

## **Rotary Twin-Lobe Air Blowers**

• Technology • Innovation • Excellence

# **SWAM SR SERIES**Rotary Positive Blowers

**Swam** a group known for Technology, Innovation and Excellence is worlds 4th larger blower manufacturing Co. with blowers upto 80,000 m<sup>3</sup>/hr. capacity.

**Swam**, offers its advance technology next generation **SR-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 efficience.

The blowers have very high accuracies & manufactured on CNC machines. The blowers are available for flows upto 80000 m<sup>3</sup>/hr. and pressure upto 0.6 kg/cm<sup>2</sup> in single stage. Swam SR Series Blowers are available in Twin-Lobe & Tri-Lobe designs.

#### **SWAM - SR Series Salient Features**

- Ruggedly built for working under tough conditions, high load transmission & higher operating speeds.
- Computer generated Axcel Series lobe-profile optimizes high volumetric efficiency.
- Helical heavy duty timing-gears, shrunk fit on rotor shafts make reliable and accurate fitment.
- Guaranteed oil free conveyance.
- Suitable for positive and negative conveying & for top, bottom or side discharge.
- Side suction or side discharge arrangement available on select models,
- Special sealed models for gas conveying and for vacuum application.
- Provided with inbuilt pulsation Dampeners.
- Rotating parts dynamically balanced to finer grades.
- Four number of bearings.
- Heavy Duty Shaft.
- Special Lip Seal Sealing System.

### **FOCUS ON QUALITY & RELIABILITY**

Emphasis on quality and 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 & 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 and approved quality plan.

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

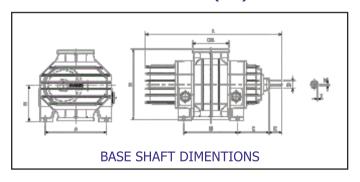


#### **WORKING PRINCIPLE**

The working principle of Twin-lobe type. The rotors, move opposite to 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.

# DIMENSION DRAWING OF ROOTS AIR BLOWER / COMPRESSOR (A.C)



MODEL	OUTER DIMENSIONS							SHAFT EXTN.				FLANGE DETAILS					
	Α	В	С	Н	N	L	Е	øD	KEW W	WAY	PCD	NO. OF HOLES	HOLE SIZE	N.B.	OD		
SR - 21	308	45	92	155	315	396	50	34	10	5	80	4	M12	50	120		
SR - 31	308	85	101	155	315	462	50	34	10	5	139.7	4	M16	65	140		
SR - 41	308	106	110	155	315	498	50	34	10	5	152.4	4	M16	80	200		
SR - 51	308	165	117	165	330	571	50	34	10	5	190.5	8	M16	100	222		
SR - 61	308	230	122	165	330	646	50	34	10	5	190.5	8	M16	100	222		
SR - 71	416	230	144	215	430	718	70	42	12	5.15	216	8	M20	125	254		
SR - 81	416	280	144	220	440	768	70	42	12	5.15	240	8	M20	150	285		

### PERFORMANCE TABLE FOR SR SERIES TWIN-LOBE BLOWERS

FLOW RATE - FAD M<sup>3</sup>/ 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	
Model	Speed	FAD	кw	FAD	KW	FAD	KW	FAD	KW	FAD	KW	FAD	KW
SR-21	2900 2000 1450 1200	181 116 77 59	0.63 0.4 0.28 0.24	170 107 67 49	1.27 0.82 0.56 0.48	163 98 59 42	1.9 1.2 0.84 0.75	156 91 51 36	2.54 1.63 1.16 1.0	150 85 45	3.18 2.04 1.44	140 80 - -	3.78 2.46 -
SR-31	2900 2000 1450 1200	302 194 128 98	1.06 0.68 0.47 0.40	284 178 112 82	2.12 1.36 0.94 0.80	272 164 98 70	3.18 2.04 1.41 1.25	260 152 86 60	4.24 2.72 1.41 1.25	250 142 76 	5.30 3.40 2.40	242 134  	6.36 4.10  
SR-41	2900 2000 1450 1200	436 284 190 148	1.50 0.95 0.68 0.50	418 266 172 130	3.00 1.90 1.36 1.00	403 249 154 115	4.50 2.90 2.04 1.50	390 230 138 100	6.00 3.85 2.72 2.00	377 217 124 84	7.50 4.80 3.40 2.60	364 204 111 	9.00 5.75 4.10
SR-51	2900 2000 1450 1200	592 386 260 202	1.90 1.30 1.00 0.70	568 362 236 178	3.80 2.60 2.00 1.40	550 344 218 160	5.70 3.90 3.00 2.10	536 330 204 146	7.60 5.20 4.00 2.80	524 318 192 134	9.50 6.50 5.00 3.50	512 306 181 	11.40 7.80 6.00
SR-61	2500 2000 1450 1200	630 490 336 266	2.10 1.70 1.10 0.90	600 460 306 236	4.20 3.40 2.20 1.80	578 438 284 214	5.30 5.10 3.30 2.70	561 421 267 197	8.40 6.80 4.40 3.60	536 406 252 182	10.50 8.50 5.50 4.50	  	  
SR-71	2900 2000 1450 1000	1462 992 731 470	4.60 3.15 2.35 1.65	1417 947 656 425	9.20 6.30 4.70 3.30	1382 912 651 390	13.80 9.50 7.10 5.00	1352 882 621 360	18.40 12.70 9.40 6.70	1325 855 594 333	23.00 15.90 11.80 8.40	1300 830 569 303	27.60 19.00 14.20 10.00
SR-81	2000 1450 1200 1000	1281 896 721 581	4.05 2.90 2.35 2.10	1233 848 673 533	8.10 5.80 4.20 4.20	1195 810 635 495	12.20 8.70 7.00 6.30	1162 777 602 462	16.20 11.60 9.40 8.40	1132 747 572 432	20.30 14.50 11.80 10.50	1107 722 547 	24.40 17.40 15.20

### Manufacturing Plants:









### SWAM PNEUMATICS PVT. LTD.

(ISO-9001: 2008 Quality Certified)

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