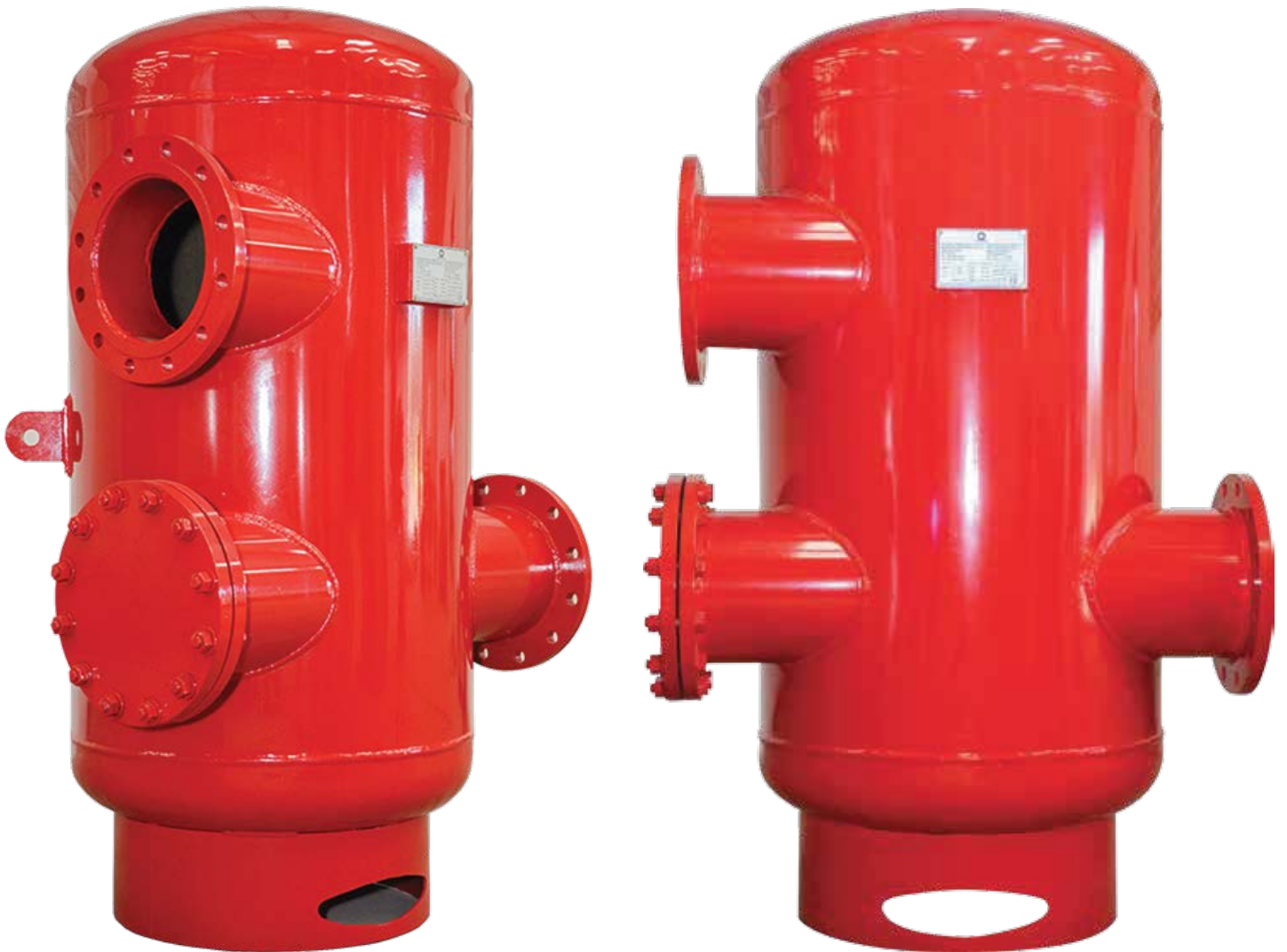
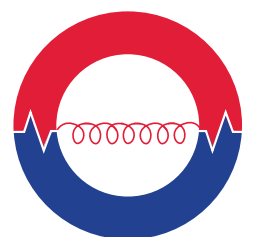


Precision Storage Vessels



TANGENTIAL AIR SEPARATORS



PRECISION

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Material of Construction:-

- Carbon Steel – Flanged to Class 150, Class 300, PN16, PN 25, PN 40
- Black Steel (Low carbon steel)
- All steel body
- Stainless Steel strainer
- Stainless Steel air collector tube

Advantages :-

- Elimination of air from closed circulation system.
- Tangential style
- Low velocity vortex
- Avoid inefficient pump operation.
- Low pressure drop across the separators.

Benefits :-

- Recover air perfectly
- Optimum pump operation
- Prevent pump cavitation.

“Precision” tangential air separators are manufactured in state of the art modern facility with automatic machines.

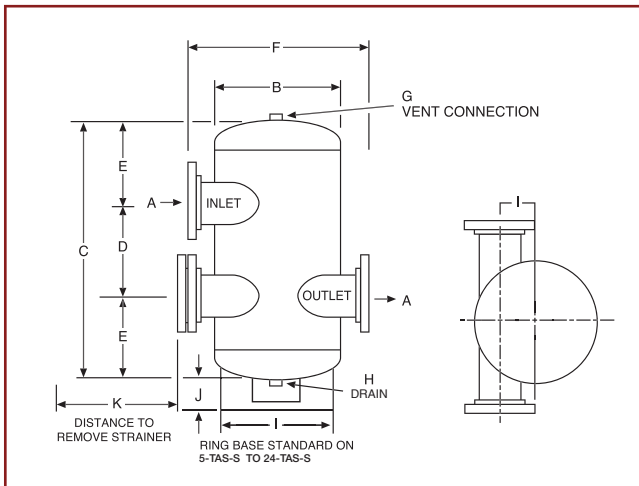
Principle

Precision Tangential air separators removes air from the system through centrifugal action, with a combination of centrifugal force and with reduction of velocity. This makes the air, force water towards the outlet connection, where the separated air moves to the low velocity centre. Air is removed from the system through air vent.

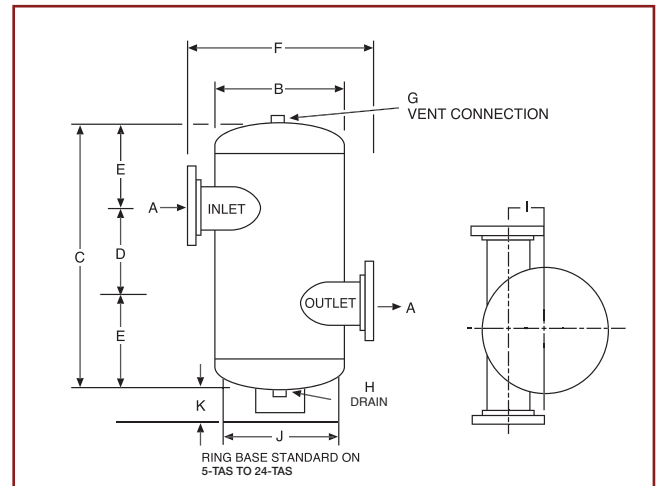
Maximum Flow Rate Based on Design Velocity

Model No.	Vel. 4 ft./sec. gpm	Vel. 1.2m/sec l/sec.	Vel. 6 ft/sec gpm	Vel. 1.8m/sec l/sec.	Vel. 8m/sec. gpm	Vel. 2.4m/sec. l/sec.	Vel. 10 ft/sec. gpm	Vel. 3m/sec l/sec.
1-TAS	12	0.9	18	1.2	22	1.29	27	1.7
2-TAS	45	3.0	65	5	86	7	107	8
2 1/2-TAS	63	3.95	95	8	125	8	152	10.5
3-TAS	96	8	145	11	188	13	235	16
4-TAS	165	13	245	17	325	22	405	27
5-TAS	260	19	390	25	505	34	635	42
6-TAS	365	25	548	36	725	47	905	59
8-TAS	635	45	948	61	1255	81	1600	108
10-TAS	1000	65	1510	98	1985	128	2490	159
12-TAS	1450	92	2150	136	2880	185	3570	224
14-TAS	1700	110	2550	161	3360	220	4205	268
16-TAS	2300	145	2980	180	3560	230	5010	319
18-TAS	3400	210	4250	268	5210	335	7550	475
20-TAS	4600	290	5600	355	7020	445	10100	635
22-TAS	5500	350	7000	448	8850	560	12600	735
24-TAS	5900	371	7300	460	9100	575	12950	815
26-TAS	6400	401	7550	475	9500	598	14150	890
28-TAS	6800	430	8100	510	10200	640	14600	920
30-TAS	7600	480	9850	620	11300	710	15750	990

Air Separator with strainer



Air Separator without strainer



Operating Conditions:-

- Standard working pressure : 10 bar
- Standard Working Temperature - 177°C
- Can supply for pressure upto 30 bar

Dimensions

Model Number Without Strainer	Model Number With Strainer	A mm	B (Inch)	C (Inch)	D (Inch)	E (Inch)	F (Inch)	G (Inch)	H mm	I mm	J mm	K mm	ShipWt. Without Strainer (Kgs)	ShipWt. With Strainer (kgs)
1-TAS	1-TAS-S	25	114	340	130	105	180	3/4"	3/4"	~	~	~	7	11
2-TAS	2-TAS-S	50	264	600	210	195	415	3/4"	3/4"	~	~	360	23	33
2 1/2-TAS	21/2-TAS-S	65	264	600	210	195	415	3/4"	3/4"	~	~	360	27	38
3-TAS	3-TAS-S	80	264	600	210	195	435	3/4"	3/4"	~	~	360	29	45
4-TAS	4-TAS-S	100	300	630	260	185	530	3/4"	3/4"	~	~	420	37	57
5-TAS	5-TAS-S	125	380	890	310	290	620	3/4"	3/4"	325	118	550	50	76
6-TAS	6-TAS-S	150	450	1050	360	345	670	3/4"	3/4"	355	118	590	115	157
8-TAS	8-TAS-S	200	600	1330	460	435	815	3/4"	3/4"	400	118	740	195	265
10-TAS	10-TAS-S	250	775	1525	561	482	1020	3/4"	3/4"	610	118	890	270	365
12-TAS	12-TAS-S	300	925	1800	650	575	1175	3/4"	3/4"	765	320	1020	503	648
14-TAS	14-TAS-S	355	1100	1885	765	560	1325	3/4"	3/4"	765	340	1220	647	850
16-TAS	16-TAS-S	406	1225	2300	820	740	1630	3	3	1055	320	1425	1103	1445
18-TAS	18-TAS-S	457	1400	2600	910	845	1630	3	3	1068	320	1575	1335	1700
20-TAS	20-TAS-S	508	1550	2600	770	915	1780	3	3	1145	180	1730	1502	1980
24-TAS	24-TAS-S	609	1850	3370	1100	925	2085	3	3	1145	205	2105	2203	2855
26-TAS	26-TAS-S	660	1900	3400	1225	950	2095	3	3	1500	300	2200	2800	3000
28-TAS	28-TAS-S	712	1900	3500	1275	1000	2100	3	3	1550	350	2300	3000	3500
30-TAS	30-TAS-S	762	1900	3600	1300	1026	2245	3	3	1600	350	2400	3200	3700

Typical Specifications

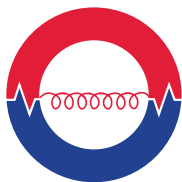
Furnish and install, as shown on plans, a Tangential type air separator. The unit shall have ____ (flanged/grooved) inlet and outlet connections tangential to the vessel. A vent connection shall be fitted to the top of the vessel to enable installation of piping. Air separators shall have all steel body construction.

The unit shall have a removable stainless steel system strainer with 4.8mm diameter holes (perforations). A blowdown connection shall be provided to facilitate routine cleaning of the strainer. (Disregard this paragraph if system strainer is not specified).

Manufacturer to furnish data sheet specifying air collection efficiency and pressure drop at rated flow. The air separator must be designed, constructed, and stamped for (8) (10) (____) bar@ 177°C in accordance with section VIII, Division I of the ASME Boiler and Pressure Vessel Code, and shall be painted with one coat of red oxide primer and one coat of red enamel paint.

RANGE OF PRODUCTS

- ✦ HEAT EXCHANGER PACKAGE
- ✦ AIR RECEIVER
- ✦ OIL AND GAS FIRED WATER HEATERS
- ✦ INDIRECT HEATED STORAGE CALORIFIERS
- ✦ AIR SEPARATORS
- ✦ FEED TANKS & CONDENSATE RECEIVERS
- ✦ BLOWDOWN VESSEL
- ✦ ELECTRIC WATER HEATERS
- ✦ CHILLED WATER BUFFER TANKS



PRECISION

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