

# APPLICATION:

## WASTE WATER

1. Dust collecting after burning
2. Equipment of dust collection
3. Vacuum dehydration for dying, paper industry
4. Ventilation, desolates
5. Environment caring
6. Air transportation
7. Gas, bulk conveyance
8. Aquarium
9. Conveyance by air
10. Liquid agitation

# UNIT CONVERSION

PRESSURE	atm	kpa	bar	1bt/m <sup>2</sup>	in Hg	in Hg	ftAg	mmHg(Torr)	mmAq
1 atm	1	101.325	1.01325	14.696	1.0333	29.921	33.914	760	10333
1 kpa	0.0099	1	0.01	0.145	0.0102	0.295	0.335	7.5	102
1 bar	0.9869	100	1	14.504	1.0198	29.53	33.47	750	101.98
1 1bt/m <sup>2</sup> (psi)	0.068	6.894	0.0689	1	0.0703	2.036	2.308	51.71	703
1 kgf/cm	0.968	98.062	0.981	14.228	1	28.96	32.82	735.53	10000
1 inhg	0.0334	3.3863	0.0339	0.491	0.0345	1	1.133	25.4	345.3
1 ftAq	0.0295	2.99	0.0299	0.434	0.0305	0.882	1	22.42	304.8
1 mmHg(Torr)	0.013	0.1338	0.00138	0.019	0.0014	0.04	0.045	1	13.6
1 mm Aq	0.000097	0.0098	0.000098	0.0014	0.0001	0.003	0.0033	0.074	1

## Pressure Conversion Formula

$$1 \text{ kPa} = 1000 \text{ Pa} = 10000 \text{ N/M}^2$$

$$1 \text{ mmHg} = 13.6 \text{ mmAq}$$

$$1 \text{ psi} = 703 \text{ mmAq}$$

1. Wide range of capacity, pressure, vacuum  
Bore size: 40 mm ~ 300 mm ( 1 - 1/2" ~ 12" )  
Capacity: 0.36 ~ 160m<sup>3</sup>/min ( 42 ~ 5700 CMF )  
Pressure:  
    RSS up to 8000 mmAq (0.8 Kg/cm<sup>2</sup>)  
    RSW up to 10000 mmAq (1 Kg/cm<sup>2</sup>)  
  
TRS(2 stage type) up to 20000mmAq(2 Kg/cm<sup>2</sup>)  
Vacuum:  
    1 stage up to-7000 mmAq (-500 mmHg)  
    2 stage up to-8000 mmAq (-600 mmHg)
2. Delivers complete oil-free air.
3. Low oscillation and low noise by complete balancing.
4. Small variation in airflow along with pressure variations.

5. Superior energy efficiency due to special lobe profile.
6. Simple structure keeps least troubles.
7. High quality alloy steel timing gears are adopted. Precision grinding and hardening make smooth motion and low noise for the gear set.
8. Rotors are formed and profiled by CNC Double Column Shaper, 4-axes synchronous motion machining in one process guarantees the rotors profile to be uniformed and in the least tolerance.
9. Non-contact Labyrinth seals are used on the shafts to reduce friction and heat generating, piston rings are incorporated to make perfect seal to the air chamber to prevent oil leaking.

Model	A	B	C	D	E	F	G	H	J	K	L	M	m	R	U	S	T	Wt. (kg)
RSS-40	260	250	180	16	332	28	108	600	46	164	41.5	517	-	-	-	-	-	103
RSS-50	302	278	175	50	350	28	108	897	75	158	37.5	795	-	150	20	85	592	136
RSS-65	323	308	173	50	350	28	107	897	75	152	37.5	795	-	150	24	95	596	155
RSS-80	406	320	213	50	450	38	114	1236	75	180	37.5	945	-	180	24	110	796	250
RSS-100	467	370	225	25	550	38	120	1287	100	186	100	760	-	180	24	115	796	330
RSS-125A	440	395	265	25	550	48	143	1843	100	250	100	900	-	250	25	140	1260	450
RSS-125	500	455	265	25	550	48	163	1843	100	250	100	900	-	250	25	140	1260	485
RSS-150	566	510	295	25	550	48	172	1875	100	250	100	900	-	250	26	150	1264	525
RSS-200A	540	497	355	32.5	935	65	194	2230	125	357	100	-	650	250	28	170	1644	900
RSS-200	620	547	405	32.5	935	65	198	2330	125	345	100	-	650	250	28	170	1644	1155
RSS-250	485	622	435	32.5	935	65	216	2500	125	356	100	-	650	250	28	210	1748	1500
RSS-300	758	685	550	35	1035	95	300	3084	250	560	235	-	1000	300	30	240	1848	2800

