

SINCE 1908
wessels
company

SUBMITTAL

TYPE: SPA ASME AIR SEPARATOR
WITHOUT STRAINER

MODELS: SPA2 TO SPA30

Submittal Sheet No. B-3301

Date: 10/04

JOB

Wessels Representative _____

Unit Tag No. _____

Engineer _____

Contractor _____

Order No. _____ Date _____

Submitted By _____ Date _____

Approved By _____ Date _____

DESCRIPTION

Wessels SPA Vortex type Air Separators eliminate air quickly and efficiently from open and closed loop heating/cooling systems. Water enters and exits through unique "tangential" connections, which promote a low velocity swirling effect in the center of the unit. Natural centrifugal forces allow the heavier air-free water to move towards the outer edges while entrained air is captured within the "eye" of the vortex and released out the top of the separator. The water then exits near the bottom of the unit, bubble free, protecting the system against the noise, corrosion, and damage commonly caused by entrained air.

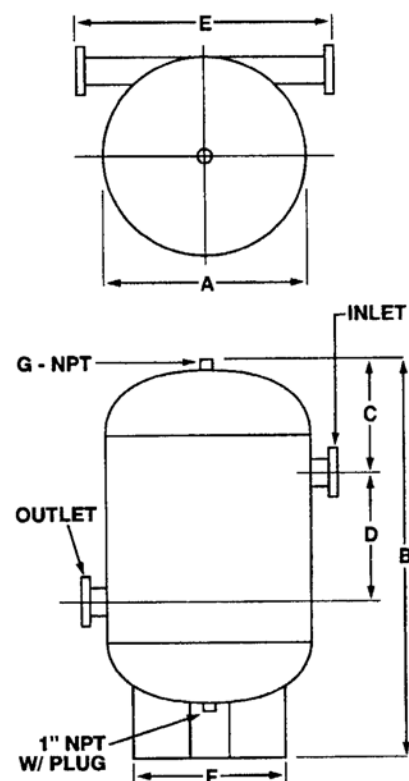
CONSTRUCTION

Shell: Carbon steel
Heads: Carbon steel

PERFORMANCE LIMITATIONS

Maximum Design Pressure: 125 PSIG
Maximum Design Temperature: 450°F

| Model Number | Max GPM | Conn. Size | Type | Dimensions in inches | | | | | | | Approx. Lbs. |
|--------------|---------|------------|---------|----------------------|--------|--------|--------|--------|--------|-------|--------------|
| | | | | A | B | C | D | E | F | G | |
| SPA 2 | 56 | 2 | NPT | 12 | 22 1/2 | 5 1/2 | 8 1/2 | 16 5/8 | 9 1/2 | 1 1/4 | 50 |
| SPA 2-1/2 | 90 | 2.5 | NPT | 12 | 22 1/2 | 5 1/2 | 8 1/2 | 16 5/8 | 9 1/2 | 1 1/4 | 55 |
| SPA 3 | 190 | 3 | FLANGED | 12 | 22 1/2 | 5 3/4 | 8 | 19 3/4 | 9 1/2 | 1 1/4 | 60 |
| SPA 4 | 300 | 4 | FLANGED | 14 | 32 | 9 1/8 | 10 3/4 | 21 3/4 | 11 1/2 | 1 1/2 | 90 |
| SPA 5 | 530 | 5 | FLANGED | 14 | 32 | 9 1/8 | 10 3/4 | 21 3/4 | 11 1/2 | 1 1/2 | 148 |
| SPA 6 | 850 | 6 | FLANGED | 20 | 44 | 13 1/4 | 14 1/2 | 28 | 18 | 2 | 191 |
| SPA 8 | 1900 | 8 | FLANGED | 20 | 44 | 13 1/4 | 14 1/2 | 28 | 18 | 2 | 379 |
| SPA 10 | 3200 | 10 | FLANGED | 30 | 60 1/2 | 19 | 20 | 41 | 24 | 2 | 598 |
| SPA 12 | 4800 | 12 | FLANGED | 30 | 60 1/2 | 19 | 20 | 41 | 24 | 2 | 947 |
| SPA 14 | 6100 | 14 | FLANGED | 36 | 78 | 22 | 31 1/2 | 46 3/8 | 30 | 2 | 1680 |
| SPA 16 | 8000 | 16 | FLANGED | 48 | 108 | 30 | 40 | 60 | 38 | 2 | 2300 |
| SPA 18 | 9700 | 18 | FLANGED | 54 | 124 | 33 | 50 | 66 | 44 | 2 | 3235 |
| SPA 20 | 12000 | 20 | FLANGED | 60 | 138 | 35 | 60 | 72 | 50 | 2 | 5100 |
| SPA 22 | 15000 | 22 | FLANGED | 66 | 150 | 38 | 66 | 78 | 56 | 2 | 6150 |
| SPA 24 | 18000 | 24 | FLANGED | 66 | 150 | 38 | 66 | 78 | 56 | 2 | 6400 |
| SPA 30 | 21000 | 30 | FLANGED | 72 | 150 | 38 | 66 | 84 | 56 | 2 | 7300 |



TYPICAL SPECIFICATION

Furnish and install as shown on plans, a vortex type air separator Model SPA _____ sized for _____ GPM, with _____" (NPT / Flanged) tangential connections, as manufactured by Wessels Company. The air separator shall be designed in accordance with the latest revisions of the ASME Code for Boilers and Pressure Vessels, Section VIII, Division 1, and shall be constructed and stamped for 125 PSI working pressure @ 450°F. A blowdown connection shall be provided to facilitate routine cleaning of the unit. Each air separator shall be Wessels SPA _____ or approved equal.