

Anderson Separator's full line of HSW in-line horizontal combination separator-traps are a cost effective choice to remove moisture or condensate from compressed air, steam, and gas with a reduced potential of re-entrainment. Fabricated at our fully automated machining center, Anderson's line of combination separator-traps are available off the shelf from many of our worldwide stocking representatives.

### STANDARD FEATURES

- Fabricated carbon steel or optional stainless steel design.
- Operating service up to 300 PSIG at 500°F
- All stainless steel internal control components.
- Units are machined and assembled in an ISO-9001 fully automated facility.
- Designed to remove 99% of particulate entrainment 10 microns and larger over a wide range of flows.
- In-line trap component maintenance with Anderson's drop-out bottom containment plate.
- **Heat treated trap seat and disc for maximum life.**
- Custom ASME "UM" code stamp available as an extra option.

### OPERATION

The process gas enters the vessel through the inlet connection and is directed through Anderson's engineered Hi-eF™ centrifugal separation element. Centrifugal force throws the entrained liquid to the walls of the unit where it drains to the bottom reservoir below the baffle plate.

The level of the reservoir is automatically controlled by the float trap mechanism, purging the vessel of unwanted condensate with no pressure drop to the system. Anderson's *exclusive* optional stainless steel mesh screen assembly protects the trap function and helps prevent the drain orifice from obstructions, thus offering maximum protection from costly malfunctions such as catastrophic carry over or excessive gas/steam loss in the purge cycle.

The scrubbed gas passes up through the outlet connection, completely free (99%) of entrained particulate 10 microns and larger, with minimum pressure drop across the unit.

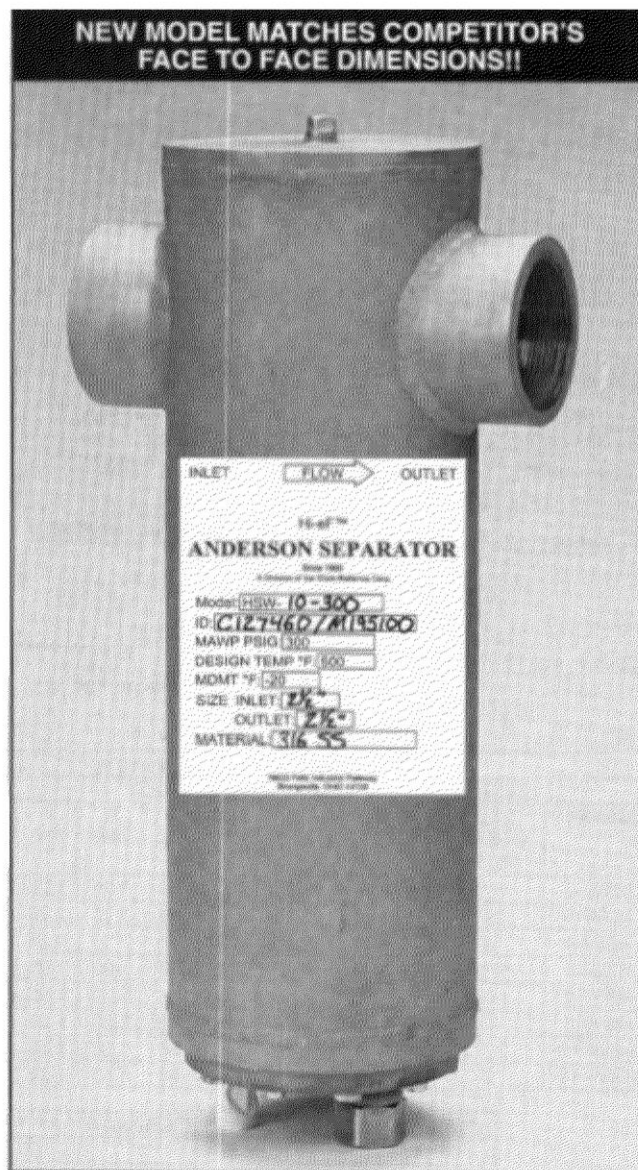
### CAPACITY

Anderson's HSW series of separator-traps have been tested in our flow lab to determine separation efficiencies. The results show that the entrainment removal efficiency to be consistently over 99% through the entire flow velocity range. The fluid discharge capacities over all sizes at various differential ( $P_{in} - P_{out}$ ) pressure ranges are: (Note: data @ SG=1.0)

DIFF. PRESSURE (psig)	80	125	150	300
GALLONS/MIN	3.1	1.9	1.4	1.3
ORIFICE DIA. (in)	.156	.109	.093	.078

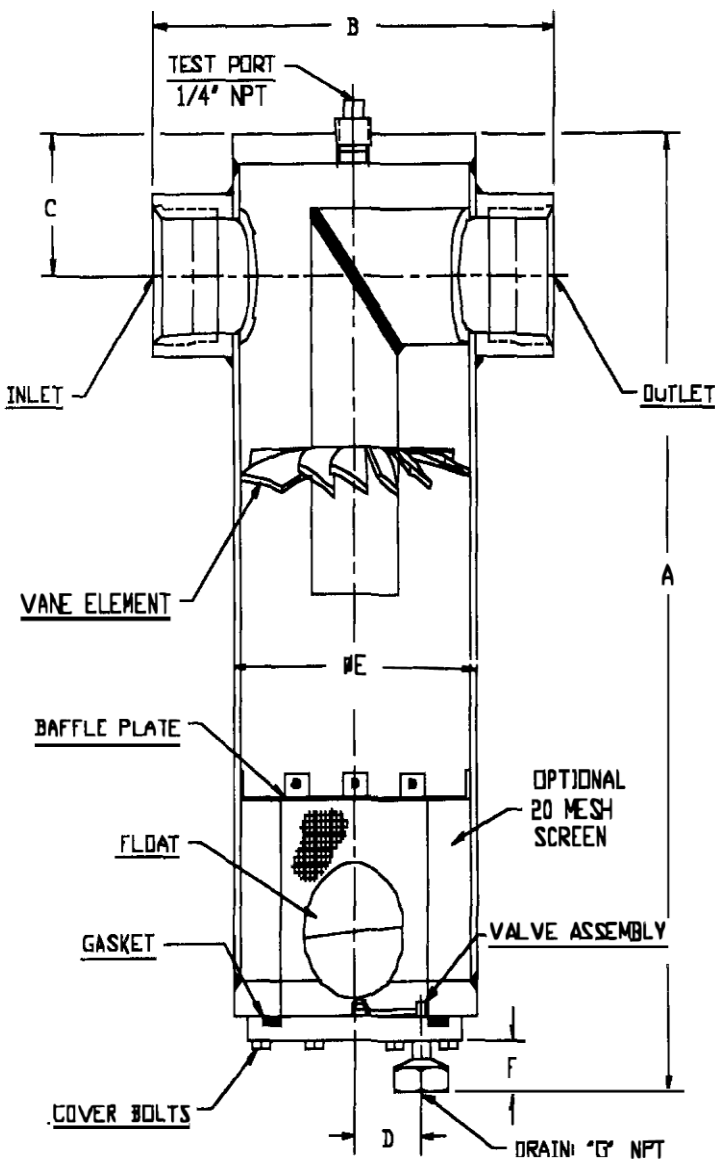
### APPLICATIONS

Anderson's HSW series of separator-traps are ideal for piping, process, and mechanical engineers that wish to maintain completely clean and dry air, gas and steam within their process lines. Refining, chemical, power, and gas pipeline industries are just a few areas of Anderson's successful applications. Air compressor, aftercooler, and exchanger OEMs specify this series when economical reliability in harsh operating service is desired.



### TO ORDER, SPECIFY:

Model	$P_{diff}$	Option
HSW-2	300	
<u>SIZE</u>	<u>MODEL</u>	<u>PSIG</u>
1/2"	HSW-2	80
3/4"	HSW-3	125
1"	HSW-4	150
1-1/4"	HSW-5	300
1-1/2"	HSW-6	
2"	HSW-8	
2-1/2"	HSW-10	
3"	HSW-12	
		<u>OPTION</u>
		BLANK- (STEEL)
		-OR-
		-SS (316SS)
		-ASME (UM)
		-SCREEN



**Construction and Materials\***

- Body:** Standard ASTM A513/A178 (Steel)  
Optional ASTM A269 (316SS)  
Optional Alloys 304SS, L Grade SS, others upon request
- Vane Element:** ASTM A240 (316L SS)
- Baffle Plate:** ASTM A240 (304L SS)
- Cover:** ASTM A36 (Steel)
- Float:** ASTM A240 (304 SS)
- Opt. Screen:** (304 SS) 20 MESH
- Fasteners:** Steel SAE Gr 5  
Option ASTM L F593 (316SS)
- Connections:** Standard ANSI B2 1 FNPT  
  
Options  
Socket Weld ANSI B16 11  
Butt-Weld ANSI B16 25
- Valve Assy:** Seat 420 SS, Heat Treated  
Disc 420 SS, Heat Treated  
Gasket Monel  
Bracket 302 SS  
Lock 302 SS  
Lever 302 SS
- Seal Gasket:** Compressed Fiber (Non-Asbestos)

**DIMENSIONAL DATA**

ALL HSW MODELS									
MODEL	INLET OUTLET (FNPT)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G NPT	APPROX WEIGHT LBS KGS
HSW-2	1/2	13 00	5 50	1 75	88	3 25	1 25	3/4"	11   5.0
HSW-3	3/4	13 00	5 50	1 75	88	3 25	1 25	3/4"	11   5.0
HSW-4	1	13.00	6 00	2 00	88	3 25	1.25	3/4"	13   5.9
HSW-5	1-1/4	13 00	6 00	2 88	88	5 00	1 25	3/4"	13   5.9
HSW-6	1-1/2	16 38	7 50	2 88	88	5 00	1 25	3/4"	19   8.6
HSW-8	2	16 38	8 12	3 00	88	5 00	1 25	3/4"	23   10.5
HSW-10	2-1/2	20 63	9 38	3 62	88	6 50	1 25	3/4"	47   21.3
HSW-12	3	20 63	11 06	3 62	88	8 63	1 25	3/4"	68   30.9

**PRESSURE-TEMPERATURE RATINGS**

TEMP °F	TEMP °C	PSIG (BARG)	
		STEEL	316 SS
-20 TO 100	-29 TO 38	300 (20.6)	300 (20.6)
150	65	300 (20.6)	300 (20.6)
200	93	300 (20.6)	300 (20.6)
250	121	300 (20.6)	300 (20.6)
300	149	300 (20.6)	300 (20.6)
350	177	300 (20.6)	300 (20.6)
400	204	300 (20.6)	300 (20.6)
450	232	300 (20.6)	300 (20.6)
500	260	300 (20.6)	300 (20.6)

MODEL	CAPACITY AT THE SPECIFIED INLET PRESSURE (PSIG)							
	PROCESS	25	50	100	150	200	250	300
HSW-2	Air (SCFM)	40	55	75	105	125	150	175
	Steam( #/hr)	115	165	245	300	365	430	480
HSW-3	Air (SCFM)	55	75	105	125	150	170	200
	Steam( #/hr)	175	235	365	455	555	645	715
HSW-4	Air (SCFM)	82	110	155	190	220	255	300
	Steam( #/hr)	270	365	540	670	835	940	1035
HSW-5	Air (SCFM)	130	175	245	300	345	400	465
	Steam( #/hr)	390	510	760	965	1170	1360	1500
HSW-6	Air (SCFM)	185	245	345	425	485	560	650
	Steam( #/hr)	500	715	1030	1315	1550	1780	2060
HSW-8	Air (SCFM)	330	445	620	770	870	1000	1170
	Steam( #/hr)	855	1240	1725	2270	2780	3245	3510
HSW-10	Air (SCFM)	500	680	945	1170	1350	1550	1810
	Steam( #/hr)	1270	1870	2700	3395	3930	4525	5300
HSW-12	Air (SCFM)	750	1000	1400	1750	1950	2300	2670
	Steam( #/hr)	2025	2800	4070	5220	6050	7030	7845

\*specifications may be subject to change without notice

**CONTROL SPECIALTIES**  
2503 MONROE DRIVE  
GAINESVILLE, GA 30507  
[WWW.CONTROL-SPECIALTIES.COM](http://WWW.CONTROL-SPECIALTIES.COM)