

swam

•Innovation •Technology •Excellence

ROTARY

TRI-LOBE BLOWERS COMPRESSORS

For positive & negative conveying,
boosting & exhausting of air & neutral
gases

Advance Technology Next Generation Axcel TR Series



Durable

Cost Effective

Energy Efficient



Bulletin SP-22



ISO 9001
ISO 14001
OHSAS 18001

SWAM a leader in Rotary Blower technology, has during its nearly four decades of experience in design & manufacturing of blowers has acquired exceptional product development capabilities to meet the stringent quality and performance requirements and to conform to the customer's tough & diversified specification. Emphasis has been on innovative design, precision engineering and responsiveness to customers.

Swam, thus offers its advance technology next generation Axcel TR-series blowers; equipped with latest features, enabling it more reliable, energy efficient and lower maintenance.

Blowers are ruggedly built with appropriate Rotor shaft design, aiming at low deflection & critical consideration. The rotors are supported on heavy duty antifriction oil lubricated bearings. The Rotor profile of Axcel Series are computer generated enabling better uniform clearances and higher volumetric efficiencies.

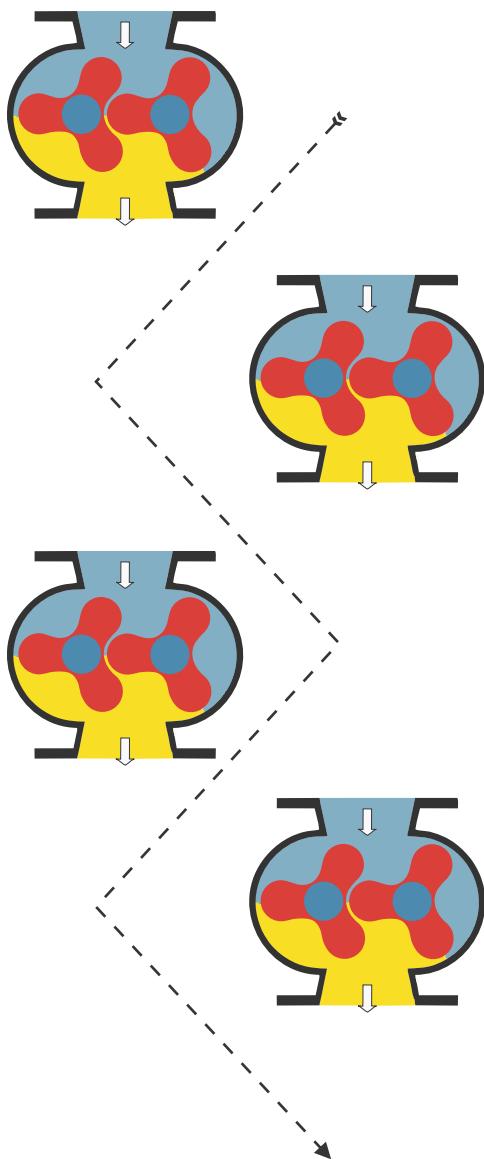
The blowers have very high accuracies and manufactured on CNC machines. The blowers are available for flows upto 80000 m /hr. and pressure upto 1.10 kg /cm² in single stage.

The blowers are suitable for continuous operation to work as compressors or as exhausters.

ADVANCE MANUFACTURING SYSTEM

Swam has the most advance manufacturing system with a large number of CNC Machines installed in our four plants. The blowers are manufactured with most optimum profile resulting higher efficiencies, high displacement, lower slippage. Thus these are more energy efficient blowers compared to any other.





WORKING PRINCIPLE

The working principle of Tri-lobe blowers is similar to that of Twin-lobe type. The rotors, move opposite each other, maintaining fine clearances, in perfect synchronization through a set of precision timing gears.

As the rotation proceeds, the trapped gas moves along until it reaches the discharge port raising its pressure against the system resistance. The precise clearances within the blower-makes possible the rise in pressure with least internal slip loss. The delivery is non-pulsating smooth and with lower sound emission.

FOCUS ON QUALITY & RELIABILITY

Emphasis on quality & performance is a commitment of every individual at SWAM beginning at grass root level.

The quality control is practiced at all levels of the organization and all its aspects are thoroughly complied with the specified standard and specification, till the product gets delivered.

The quality assurance system encompasses self quality control by each worker, supervised by quality control engineers. Each blower undergoes thorough & stringent tests at different stages of manufacturing and are test run for several hours prior to despatch as per the relevant code, customers' specification & approved quality plan.

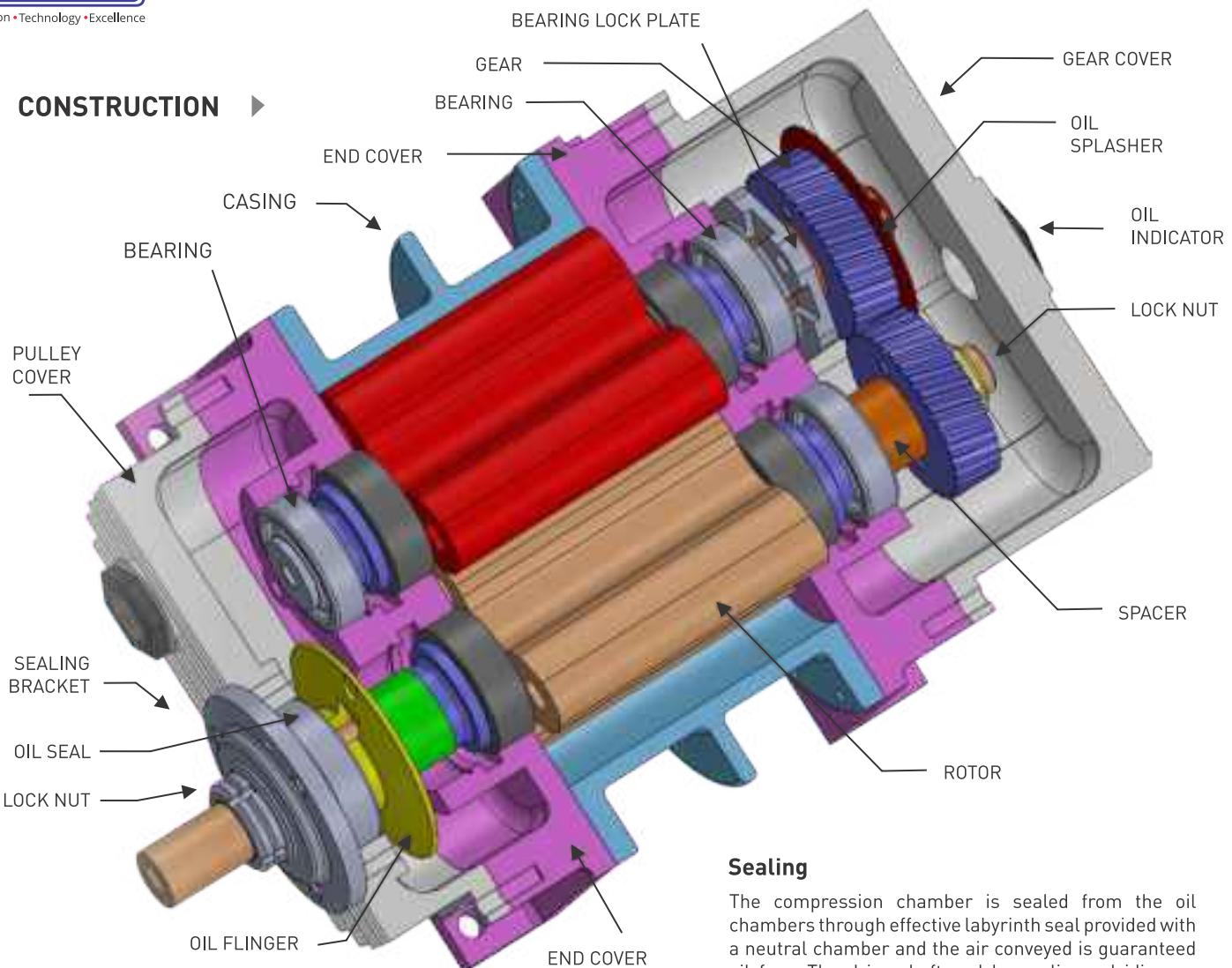
These functions are carried out by our team of dedicated, qualified & experienced engineers.

In pursuit and in recognition there of, our products are accredited to ISO 9001:2008 certification. Our blowers comply to European standard of machinery directives and are CE certified.



◀ 28000 cmh Blower for
Steel / Metallurgical
Industry

CONSTRUCTION ▶



Casing

It is a one piece Integral Grey or Ductile Cast Iron or Cast Steel casting.

The surface of casing is adequately ribbed for strengthening against distortion on high loads. Selective models have sound attenuating chambers on discharge. The suction flange is on the top and discharge is either at bottom or on the side.

Lubrication

There is an effective OIL splash lubrication for gears and bearings. This arrangement is for all blowers. However, for certain specific applications the blowers are provided with forced lubrication (L). For blowers operating at low temperature heating arrangement is provided.

Rotors

Each rotor has 3-lobes of computer generated profile optimizing volumetric efficiency.

The lobes are generally of fine grain Grey Cast or Ductile Iron and has pressed in steel shafts. The lobe materials can also be SS or AL depending on the process requirement. The ends of lobes are plugged; when handling dust laden air.

The rotors of smaller blowers can be out of forged steel with integral shaft. The rotors are dynamically balanced to very fine grade of 2.5 of ISO-1940.

Sealing

The compression chamber is sealed from the oil chambers through effective labyrinth seal provided with a neutral chamber and the air conveyed is guaranteed oil free. The drive shaft end has a lip seal riding on hardened and replaceable sleeve.

For conveying gases the seal can be mechanical (M) or gland packed type (P).

Timing Gears

The timing gears are hardened and ground, heavy-duty helical design to withstand wear. Fixing to the shaft is through press on tapers under high oil pressure.

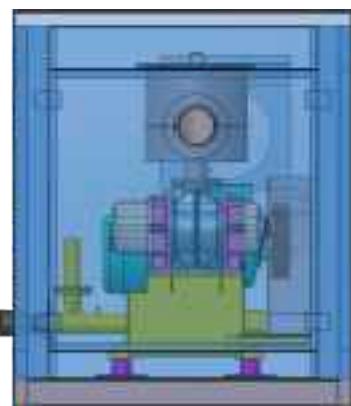
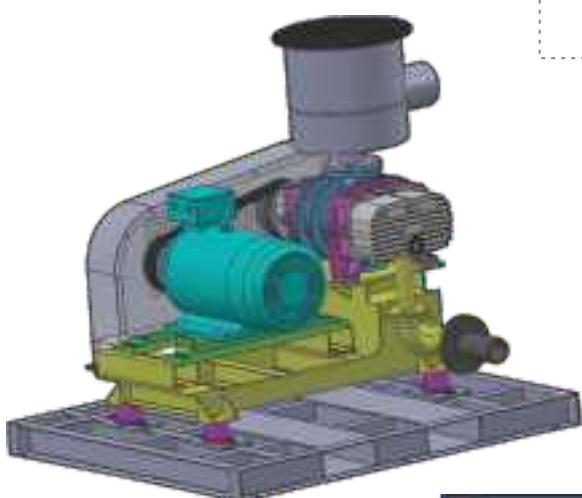


BLOWER PACKAGES ▶

Standard execution:

The standard blower unit consists of

- ◆ Common skid for blower and motor.
- ◆ V-belts and pulleys of flexible coupling
- ◆ with protection guard.
- ◆ Pressure relief valve.
- ◆ Non return check valve
- ◆ Suction Filter.
- ◆ Suction and discharge silencers.
- ◆ Vibration isolators.
- ◆ Pressure gauge with isolation valve.



Optional Accessories:

- ◆ Acoustic enclosure.
- ◆ Blow off control valve with silencer.
- ◆ Special instrumentation for monitoring, temperature, pressure & vibration.
- ◆ Heat exchanger-pre, inter or after cooler.
- ◆ Pressurized lubrication.
- ◆ Automatic unloading device (no load starting).
- ◆ Water injection system.
- ◆ Instrument control panel with alarm annunciations.
- ◆ Flow controller.
- ◆ Gear box drive.
- ◆ Variable Frequency Drive

PERFORMANCE TESTING ►

The performance testing of blowers is carried out for several hours at the rated conditions at the shop prior to dispatch as per the standard test procedure. Swam has the biggest shop test facilities with testing up to 1200 HP with voltages 415V, 690V & 6.6 kv/6600V.

During testing the various aspects are checked, such as rated flow, discharge pressure, absorbed power, vibration, noise and outlet temperature etc. as per the approved quality plan.

Each blower dispatched, carries a FACTORY TEST REPORT and a Guarantee Certificate.

Process Air Blower-30000 cmh,
Pressure of 0.76 Bar driven ▶
by 900 kw motor



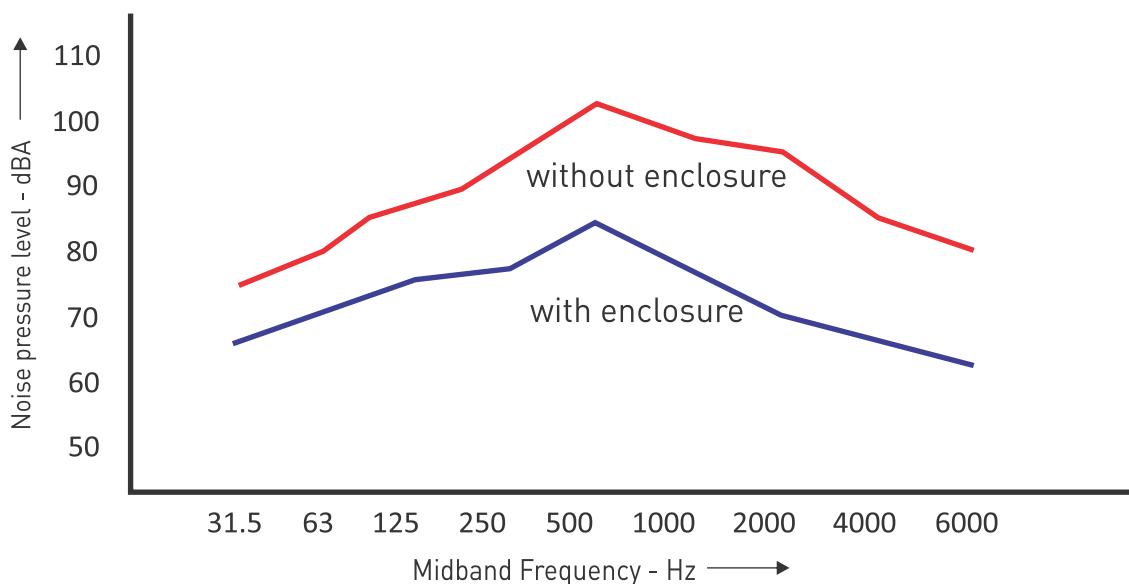
High Suction Pressure Blowers ►

The blowers for high suction pressure (H) are mechanically designed for withstanding such pressure and are provided with special seals and with force/external lubrication (L) system and bearing oil temperature and vibration monitoring system.



Blower of capacity 24,000 cmh, ▶
at Pressure of 1.1 Bar

NOISE CHARACTERISTICS ►



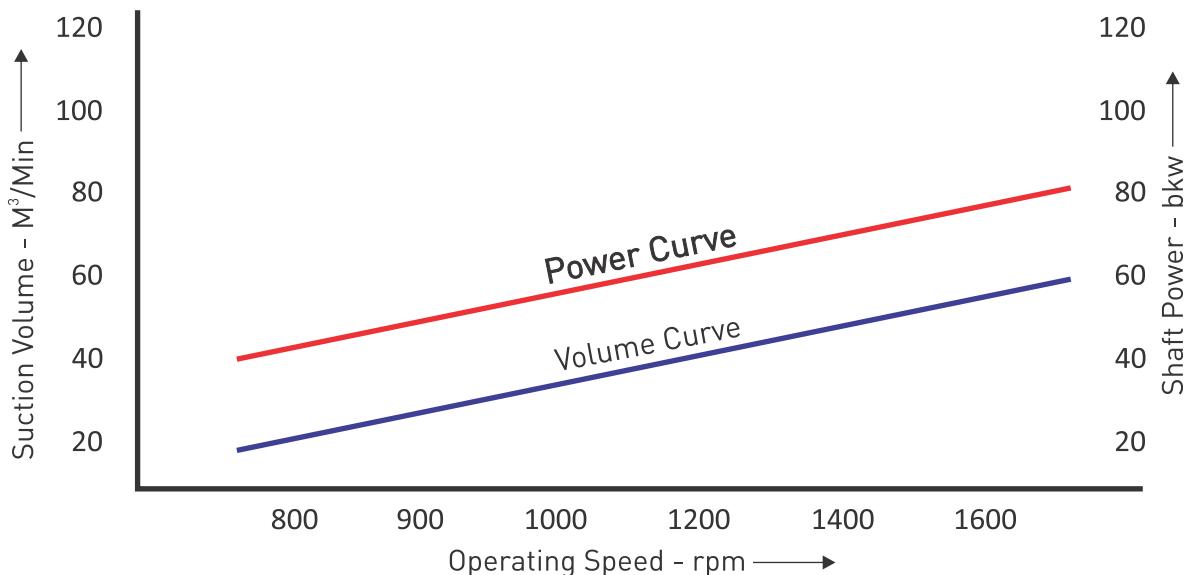
The noise characteristic of a specific model of 26500 M³/hr. at a gauge pressure of 0.7kg/cm²g operating at 1000 rpm.

The Rotary machines generate high pitch sound due to its operational characteristic. This, however, depends on operating speed, differential pressure and on rotor geometry.

It can be reduced by using absorptive or reactive silencers, at the suction and discharge of the blower.

There is, however, limitation to the sound reduction by mere use of silencers. Sound proof acoustic enclosures are, used for further reduction upto 25 dBA.

AIR FLOW REGULATION AT CONSTANT DISCHARGE PRESSURE ►



Performance characteristic of a specific model operating at 0.7kg/cm²g gauge pressure

For regulating the flow of air at a constant discharge pressure either of the following methods can be adopted:

- Blower operates at constant speed and the excess air vented or by-passed through a manually operated or an automatic pneumatic operated valve.
- By regulating blower speed through a variable frequency drive or by using a dual speed motor.

By FIRST method the energy absorbed by the blower remains constant, where as in SECOND method it reduces in proportion to the air delivered.

SILENCE FLO BLOWERS ▶

The package consists of blower unit placed within a suitably designed sound proof housing. The noise level for such packaged blower is achievable below 85 dBA or as per customer requirement. The enclosures are provided with suitable ventilation system.



PROCESS GAS BLOWERS ▶

The blowers are available in a wide range for handling different types of gases like Hydrogen, Hydrocarbon, Carbon Monoxide, Carbon Dioxide, Sulphur Dioxide, H₂S, Oxygen, Mixed gas, Coke Oven gas, Seal gas, Nitrogen, Helium & other radioactive etc.

The gas blowers are of unique design with different material of construction ranging from Alloy Cast Iron, Cast Steel, Aluminum, Phosphorus, Bronze, Stainless steel, Nickel alloy etc and provided with special sealing system.

- To have provision for water injection for cooling the suction gas and for removal of dust.
- The oil chambers are completely separated from the compression chambers through air space open to atmosphere.
- The compression chamber is sealed through gland pack or mechanical seals (M).
- Large capacity blowers are provided with integral inbuilt pulsation dampener at discharge.
- Steam injection or purging facility is also provided depending upon application.
- The process gas blowers/ booster of SWAM comply to the highest quality standards and are even ATEX certified & CE certified.

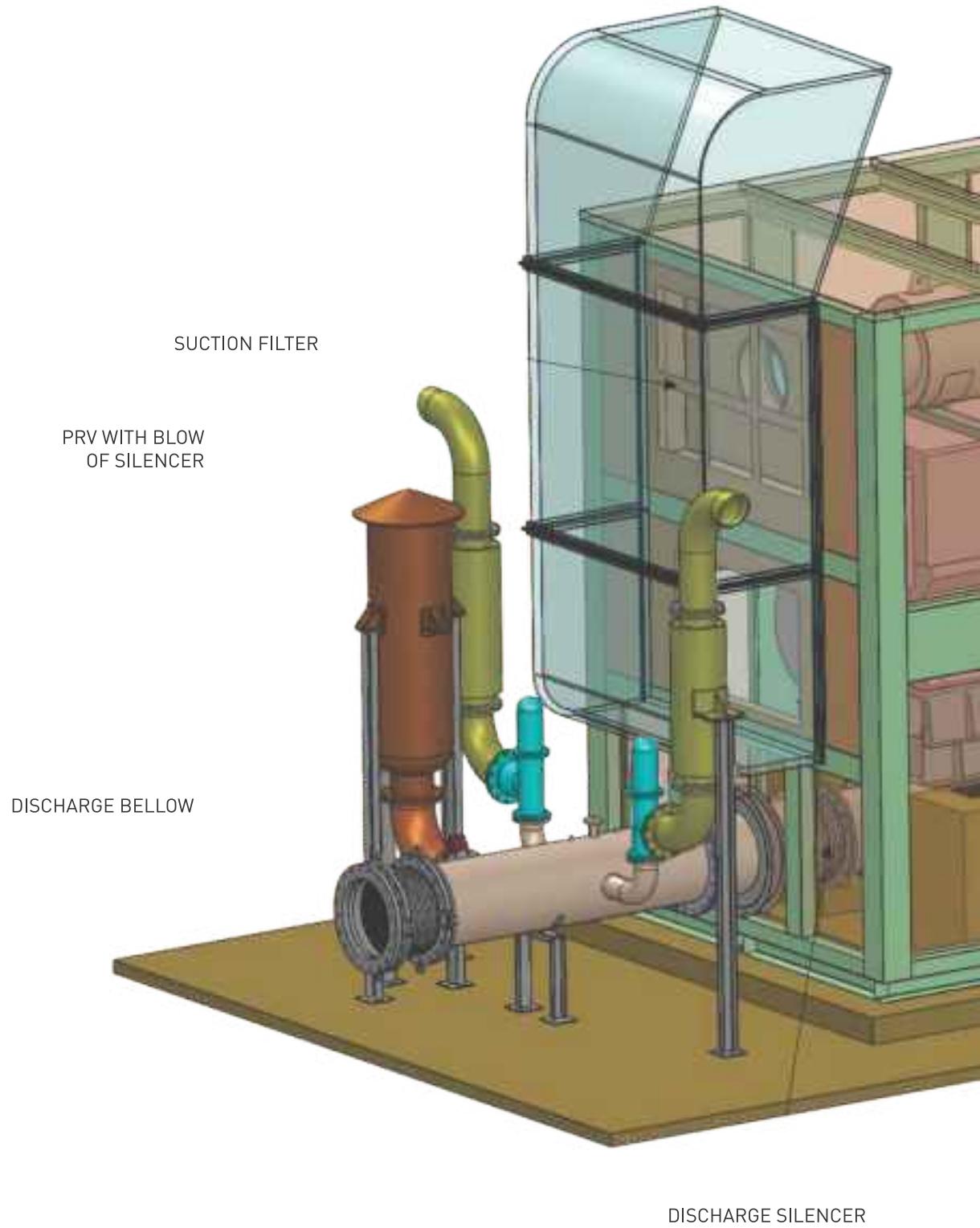


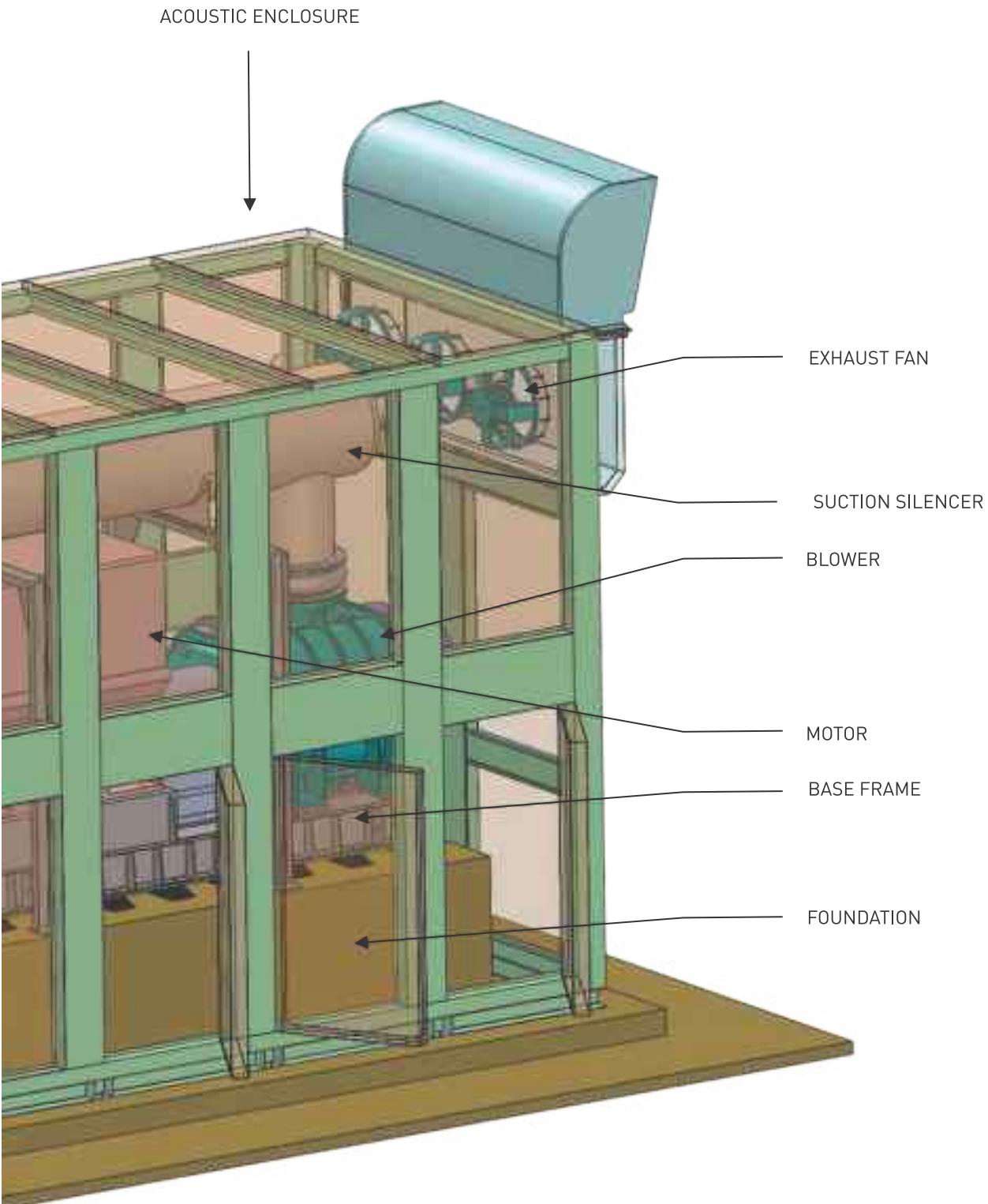


CERTIFICATIONS



Complete 3D model of Swam 30,000 m³/hr Tri-lobe blower package





PERFORMANCE TABLE FOR AXCEL TR SERIES BLOWERS



FLOW RATE - FAD M³/Hr. at Suction Conditions : Pressure - 760 mm hg. Temperature - 20°C

PERFORMANCE DATA FOR HANDLING AIR AT POSITIVE PRESSURE

PRESSURE mmwg		1000		2000		3000		4000		5000		6000		7000		8000		9000		10000	
Model	Speed	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW										
RH-45TR	2900	458	1.50	439	3.0	423	4.5	410	6.0	396	7.5	382	9.0	370	10.5	357	12.0	346	13.5	335	15.0
	2000	298	0.95	279	1.9	261	2.90	242	3.85	228	4.8	214	5.75	202	6.7	189	7.65	177	8.55	165	9.65
	1450	200	0.68	181	1.36	162	2.04	145	2.72	138	3.4	117	4.10	--	--	--	--	--	--	--	--
RM-70TR	2900	653	1.90	625	3.8	606	5.7	591	7.6	577	9.5	564	11.4	525	13.4	--	--	--	--	--	--
	2000	425	1.30	399	2.6	379	3.9	365	5.2	351	6.5	337	7.8	323	9.1	--	--	--	--	--	--
	1450	286	1.00	260	2.0	240	3.0	224	4.0	212	5.0	199	6.0	180	7.0	--	--	--	--	--	--
RH-80TR	2900	1019	3.00	980	6.0	950	8.9	926	11.9	905	14.8	886	17.8	870	20.7	853	23.7	837	26.7	821	29.6
	2000	711	2.20	673	4.4	642	6.6	618	8.8	597	11.0	578	13.2	562	15.4	546	17.6	529	19.8	512	22.0
	1450	523	1.60	484	3.2	454	4.8	430	6.4	409	8.0	390	9.6	373	11.2	357	12.8	--	--	--	--
RM-100TR	2900	1611	4.50	1562	9.0	1523	13.5	1491	18.0	1460	22.5	1433	27.0	1411	31.5	--	--	--	--	--	--
	2000	1094	3.15	1043	6.3	1005	9.5	972	12.6	942	15.6	915	18.6	893	21.8	--	--	--	--	--	--
	1450	806	2.30	723	4.6	718	6.9	684	9.2	655	11.5	627	13.9	--	--	--	--	--	--	--	--
RL-110TR	2900	1933	5.40	1874	10.80	1827	16.20	1789	19.60	1752	27.00	1779	32.40	--	--	--	--	--	--	--	--
	1800	1200	3.78	1150	7.60	1203	11.40	1056	15.10	1009	18.70	962	2230	--	--	--	--	--	--	--	--
	1450	967	2.76	920	7.60	873	8.30	826	11.20	779	13.80	732	16.50	--	--	--	--	--	--	--	--
RH-120TR	2900	2315	6.30	2243	12.5	2188	18.8	2145	25.1	2106	31.4	2072	37.6	2054	43.3	2018	50.2	1996	56.4	1974	62.7
	1800	1378	3.90	1319	7.8	1273	11.8	1233	15.7	1201	19.6	1170	23.5	1143	27.4	1119	31.4	1101	35.3	1072	39.2
	1450	1080	3.10	1020	6.2	974	9.3	936	12.4	903	15.5	873	18.6	845	21.7	821	24.8	798	27.9	775	31
RM-180TR	2900	3164	8.20	3080	16.4	2996	24.6	2916	32.8	2945	41.0	2066	49.2	2039	57.4	2012	65.6	1988	73.8	--	--
	2200	2534	4.55	2450	9.1	2396	13.6	2349	18.2	2311	22.7	2277	27.3	2248	31.8	2219	36.7	2190	40.9	--	--
	1450	1640	4.50	1557	9.0	1507	13.5	1450	18.0	1416	22.5	1383	27.0	1353	31.5	1324	36.0	--	--	--	--
RH-200TR	2900	4586	13.10	4503	26.2	4437	39.3	4381	52.4	4338	66.5	4299	78.6	4260	92.0	4228	1104.8	4201	117.9	4199	131.0
	1800	2878	7.90	2795	15.8	2725	23.7	2673	31.6	2629	39.5	2590	47.4	2550	55.3	2511	63.2	2475	71.1	2443	79.0
	1460	2260	6.50	2361	13.0	2111	19.5	2055	26.0	2011	32.4	1972	39.0	1933	45.5	18940	52.0	1858	58.5	--	--
RM-290TR	2000	3958	11.00	3848	22.0	3765	33.0	3693	44.0	3643	55.0	3048	66.0	3010	77.0	2971	88.0	2944	99.0	--	--
	1460	3243	9.20	3133	18.8	3050	27.6	2978	36.8	2918	46.0	2865	55.2	2816	64.4	2766	73.6	2722	82.8	--	--
	1200	2608	7.30	2498	14.6	2416	21.9	2346	29.2	2283	36.5	2230	43.8	2180	51.1	2131	58.4	2080	65.7	--	--
RL-300TR	1460	4185	12.30	4137	26.6	4089	36.9	4041	29.2	3993	61.5	3949	73.8	--	--	--	--	--	--	--	--
	1200	3536	10.50	3486	21.0	3436	31.5	3386	42.0	3336	52.5	3286	63.0	--	--	--	--	--	--	--	--
	985	2904	8.60	2855	17.2	2806	25.2	2757	33.6	2708	41.8	2659	50.0	--	--	--	--	--	--	--	--



WIDE SELECTION: The blowers are available in many size covering are and water cooled versions suiting specific application. The sealing system, can be standard or mechanical (M) or gland packed (P) seal depending on system requirement and on customer choice.

The suffixes used indicate: G - Gas duty WI - Water Injection M - Mechanical Seal
 V - Vacuum Application L - Force Lubrication WC - Water Cooled
 P - Grand Packed H - High Inlet Pressure L - Lube Oil Cooling

To illustrate : Model : Model : RH320 WCGML = Gas duty blower model Rh320, water cooled, fitted with mechanical seal and with force lubrication.

PERFORMANCE TABLE FOR AXCEL TR SERIES BLOWERS ▶

FLOW RATE - FAD M³/Hr. at Suction Conditions : Pressure - 760 mm hg. Temperature - 20°C

PERFORMANCE DATA FOR HANDLING AIR AT POSITIVE PRESSURE

PRESSURE mmwg		1000		2000		3000		4000		5000		6000		7000		8000		9000		10000	
Model	Speed	FAD	KW																		
RL-310TR	1460	7000	23.00	6905	46.0	6815	69.0	6730	92.0	66.50	105	--	--	--	--	--	--	--	--		
	1200	5830	19.00	5730	38.0	5630	57.0	5530	76.0	54.30	95	--	--	--	--	--	--	--	--		
	985	4570	16.00	4760	32.0	4690	48.0	4600	64.0	45.10	80	--	--	--	--	--	--	--	--		
RH-320TR	1460	5232	14.40	5089	28.8	4979	43.2	4885	57.6	4802	72.0	4725	86.4	4659	100.8	4599	115.2	4543	129.6	4494	144.0
	1200	4421	12.30	4277	24.6	4167	36.9	4074	49.2	3991	61.5	3914	73.8	3848	86.1	3787	98.4	3731	110.7	3682	123.0
	985	3630	10.20	3486	20.4	3375	30.6	3282	40.8	3199	51.0	3122	61.2	3056	71.4	2995	81.6	2940	91.8	--	--
RM-450TR	1460	7598	20.90	7410	41.8	7261	62.7	7135	83.6	7025	104.5	6942	125.4	6871	146.3	6805	167.2	6744	188.1	6688	209.0
	1200	6094	17.30	5907	34.6	5758	51.9	5631	69.2	5520	86.5	5439	103.6	5366	121.1	5300	138.4	5240	157.7	4938	173.0
	985	5075	14.30	4888	28.6	4739	42.9	4612	57.2	4502	72.3	4420	86.6	4348	100.9	4281	115.2	4222	129.6	--	--
RL-500TR	1460	8910	28.5	8705	57.0	8548	85.0	8413	113.0	8293	142.0	8173	171.0	8060	200.0	--	--	--	--	--	--
	1200	7362	23.4	7162	46.8	7000	70.2	6865	93.6	6745	117.0	6625	141.0	6510	165.0	--	--	--	--	--	--
	985	6077	19.3	5877	38.6	5712	57.9	5580	77.2	5460	96.5	5340	117.8	5225	137.1	--	--	--	--	--	--
RL-550TR	1460	12100	39.0	11990	78.0	11800	117.0	11675	156.0	115.5	195	234	--	--	--	--	--	--	--	--	
	1200	9900	32.0	9760	64.0	9660	96.0	9500	128.0	93.50	160	192	--	--	--	--	--	--	--	--	
	985	7990	26.0	7890	52.0	7790	78.0	7680	104.0	75.60	130	156	--	--	--	--	--	--	--	--	
RH-600TR	1300	9817	27.4	9569	54.9	9376	82.3	9214	109.8	8640	137.2	8516	164.0	8389	192.1	8304	219.5	8220	247.0	8146	274.4
	1150	8708	24.0	8067	43.7	8305	72.9	8162	97.2	7654	121.5	7548	145.8	7459	170.1	7380	194.4	7312	218.7	7249	243.0
	985	6730	18.9	6510	37.8	6332	56.7	6150	75.7	5874	94.6	5669	113.5	5584	132.4	5506	151.4	5437	170.0	5367	189.0
RH-1000TR	1250	12526	35.8	12274	71.5	12069	107.3	11865	143.1	11697	178.9	11560	214.6	11435	250.4	11335	286.2	11193	321.9	11088	357.7
	985	9702	27.8	9450	55.7	9245	83.5	9040	114.3	8827	139.2	8614	167.0	8401	194.8	8288	222.7	8054	250.5	7790	278.3
	850	8234	23.9	8041	47.8	7837	71.7	7632	95.6	7453	119.6	7306	143.5	7191	191.3	7071	215.2	6950	219.6	6829	239.1
RH-1150TR	1250	14190	41.9	13950	83.8	13755	125.7	13560	167.6	13470	209.5	13320	251.4	13170	293.3	13020	335.2	12870	377	12720	419
	985	11180	33.0	11100	66.0	10960	99.0	10660	131.0	10440	163.0	10280	195.0	10130	227.0	9990	262.0	9850	297	9710	332
	850	9648	28.6	9580	57.2	9440	85.8	9013	114.4	8863	143.0	8713	171.6	8573	199.0	8433	227.8	8290	245.8	8150	281
RM-1250TR	1250	16710	50.0	16360	100.0	16060	149.9	15700	199.9	15520	249.9	15360	299.9	15220	321.9	170.9	--	--	--	--	--
	985	12915	39.8	12556	77.6	12256	116.4	12016	155.2	11816	194.0	11636	232.8	11516	271.7	--	--	--	--	--	--
	850	11040	33.1	10680	66.2	10380	99.4	10140	132.5	9900	165.6	9760	198.7	9640	231.9	--	--	--	--	--	--
RM-1350TR	1200	17665	63.0	17355	125.0	17045	188.0	16765	251.0	16505	314.0	16245	377.0	15980	440	--	--	--	--	--	--
	985	14500	51.0	14200	101.0	13900	152.0	13728	203.0	13490	252.0	13240	302.0	12980	352	--	--	--	--	--	--
	740	10894	39.0	10604	77.0	10314	116.0	10044	155.0	9774	192.6	9504	231.0	9234	272	--	--	--	--	--	--



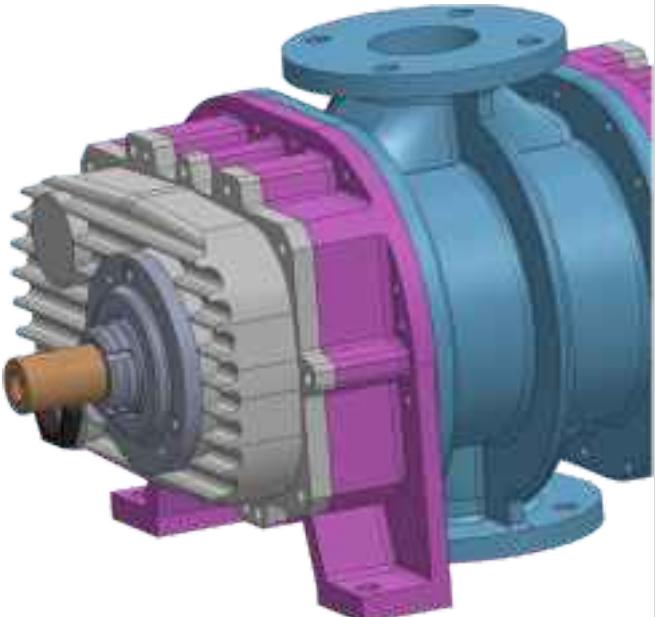
- ◆ The operating speed are indicative and in actual can be higher or lower depending on the drive arrangement.
- ◆ Water Cooled models under shaded portions are for higher discharge pressures and for specific application.
- ◆ Blowers are suitable for conveying under vacuum, for details contact.
- ◆ The blowers are suffixed with J for higher volumetric efficiencies & speeds other than indicated.

PERFORMANCE TABLE FOR AXCEL TR SERIES BLOWERS ▶

FLOW RATE - FAD M³/Hr. at Suction Conditions : Pressure - 760 mm hg. Temperature - 20°C

PERFORMANCE DATA FOR HANDLING AIR AT POSITIVE PRESSURE

PRESSURE mmwg		1000		2000		3000		4000		5000		6000		7000		8000		9000		10000	
Model	Speed	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW		
RH-1500TR	985	15750	65.0	15465	113.0	15195	161.0	14935	209.0	14680	257.0	14435	305.0	14200	353.0	13965	401.0	13730	449.0	13495	496.0
	850	13430	55.0	13145	95.0	12875	134.0	12615	174.0	12360	214.0	12115	254.0	11880	294.0	11645	334.0	11410	374.0	11180	414.0
	740	11584	47.0	11299	81.0	11029	124.0	10769	157.0	10514	190.0	10269	223.0	10034	256.0	9799	289.0	9564	322.0	--	--
RH-1650TR	985	19135	57.0	18748	113.0	18410	169.0	18099	225.0	17814	281.0	17552	337.0	17303	393.0	17050	449	--	--	--	--
	850	16492	49.0	16123	97.0	15785	145.0	15474	193.0	15163	241.0	14896	289.0	14656	337.0	12410	386	--	--	--	--
	740	14338	43.0	13951	88.0	13613	127.0	13302	169.0	13017	211.0	12733	253.0	12497	295.0	12250	337	--	--	--	--
RM-1800TR	985	21500	79.0	21065	138.0	20685	197.0	20335	262.0	20015	327.0	19720	389.0	19440	452.0	19160	517.0	--	--	--	--
	850	18530	67.0	18115	119.0	17735	171.0	17385	229.0	17035	282.0	16735	338.0	16465	395.0	16200	446.0	--	--	--	--
	740	16110	59.0	15675	104.0	15295	142.0	14945	189.0	14625	236.0	14330	284.0	14065	332.0	13800	386.0	--	--	--	--
RH-2000TR	985	26840	123	26540	214	26270	299	26010	390	25750	480	25500	576	25200	626	24900	776	24000	876	23227	986
	740	20164	92.4	19940	161	19716	225	19492	293	19268	361	19018	433	18768	507	18596	581	18518	653	18990	725
	600	16400	75	16200	131	16000	183	15800	238	15600	293	15420	351	15240	410	15060	469	14880	511	--	--
RM-2500TR	985	35750	137	35120	237	34610	336	34170	435	33765	534	33390	633	33015	732	32690	831	--	--	--	--
	740	29781	114	29800	198	30110	282	30410	364	30680	450	30950	534	31200	618	31500	702	--	--	--	--
	600	24041	85	23411	156	22901	226	22461	296	22056	366	21681	465	21306	506	20950	546	--	--	--	--
RH-2650TR	740	38600	115.0	38050	225.0	37500	335.0	36950	445.0	36400	554.0	35950	662.0	35350	770.0	34950	880	34550	998	40900	1374
	600	31300	95.0	30850	189.0	30400	282.0	29950	377.0	29600	272.0	29200	567.0	28800	662.0	28400	787	28000	897	32700	1032
	500	26100	82.0	25700	163.0	25300	245.0	24900	327.0	24450	409.0	24200	491.0	23850	573.0	23500	655	23200	737	26960	853
RH-3000TR	740	43800	164.0	42960	255.0	42210	381.0	41510	508.0	40880	634.0	40280	760.0	39720	932.0	39210	1060	38700	1192	--	--
	600	35126	138.0	34286	235.0	33536	335.0	32836	435.0	32206	535.0	31606	635.0	31046	735.0	30486	835	29976	935	--	--
	500	28936	112.0	28096	194.0	27346	276.0	26646	358.0	26016	440.0	25416	522.0	24856	604.0	24296	686	23786	768	--	--
RH-3500TR	600	58650	190.0	56753	361.1	55660	531.3	54625	702.0	53820	872.0	--	--	--	--	--	--	--	--	--	--
	500	48070	159.85	46920	296.7	36639	664.7	43700	573.0	42780	711.0	--	--	--	--	--	--	--	--	--	--
	400	37375	125.5	36179	233.45	35075	34097.5	29650	447.0	33235	554.0	--	--	--	--	--	--	--	--	--	--
RH-4000TR	500	71940	252.0	70560	465.0	59510	680.0	68640	885.0	67800	1095.0	66940	1305	66080	1515	--	--	--	--	--	--
	420	60500	200.0	59270	380.0	58040	555.0	56770	735.0	55700	906.0	54540	1076	53540	1246	--	--	--	--	--	--
	300	43200	143.0	42340	275.0	41400	395.0	40620	525.0	39820	650.0	39020	775	38220	900	--	--	--	--	--	--



- ◆ The operating speed are indicative and in actual can be higher or lower depending on the drive arrangement.
- ◆ Water Cooled models under shaded portions are for higher discharge pressures and for specific application.
- ◆ Blowers are suitable for conveying under vacuum, for details contact.
- ◆ The blowers are suffixed with J for higher volumetric efficiencies & speeds other than indicated.

APPLICATIONS ▶

Rotary blowers are extensively used in various Industrial applications and process plants



Metallurgy

Steel, Aluminium, Mining, Copper, Nickel Plants

- Lime Calcination Plants
- Pneumating Conveying
- Oxygen Plants (VPSA)
- Mixed Gas, Coke over, BF Gas Boosting
- Smelting plants
- DRI Plants
- Engine driven emergency blowers

Industrial

- Vacuum Boosting
- Oil Free Conveying of Industrial Gases
- Vacuum Cleaning & Drying
- Fluid Bed Combustion
- Super - Charging



Water, Waste Water Treatment Plants & Environment Sector

- Tank Aeration
- Digester Gas Processing
- Big Gas Boosting
- Air Sparging
- Air Scouring
- Vacuum Truck blowers

APPLICATIONS ▶

Rotary blowers are extensively used in various Industrial applications and process plants



Refineries, Petrochemicals

- Sulphur Recovery & Dewaxing
- Nitrogen Boosting & Conveying
- Hydrogen Generation units
- Utilities
- FCC units
- Pneumatic conveying
- Handling Corrosive Gases
- Gas Boosting, circulation & exhausting



Power Plants

- Ash Conveying
- Fluidisation
- Flue Gas Desulphurisation



Cement Plants

- Conveying
- Fluidising
- Air lift
- Blending
- Pneumatic conveying

APPLICATIONS ▶

Rotary blowers are extensively used in various Industrial applications and process plants



Chemical & Process Plants

- Pneumatic conveying
- Handling Corrosive Gases
- Gas Boosting, circulation & exhausting

Food Processing, Dairy & Yeast Industry

- Pneumatic conveying
- Fluidisation
- Exhausting



General Industry

- Conveying
- Fluidising
- Air lift
- Blending
- Pneumatic conveying

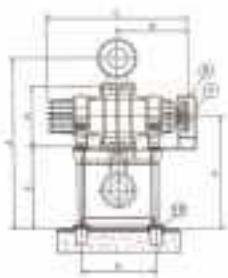
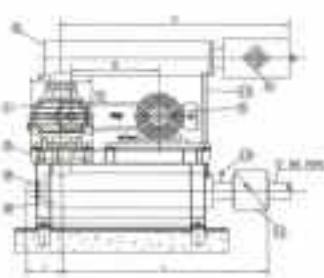
DIMENSION TABLE - VERTICAL FLOW ▶

DIMENSIONS : TOP - SUCTION, BOTTOM - DISCHARGE

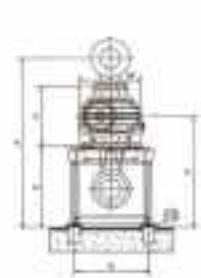
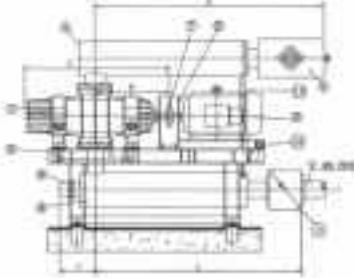
Approx.- mm

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
RH-45TR	810	525	631	65	365	275	262	295	375	500	977	325	291	1157	525
RH-70TR	865	525	704	80	390	275	335	295	375	570	1058	325	328	1258	550
RH-80TR	865	600	771	100	445	350	315	410	400	560	1183	416	361	1353	655
RH-100TR	1075	600	911	125	470	350	455	410	405	690	1183	416	431	1563	680
RH-120TR	1212	725	876	125	498	470	165	504	465	690	1432	525	405	1563	768
RH-180TR	1178	725	1015	150	464	470	298	504	465	830	1432	525	475	1762	734
RH-200TR	1265	900	1033	150	485	560	235	570	565	740	1678	624	472	1812	785
RH-290TR	1400	900	1173	200	595	560	345	570	665	880	1678	624	530	1812	895
RH-320TR	1640	950	1247	250	650	660	323	710	665	900	1808	783	565	2108	1015
RH-450TR	1640	950	1449	250	650	660	515	710	665	933	1808	783	676	1208	1015
RL-500TR	2050	1050	1552	300	920	850	525	820	750	1250	1953	914	845	2288	1355
RH-600TR	2085	1045	1400	300	875	850	410	450	750	1000	2650	960	757	2600	1325
RH-1000TR	2350	1100	1410	350	1065	810	775	1000	750	12900	2005	960	621	2870	1555
RH-1250TR	2350	1200	1690	400	1065	810	990	1000	750	1290	2005	960	934	2870	1555
RH-1500TR	2700	1300	1600	400	1075	1050	800	1120	785	1280	3460	1235	840	3500	1610
RH-1800TR	2700	1300	2080	500	1075	1050	900	1120	785	1280	3460	1235	1035	3500	1610

V-BELT DRIVE



DIRECT COUPLED



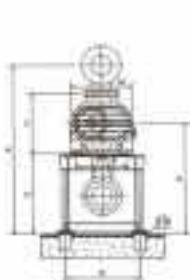
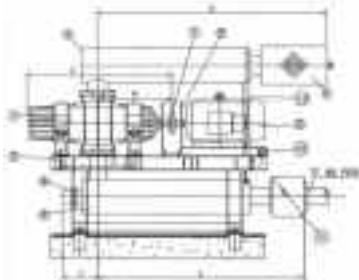
DIMENSIONS : TOP - SUCTION, SIDE - DISCHARGE

MODEL	A	B	C	D	E	F	G	H	J	K
RH-2000TR	1045	935	1630	600	264	1565	1785	850	1980	210
RH-2500TR	1265	1075	1630	700	264	1565	1785	850	2340	210
RH-3000TR	1235	1220	1990	700	320	2450	1820	1100	2455	250
RH-3500TR	1577	1567	1990	800	320	2450	1820	1100	3145	250

PARTS DESCRIPTION:

1. Blower
2. Electric Motor
3. Common Base Plate
4. Suction Filter
5. Suction Silencer
6. Discharge Silencer
7. V-Belts & Pulley or Flexible Coupling
8. Protective Guard
9. Pressure Relief Valve
10. Pressure Gauge
11. Non Return Valve
12. Anti-Vibration Pad
13. Silencer Support

DIRECT COUPLED



OUR PRODUCT AT A GLANCE ►



TRI-LOBE BLOWER



**BIO-GAS BLOWER/
COMPRESSOR**



**GAS BOOSTERS/
PROCESS GAS BLOWERS**



**SLIDING VANE
COMPRESSOR/ GAS
COMPRESSOR**



MECH. VACUUM BOOSTERS



**TRUCK BLOWERS
KHV SERIES**



**ROTARY SLIDING
VANE COMPRESSORS**



SCREW BLOWERS



HELICAL BLOWER



LIQUID RING VACUUM PUMPS



DRY SCREW VACUUM PUMPS



**TRUCK BLOWERS
SHV SERIES**



**GAS BOOSTERS
WITH SIDE DISCHARGE**



TURBO BLOWER

Customer Support Services:

A team of experienced and qualified engineers are deployed to rendering all kind of technical post supply services to our esteemed customers; such as pre-commissioning and post commissioning services, trouble shooting etc., to make the equipment to user's satisfaction.

Professionally & technically competent personnel are always ready to render these services, promptly and expeditiously.

Diversified Product Range:

Swam offers a comprehensive and diversified product range of products for the Process, Chemical, Oil & Gas, Steel, Aluminum, Cement, Water & Waste Water and Power Industries.

Blowers & Fans

- Rotary Piston Blowers (Tri & Twin)
- Process Air Blowers
- Gas Boosters
- Truck Blowers
- Centrifugal Fans
- Process Air Fans
- Screw Blowers

Vacuum Pumps & Systems

- Dry vacuum Pumps
- Mechanical Vacuum Boosters
- Vacuum System

Noise Reduction Equipments

- Industrial Silencers
- Acoustic Enclosures

Heat Transfer Equipments

- Shell & Tube Type Heat Exchangers
- Finned Tube Heat Exchangers



SWAM PNEUMATIC PVT. LTD.

(ISO-9001:2008 Quality Certified)

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Plant-IV : C-52, Sector-57, Noida-201301 (INDIA)

Website : www.swamatics.com

For details of our local contact office in your region, contact H.O. or log on to website

