19	810	75.67	844	84.54	879	93.84	912	103.40	944	113.22																
45000	2341	489	16.26	537	23.50	584	31.05	628	38.81	672	46.49	712	54.38	750	62.59	786	70.96	820	79.55	853	88.51	886	97.84	919	107.57	951	117.59																
47250	2458	509	18.03	555	25.61	600	33.45	641	41.64	684	49.67	724	57.81	762	66.24	798	74.93	831	83.74	863	92.80	895	102.22	927	111.99	958	122.14																
49500	2575	529	20.05	573	27.87	616	36.02	656	44.53	697	52.99	737	61.45	774	70.08	809	79.03	843	88.19	874	97.42	905	106.95	936	116.80	966	126.99																
51750	2692	549	22.17	592	30.26	632	38.76	672	47.53	710	56.49	750	65.28	786	74.17	821	83.30	855	92.73	886	102.35	916	112.01	946	121.97																		
54000	2809	569	24.47	610	32.84	649	41.67	689	50.67	725	60.06	762	69.25	799	78.48	833	87.84	866	97.47	898	107.36	928	117.41	957	127.50																		
56250	2926	590	26.93	629	35.60	667	44.74	705	54.05	740	63.73	775	73.42	812	82.97	846	92.61	878	102.45	910	112.57	940	122.90	969	133.37																		
58500	3043	610	29.58	648	38.54	685	47.98	721	57.60	756	67.51	790	77.69	825	87.64	858	97.63	890	107.69	921	118.00	951	128.59																				
60750	3161	631	32.42	667	41.67	703	51.39	737	61.36	772	71.51	805	82.06	838	92.50	871	102.81	903	113.20	934	123.73	963	134.49																				
63000	3278	652	35.47	686	45.00	722	54.98	754	65.30	788	75.74	821	86.54	852	97.49	884	108.19	916	118.94	946	129.72																						
65550	3395	673	38.72	705	48.53	740	58.77	772	69.44	805	80.19	837	91.17	867	102.56	897	113.79	929	124.84	959	136.00																						
67500	3512	694	42.13	725	52.28	759	62.80	790	73.77	821	84.85	853	96.12	883	107.77	911	119.49	942	130.97																								
69750	3629	715	45.69	745	56.24	778	67.04	809	78.30	838	89.73	869	101.29	899	113.10	927	125.30	955	137.33																								
72000	3746	736	49.47	766	60.42	797	71.52	827	83.03	856	94.83	885	106.69	915	118.76	942	131.24																										
74250	3863	757	53.46	786	64.83	816	76.22	846	87.96	874	100.14	902	112.32	931	124.68	959	137.31																										
76500	3980	778	57.68	806	69.48	835	81.17	864	93.20	892	105.67	919	118.20	947	130.85																												
78750	4097	799	62.12	827	74.38	854	86.37	883	98.68	910	111.41	936	124.31	963	137.27																												
81000	4214	821	66.81	847	79.53	874	91.82	902	104.41	929	117.39	954	130.66																														

Class I Fans.

Class II Fans.

Class III Fans.

Class IV Fans.

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

CLUB-7300 Catalog Table

**CLUB-7300**  
 (BACKWARD CURVED IMPELLER)

 Impeller Dia. 74.00 " O.D.  
 Tip Speed (fpm) 19.37 \* RPM  
 Inlet Dia. 72 " I.D.  
 Inlet Area 28.27 sq. ft.

VOL CFM	VEL FPM	1" W.G.		2" W.G.		3" W.G.		4" W.G.		5" W.G.		6" W.G.		7" W.G.		8" W.G.		9" W.G.		10" W.G.		11" W.G.		12" W.G.		13" W.G.		14" W.G.		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
24000	842	229	4.74	303	9.89	365	15.65																							
27000	948	238	5.43	308	10.78	368	17.09	421	23.62	469	30.34	512	37.39																	
30000	1053	247	6.21	314	11.80	372	18.42	424	25.59	471	32.84	514	40.30	553	48.05															
33000	1158	256	7.08	321	13.00	377	19.77	427	27.42	473	35.34	516	43.32	555	51.46	592	59.91													
36000	1264	267	8.03	330	14.32	382	21.27	431	29.15	476	37.64	518	46.31	557	55.01	594	63.82	629	72.94											
39000	1369	278	9.02	339	15.75	390	22.99	436	31.00	480	39.83	521	49.08	560	58.49	596	67.91	631	77.37	663	87.15									
42000	1474	290	10.13	348	17.32	398	24.92	442	33.06	485	42.08	525	51.74	563	61.72	599	71.85	633	81.99	665	92.16	697	102.52							
45000	1580	302	11.35	357	19.03	407	26.94	450	35.37	490	44.48	530	54.38	567	64.85	602	75.53	635	86.37	667	97.23	698	108.12	729	119.05	757	130.30	784		
48000	1685	315	12.69	367	20.85	416	29.11	459	37.92	497	47.16	535	57.18	571	67.88	606	79.11	639	90.49	670	102.02	701	113.63	730	125.23	759	136.86	787		
51000	1790	328	14.14	378	22.75	425	31.47	467	40.60	505	50.13	541	60.25	576	71.11	610	82.56	643	94.51	674	106.59	704	118.81	733	131.16	761	143.46	788		
54000	1896	342	15.72	389	24.73	434	33.99	476	43.41	514	53.36	548	63.64	582	74.58	615	86.24	647	98.38	678	111.02	707	123.83	736	136.72	764	149.77	790		
57000	2001	356	17.43	401	26.84	444	36.64	485	46.43	522	56.71	556	67.32	589	78.40	621	90.12	652	102.53	682	115.35	711	128.64	740	142.17	767	155.73	793		
60000	2106	370	19.31	413	29.12	453	39.45	494	49.66	531	60.22	565	71.27	597	82.54	627	94.38	657	106.84	687	119.95	716	133.43	744	147.37	771	161.63			
63000	2211	384	21.34	425	31.56	464	42.32	503	53.07	540	63.95	574	75.32	605	87.01	635	99.00	664	111.56	692	124.72	721	138.51	748	152.63	775	167.18			
66000	2317	398	23.53	437	34.17	476	45.30	513	56.64	549	67.92	582	79.56	614	91.66	643	103.96	671	116.67	699	129.92	726	143.75	753	158.18	779	172.94			
69000	2422	412	25.90	451	36.94	488	48.41	523	60.38	558	72.12	591	84.05	622	96.46	652	109.23	679	122.14	706	135.53	732	149.45	758	163.93	784	178.97			
72000	2527	427	28.45	464	39.88	500	51.76	533	64.20	568	76.46	600	88.79	631	101.47	660	114.59	688	127.97	714	141.53	739	155.58	765	170.14	790	185.23			
75000	2633	442	31.18	478	42.98	512	55.31	545	68.13	577	81.01	610	93.80	640	106.76	669	120.17	696	133.96	722	147.90	747	162.12	772	176.81					
78000	2738	457	34.11	491	46.25	524	59.05	557	72.17	587	85.73	619	98.97	649	112.33	678	126.01	705	140.12	731	154.54	756	169.05	780	183.90					
81000	2843	472	37.24	505	49.77	537	63.00	569	76.48	598	90.53	629	104.35	659	118.18	687	132.15	714	146.52	740	161.29	764	176.33	788	191.41					
84000	2949	487	40.58	519	53.50	550	67.14	581	81.02	610	95.45	638	109.96	668	124.21	696	138.58	722	153.24	748	168.30	773	183.69							
87000	3054	502	44.14	533	57.45	563	71.49	592	85.79	622	100.50	649	115.66	678	130.46	705	145.32	732	160.27	757	175.59	782	191.30							
90000	3159	517	47.93	547	61.63	576	76.04	604	90.80	634	105.84	660	121.48	687	136.95	715	152.22	741	167.61	766	183.22	790	199.18							
93000	3265	533	51.96	561	66.04	590	80.79	617	96.04	645	111.47	672	127.44	697	143.59	724	159.37	750	175.25	775	191.18									
96000	3370	548	56.24	575	70.70	604	85.78	630	101.51	657	117.34	684	133.54	709	150.32	734	166.78	760	183.07	785	199.48									
99000	3475	563	60.74	590	75.61	618	91.07	644	107.21	669	123.47	696	140.04	720	157.21	744	174.36	769	191.15	794	208.03									
102000	3580	579	65.39	605	80.77	632	96.62	657	113.14	682	129.86	707	146.81	732	164.25	755	182.03	779	199.51											
105000	3686	595	70.29	619	86.20	646	102.43	671	119.31	695	136.51	719	153.86	744	171.54	767	189.86	789	208.04											
108000	3791	610	75.44	634	91.90	660	108.52	684	125.72	708	143.42	731	161.18	756	179.25	778	197.86													
111000	3896	626	80.85	649	97.87	674	114.89	698	132.41	721	150.59	744	168.80	767	187.24	790	206.01													

 Class I Fans     Class II Fans     Class III Fans     Class IV Fans

Power rating (watts, kW, or BHP) does not include transmission losses.

Performance ratings do not include the effects of appurtenances (accessories).

For static pressure greater than 14", contact Verantis.

# How to Specify FRP Fans

The following construction details can be used as a guide when writing specifications which demand the highest quality equipment. These specifications are in compliance with accepted design standards.

Fan performance to be certified by the manufacturer that it meets AMCA Standards Handbook 99, Test Code for Air Moving Devices 210 and Certified Ratings Program for Air Moving Devices 211.

## Design Criteria Sizing

Axial and centrifugal fans shall be sized so an increase in speed of 10% will not exceed the maximum RPM of that class of fan.

## Performance and Sound Data Provided.

- Design RPM
- Max RPM
- Static Efficiency
- Overall Sound
- Sound Power
- Fan Performance Curve
- Static Efficiency Curve
- Horse Power Curve

## Rating.

The size and the capacity rating for each fan quoted shall be furnished.

## Laminate.

Fan housings shall be constructed of a FRP laminate consisting of an appropriate fire-retardant resin and the proper fiberglass or synthetic reinforcement capable of resisting continuous fume temperatures of 180°F for standard resins. Other options available up to 230°F.

The fire-retardant qualities which equal or exceed the ASTME-84 Tunnel Test Rating of less than 25. For optimum structural integrity, the impeller shall be constructed of vinyl ester resin.

All interior surfaces exposed to the corrosive air stream shall be resin rich and contain not more than 20% of the appropriate surface veil, such as "C" grade fiberglass veil for most service conditions and Nexus surface veil when fluorides are present.

All surfaces exposed to the atmosphere shall be resin rich of a paraffinized resin stabilized against ultraviolet degradation and include a reinforcement not to exceed more than 20% of "C" grade fiberglass, to serve as protection against weathering, fumes, spillage and ultraviolet attack.

Immediately beneath the surfacing veil of the interior and exterior surfaces, the laminate shall be layers of chopped strand mat of Type E glass.

When conductivity is required, the interior of the fan housing and the impeller shall have a carbon gel coat that has a surface conductivity range of 0-30,000 ohms resistance. A grounding lug shall be provided to facilitate the discharging of static electricity to an external ground.

## Metal Parts.

No metal parts shall be exposed to the corrosive air stream.

## Shaft.

The shaft shall be of such design and size so as to operate below its first critical speed.

## Bearings.

Fan to be equipped with heavy-duty bearings, rated for a L-10 life of 100,000 hours, grease packed and sealed against dust and moisture.

## Belt drives.

Fan to be equipped with belt drives using matched "deep V" type V-belts sized to handle 1.5 times the rated brake horsepower of the fan motor and incorporating industrial type companion sheaves.

## Balancing.

Fan shall be statically and dynamically balanced at its rated operating speed and a certificate of compliance supplied at the time of delivery.

## Guards & Canopies.

Provide OSHA approved FRP belt, shaft, and bearing guards, properly ventilated for drive belt and bearing cooling for Arrangement 9. Provide OSHA approved one piece FRP Canopy for Arrangement 10. FRP guards to be supplied with UV resistant top coat.

## Impeller.

The fan impeller shall be constructed of premium-grade vinyl ester resin in accordance with ASTM D4167 and the laminate shall meet or exceed the requirements for defects per ASTM D2563 Level II. Customer inspections are available to ensure compliance. The fan impellers shall be made using a non-fire retardant vinyl ester resin chosen for strength characteristics. Resin for the fan impellers is to be DION 9800 or approved equal. Steel impeller hub shall be encapsulated in FRP to ensure corrosion resistant integrity and constructed so that the shaft remains outside of the airstream. Metal-constructed impellers coated with FRP, or impellers permanently bonded to shaft are not acceptable.

## Hardware.

- All hardware to be Type 316 Stainless Steel.

## Contact Verantis

For more information about incineration systems and thermal treatment technologies that can meet all your waste processing needs.



[www.verantis.com](http://www.verantis.com)  
[sales@verantis.com](mailto:sales@verantis.com)