
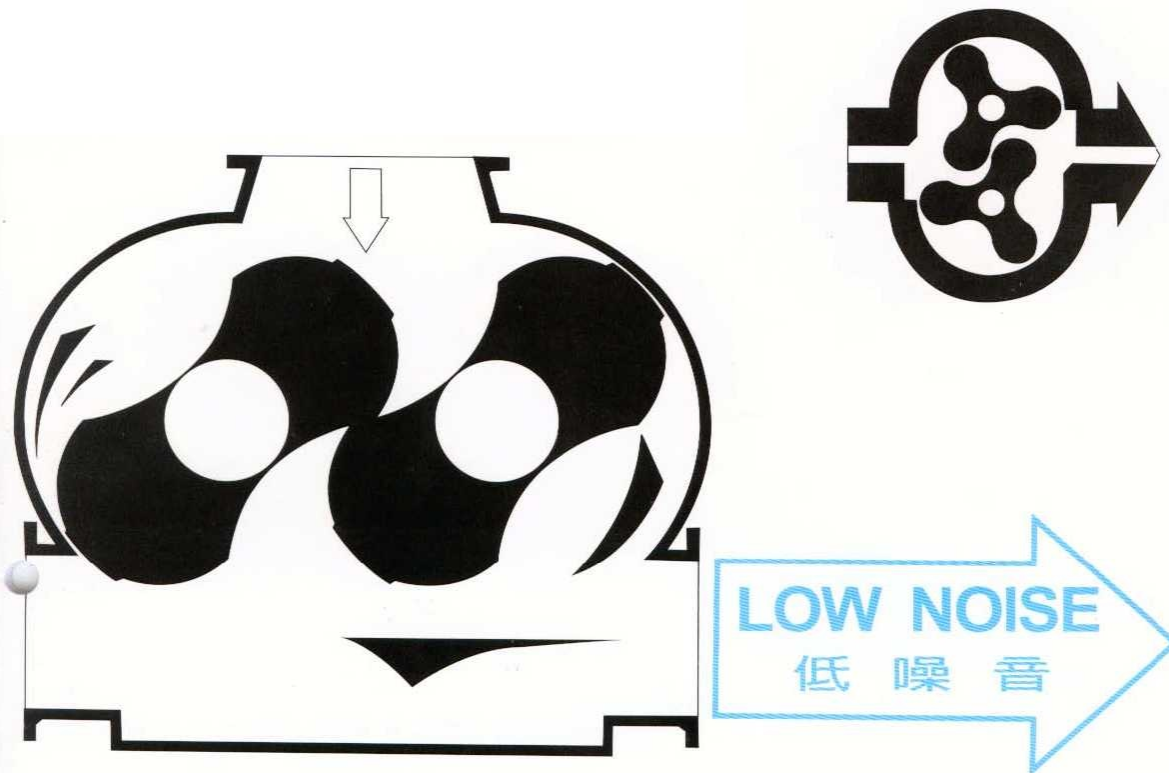


Fu  Tsu



LOW NOISE  
低 噪 音

# ROOTS-TYPE ROTARY BLOWER



TAIKO KIKAI INDUSTRIES CO., LTD

**Features:**

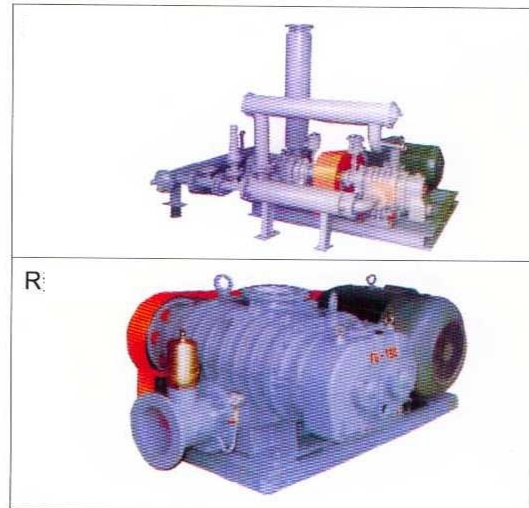
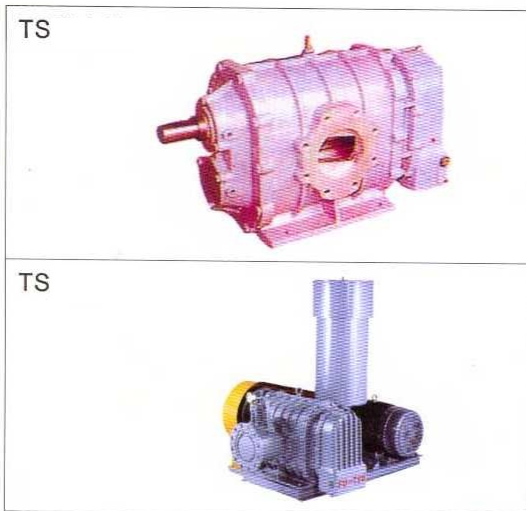
1. Capacity, Pressure and Vacuum range  
Bore: 50mm-500mm (2"-20")  
Capacity: 0.4-490M /min (14-17300CFM)

**Pressure:**

- One-Stage TS type 6000mm Aq. (0.6 kg/cm<sup>2</sup>)  
R type 10000mm Aq. (1 kg/cm<sup>2</sup>)
- TWO-Stage TR-type 20000mm Aq. (2 kg/cm<sup>2</sup>)

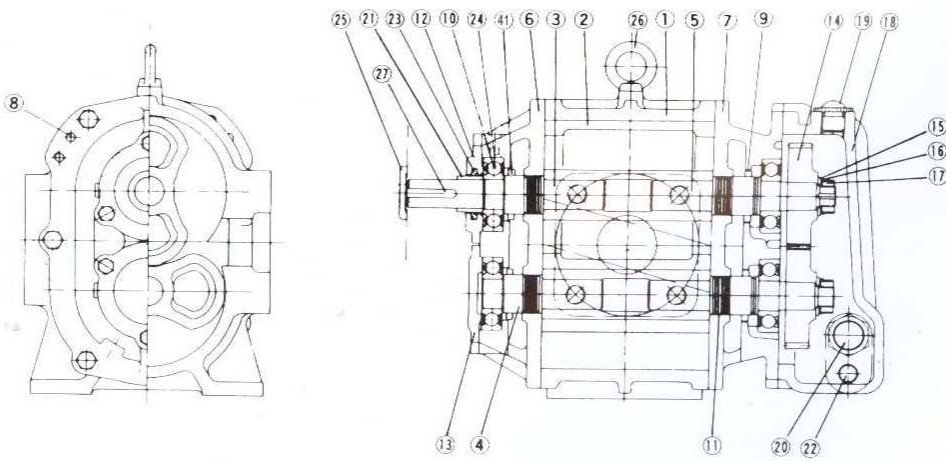
**Vacuum range:**

- One Stage-5000mm Aq. (-400mm Hg.)
  - Two-Stage-8000mm Aq. (-600mm Hg.)
2. Delivers completely oil-free air.
  3. Low oscillation and low noise by complete balancing.
  4. Small change in capacity against change in pressure.
  5. High efficiency due to special profile.
  6. Simple structure, free from trouble.
  7. Highest quality pilot & Accurate gear applied.  
Long life and low noise assured.
  8. Standardized product with strict quality control.

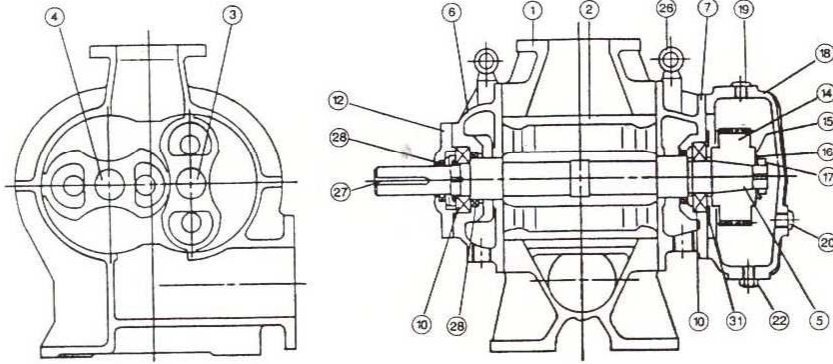


**TS**

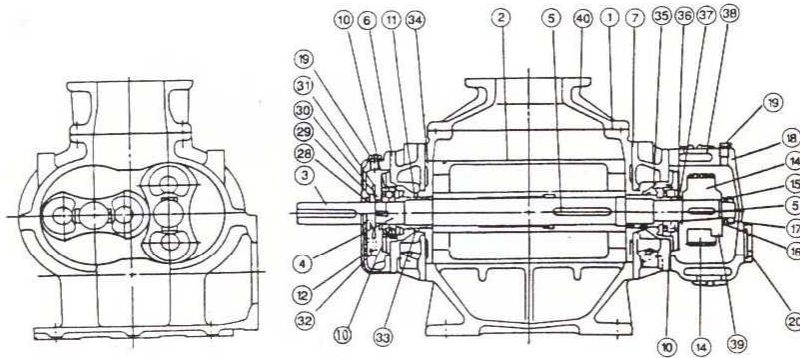
**Structural Drawing**



**R**



**R-S**



**STANDARD MATERIAL**

No.	Name	Material	Q'ty	No.	Name	Material	Q'ty	No.	Name	Material	Q'ty
1	Casing	FC250	1	15	Gear plate	SS400	2	29	Lock nut	S45C	4
2	Impeller	FC250	2	16	Lock nut washer	SS400	2	30	Lock washer	S45C	4
3	Drive shaft	S45C	1	17	Lock nut	SS400	2	31	Splash	SPC1	1
4	Driven Shaft	S45C	1	18	Gear case	FC250	1	32	Oil gauge	Acrylic	1
5	Gear shaft	S45C	2	19	Lubrication plug	Resin	1	33	V ring	NBR	4
6	Side cover (drive side)	FC250	1	20	Oil gauge	Plastic	1	34	Side plate	FC250	4
7	Side cover (driven side)	FC250	1	21	Collar	S45CH	1	35	Bearing case	FC250	4
8	Parallel pin	S20C	4	22	Drain plug	FCMB270	1	36	Bearing Cover	SPC1	4
9	Stop ring	NBR	2	23	Z seal	NBR	1	37	Gear sleeve	S45C	2
10	Ball bearing	SUJ2	4	24	Grease nipple	SS400	2	38	Jacket cover	FC250	2
11	Labyrinth seal	S45C	4	25	End plate	SS400	1	39	Gear inner	S45C	1
12	Bearing holder (drive side)	FC250	1	26	Eye bolt	SS400	1	40	Reducer	FC250	1
13	Bearing holder (driven side)	FC250	1	27	Parallel key	S50C	1	41	Tc oil seal	NBR	2
14	Gear	SCM21	2	28	Oil seal	NBR	1				

# TS TS Type Two-Rotor Rotary Blower Performance Table

Qs:Suction phase air volume (m<sup>3</sup>/min) La:Required electric power (kw)

Model No.	Discharge Pressure R.P.M.	Suction Volume Qs (m <sup>3</sup> /min) at each Discharge Pressure & Required Power																				Discharge Pressure R.P.M.				
		1000 <sup>mmAq</sup>		1500 <sup>mmAq</sup>		2000 <sup>mmAq</sup>		2500 <sup>mmAq</sup>		3000 <sup>mmAq</sup>		3500 <sup>mmAq</sup>		4000 <sup>mmAq</sup>		4500 <sup>mmAq</sup>		5000 <sup>mmAq</sup>		5500 <sup>mmAq</sup>			6000 <sup>mmAq</sup>			
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La		Qs	La		
TSB-50 Bore 50A JIS 10k	770	0.89	0.53	0.78	0.64	0.69	0.75	0.62	0.86	0.55	0.97	0.48	1.08	0.42	1.19										770	
	900	1.11	0.57	1.00	0.70	0.91	0.83	0.84	0.95	0.77	1.08	0.70	1.21	0.64	1.34	0.58	1.47	0.52	1.50						900	
	950	1.20	0.60	1.09	0.74	1.00	0.87	0.93	1.01	0.86	1.15	0.79	1.28	0.73	1.42	0.67	1.55	0.63	1.69	0.56	1.82				950	
	1000	1.29	0.62	1.18	0.76	1.09	0.90	1.02	1.03	0.95	1.19	0.88	1.33	0.82	1.47	0.76	1.61	0.70	1.76	0.65	1.90				1000	
	1080	1.43	0.66	1.32	0.81	1.23	0.97	1.16	1.12	1.09	1.28	1.02	1.43	0.96	1.58	0.90	1.74	0.84	1.89	0.79	2.05				1080	
	1150	1.54	0.70	1.43	0.86	1.34	1.03	1.27	1.19	1.20	1.35	1.13	1.52	1.08	1.68	1.01	1.84	0.95	2.01	0.90	2.17	0.85	2.33		1150	
	1300	1.81	0.76	1.70	0.95	1.61	1.13	1.54	1.32	1.47	1.50	1.40	1.69	1.34	1.88	1.28	2.09	1.22	2.23	1.17	2.43	1.12	2.63		1300	
	1450	2.07	0.84	1.96	1.04	1.87	1.25	1.80	1.46	1.73	1.66	1.66	1.87	1.60	2.06	1.54	2.28	1.48	2.49	1.43	2.69	1.38	2.94		1450	
1620	2.37	0.91	2.26	1.15	2.17	1.38	2.10	1.61	2.03	1.84	1.96	2.07	1.90	2.30	1.84	2.53	1.78	2.76	1.73	2.99	1.67	3.28		1620		
1750	2.59	0.97	2.48	1.22	2.39	1.47	2.32	1.72	2.25	1.97	2.18	2.22	2.12	2.47	2.06	2.71	2.00	2.96	1.95	3.21	1.90	3.54		1750		
TSB-65 Bore 65A JIS 10k	850	1.50	0.70	1.36	0.87	1.24	1.04	1.18	1.22	1.04	1.39	0.95	1.56	0.87	1.74	0.80	1.91	0.72	2.08						850	
	900	1.62	0.74	1.48	0.92	1.36	1.10	1.25	1.29	1.16	1.47	1.07	1.65	0.99	1.84	0.92	2.02	0.84	2.20	0.78	2.38				900	
	950	1.75	0.79	1.61	0.98	1.49	1.18	1.38	1.37	1.29	1.56	1.20	1.76	1.12	1.95	1.05	2.14	0.97	2.34	0.91	2.53				950	
	1000	1.87	0.81	1.73	1.01	1.61	1.22	1.50	1.42	1.41	1.62	1.32	1.83	1.24	2.03	1.17	2.23	1.09	2.43	1.03	2.63				1000	
	1080	2.07	0.87	1.93	1.09	1.81	1.31	1.70	1.53	1.61	1.75	1.52	1.97	1.44	2.19	1.37	2.41	1.30	2.63	1.23	2.85	1.16	3.01		1080	
	1150	2.24	0.93	2.10	1.16	1.98	1.40	1.87	1.63	1.78	1.86	1.67	2.10	1.61	2.33	1.54	2.56	1.46	2.80	1.40	3.03	1.34	3.21		1150	
	1300	2.62	1.02	2.48	1.29	2.36	1.55	2.25	1.81	2.16	2.08	2.07	2.34	1.99	2.61	1.92	2.88	1.84	3.14	1.78	3.46	1.71	3.63		1300	
	1450	2.99	1.11	2.85	1.41	2.73	1.70	2.62	2.00	2.53	2.29	2.44	2.59	2.36	2.88	2.29	3.18	2.21	3.47	2.15	3.77	2.08	4.04		1450	
1620	3.42	1.21	3.28	1.54	3.16	1.87	3.05	2.20	2.96	2.53	2.87	2.86	2.79	3.19	2.72	3.52	2.64	3.85	2.58	4.18	2.51	4.52		1620		
1750	3.74	1.31	3.60	1.67	3.48	2.03	3.37	2.38	3.28	2.74	3.19	3.10	3.11	3.45	3.04	3.80	2.96	4.16	2.90	4.52	2.83	4.88		1750		
TSC-80 Bore 80A JIS 10k	760	3.16	1.24	2.92	1.58	2.72	1.92	2.55	2.26	2.39	2.61	2.25	2.95	2.12	3.29	1.99	3.63	1.87	3.98	1.76	4.32				760	
	810	3.43	1.30	3.19	1.67	2.99	2.03	2.82	2.39	2.66	2.76	2.52	3.12	2.39	3.49	2.26	3.85	2.14	4.21	2.03	4.57				810	
	870	3.77	1.39	3.53	1.78	3.33	2.17	3.16	2.56	3.00	2.95	2.86	3.35	2.73	3.74	2.60	4.13	2.48	4.52	2.37	4.90	2.25	5.21		870	
	920	4.04	1.46	3.80	1.88	3.60	2.29	3.43	2.70	3.27	3.12	3.13	3.53	3.00	3.95	2.87	4.36	2.75	4.77	2.67	5.19	2.53	5.51		920	
	980	4.37	1.55	4.13	2.00	3.93	2.44	3.76	2.87	3.60	3.32	3.46	3.76	3.33	4.20	3.20	4.64	3.08	5.08	2.97	5.53	2.86	5.87		980	
	1040	4.70	1.64	4.46	2.11	4.26	2.58	4.09	3.04	3.93	3.51	3.79	3.98	3.66	4.45	3.53	4.91	3.41	5.38	3.30	5.85	3.19	6.23		1040	
	1170	5.42	1.79	5.18	2.31	4.98	2.84	4.81	3.37	4.65	4.35	3.89	4.51	4.42	4.38	4.95	4.25	5.48	4.13	6.00	4.02	6.53	3.91	7.01		1170
	1260	5.91	1.91	5.67	2.47	5.47	3.04	5.30	3.61	5.14	4.17	5.00	4.77	4.87	5.31	4.74	5.88	4.62	6.44	4.51	7.01	4.40	7.55		1260	
1350	6.41	2.04	6.17	2.65	5.97	3.26	5.80	3.86	5.64	4.47	5.50	5.08	5.37	5.69	5.24	6.29	5.12	6.90	5.01	7.51	4.90	8.09		1350		
1450	6.96	2.16	6.72	2.81	6.52	3.46	6.35	4.12	6.19	4.77	6.05	5.42	5.92	6.08	5.79	6.73	5.67	7.37	5.56	8.03	5.45	8.69		1450		
1620	7.90	2.41	7.66	3.14	7.46	3.87	7.29	4.60	7.13	5.33	6.99	6.06	6.86	6.79	6.68	7.52	6.47	8.23	6.37	8.97	6.25	9.71		1620		
TSC-100 Bore 100A JIS 10k	760	4.42	1.49	4.12	1.96	3.86	2.43	3.64	2.90	3.44	3.37	3.25	3.85	3.08	4.32	2.92	4.79	2.76	5.26	2.62	5.73				760	
	810	4.80	1.60	4.50	2.11	4.24	2.61	4.02	3.11	3.82	3.61	3.63	4.11	3.46	4.62	3.30	5.12	3.14	5.62	3.00	6.12	2.87	6.59		810	
	870	5.25	1.73	4.95	2.27	4.69	2.81	4.47	3.34	4.27	3.88	4.08	4.42	3.91	4.96	3.75	5.50	3.59	6.03	3.45	6.57	3.32	7.08		870	
	920	5.63	1.84	5.33	2.41	5.07	2.98	4.85	3.55	4.65	4.12	4.46	4.70	4.29	5.26	4.13	5.83	3.97	6.40	3.83	6.97	3.70	7.49		920	
	980	6.08	1.96	5.78	2.57	5.52	3.18	5.30	3.78	5.10	4.39	4.91	4.99	4.74	5.60	4.58	6.21	4.42	6.81	4.28	7.42	4.16	7.98		980	
	1040	6.54	2.09	6.24	2.73	5.98	3.38	5.76	4.02	5.56	4.66	5.37	5.31	5.20	5.95	5.04	6.60	4.88	7.24	4.74	7.88	4.61	8.46		1040	
	1170	7.52	2.30	7.22	3.02	6.98	3.75	6.74	4.47	5.54	5.20	6.35	5.92	6.18	6.64	6.02	7.37	5.86	8.09	5.72	8.81	5.60	9.52		1170	
	1260	8.21	2.46	7.91	3.24	7.65	4.02	7.43	4.80	7.23	5.88	7.04	6.36	6.87	7.14	6.71	7.93	6.55	8.70	6.41	9.48	6.28	10.25		1260	
1350	8.86	2.62	8.56	3.45	8.30	4.29	8.08	5.12	7.88	5.95	7.69	6.79	7.52	7.62	7.36	8.40	7.20	9.29	7.06	10.20	6.96	10.99		1350		
1450	9.66	2.80	9.36	3.70	9.10	4.60	8.88	5.50	8.68	6.40	8.49	7.30	8.32	8.19	8.16	9.09	8.00	9.99	7.86	10.90	7.72	11.80		1450		
1620	10.94	3.13	10.64	4.13	10.38	5.14	10.16	6.15	9.96	7.15	9.77	8.16	9.60	9.15	9.44	10.16	9.28	11.16	9.14	12.18	8.92	13.50		1620		
TSD-125 Bore 125A JIS 10k	720	8.21	2.49	7.81	3.31	7.45	4.14	7.15	4.96	6.88	5.78	6.62	6.00	6.39	7.42	6.17	8.24	5.95	9.06	5.75	9.88	5.52	10.62		720	
	770	8.91	2.66	8.51	3.54	8.15	4.42	7.85	5.29	7.58	6.17	7.32	7.05	7.10	7.92	6.87	8.80	6.65	9.68	6.45	10.60	6.21	11.36		770	
	820	9.61	2.82	9.21	3.76	8.85	4.69	8.55	5.63	8.28	6.56	8.00	7.50	7.79	8.45	7.57	9.37	7.35	10.30	7.15	11.30	6.91	12.10		820	
	870	10.30	2.99	9.91	4.00	9.55	5.00	9.25	5.96	8.98	6.95	8.72	7.95	8.49	8.95	8.27	9.94	8.05	11.00	7.85	11.90	7.61	12.84		870	
	920	11.00	3.15	10.60	4.20	10.20	5.25	9.95	6.30	9.68	7.35	9.42	8.40	9.19	9.45	8.97	10.50	8.75	11.60	8.55	12.70	8.31	13.57		920	
	970	11.60	3.30	11.20	4.41	10.90	5.51	10.60	6.61	10.30	7.71	10.00	8.82	9.84	9.92	9.62	10.90	9.40	12.10	9.20	13.20	9.01	14.31		970	
	1030	12.50	3.50	12.10	4.68	11.80	5.86	11.50	7.02	11.20	8.21	10.90	9.39	10.70	10.60	10.50	11.80	10.30	13.00	10.10	14.20	9.84	15.20		1030	
	1100	13.50	3.72	13.10	4.97	12.70	6.20	12.40	7.48	12.10	8.73	11.40	9.99	11.70	11.20	11.40	12.50	11.20	13.80	11.00	15.00	10.82	16.23		1100	
1150	14.20	3.88	13.80	5.19	13.40	6.50	13.10	7.81	12.80	9.13	12.63	10.50	12.40	11.80	12.10	13.10	11.90	14.50	11.70	15.70	11.52	16.97		1150		
1220	15.20	4.08	14.80	5.50	14.40	6.87	1																			