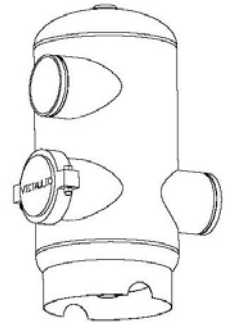


| | | |
|-------------------|---------------------------|-------------|
| Job Name: _____ | | |
| Job No.: _____ | JWC Representative: _____ | |
| Tag No.: _____ | Submitted By: _____ | Date: _____ |
| Engineer: _____ | Approved By: _____ | Date: _____ |
| Contractor: _____ | Order No.: _____ | Date: _____ |

JVSR Series

ASME Tangential Air Separators With 304 Stainless Steel Strainer Grooved End Inlet/Outlet Connections



APPLICATION

- JVSR Series air separators are designed with tangential openings to enhance the air separation efficiency. The vortex action allows the heavier air-free water to move to the vessel wall area while forcing the separated air into the center where it is vented out of the top of the separator.
- Water exits the vessel through the outlet nozzle connection near the bottom, free of air bubbles, protecting the system from the problems associated with trapped system air.
- A Stainless Steel strainer collects unwanted system debris.

DESIGN PRESSURE AND TEMPERATURE

- Maximum design pressure:
JVSR-19-501 to 509: 150 PSI (1035 kPa)
JVSR-19-510 to 514: 125 PSI (862 kPa)
- 175, 200, 250, 300 PSI available upon request
- Maximum design temperature: 375° F (191° C)

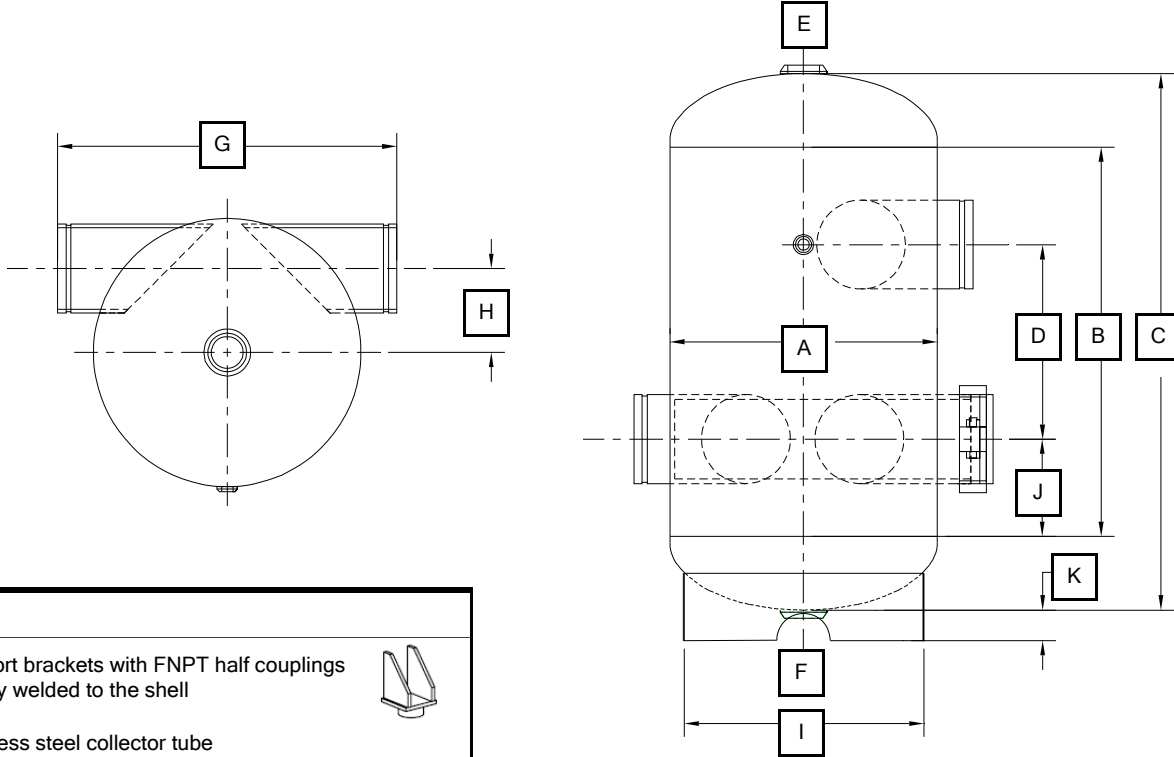
TYPICAL DESIGN SPECIFICATION

Furnish and install as shown on plans a John Wood Model No. JVSR-19-_____ ASME stamped tangential air separator with 304 Stainless Steel strainer. The unit shall have _____" grooved end pipe system connections. A blowdown connection shall be provided to facilitate preventative maintenance and cleaning of the strainer and separator. The unit must be designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code Section VIII, Division 1 with a stamped MAWP of _____ PSI (_____ kPa).

SPECIFICATIONS

- Designed and built in accordance with the ASME Code Section VIII, Division 1
- Installation: vertical
- Shell: Carbon Steel with exterior gray primer finish
- Strainer: 304 Stainless Steel
- System connections: grooved end pipe
- Strainer access connection: NPT pipe cap for 2" and 2½" sizes (JVSR-19-501 and 502); grooved pipe coupling and cover for 3" and larger.
- These air separators can be supported in the piping system if the piping system hangers are located under the inlet and outlet nozzles as close as possible to the outside diameter of the shell of the unit.
- Optional factory welded support brackets on the shell are optionally available, but are required for the 6" and larger sizes for seismic designs.
- Lifting lugs are not designed to support the vessel in the piping system.

JVSR Series (with Strainer)



OPTIONS

- Support brackets with FNPT half couplings factory welded to the shell
- Stainless steel collector tube



| MODEL NUMBER | CODE SYMBOL | MAWP | INLET/OUTLET SIZE | A DIA | | B DIM | C OVERHEADS | | D DIM | E DIM | F DIM | G DIM | H DIM | I DIM | J DIM | K DIM | TANK WEIGHT |
|--------------|-------------|------|-------------------|-------|------|-------|-------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|
| | | | | IN | MM | | IN | MM | | | | | | | | | |
| JVSR-19-501 | UM | 150 | 2 | 12 | 305 | 13 | 19½ | 495 | 8 | 1¼ | 1 | 17¼ | 4¼ | 9½ | 2½ | 3 | 40 |
| JVSR-19-502 | UM | 150 | 2½ | 12 | 305 | 13 | 19½ | 495 | 8 | 1¼ | 1 | 17¼ | 4⅝ | 9½ | 2½ | 2⅝ | 41 |
| JVSR-19-503 | UM | 150 | 3 | 12 | 305 | 13 | 19½ | 495 | 8 | 1¼ | 1 | 17¼ | 3¾ | 9½ | 2½ | 2⅝ | 70 |
| JVSR-19-504 | UM | 150 | 4 | 14 | 356 | 20¼ | 27½ | 699 | 10¾ | 1½ | 2 | 19¼ | 4¼ | 11½ | 4¼ | 3 | 100 |
| JVSR-19-505 | UM | 150 | 5 | 14 | 356 | 20¼ | 27½ | 699 | 10¾ | 1½ | 2 | 19¼ | 3¾ | 11½ | 4¼ | 3 | 130 |
| JVSR-19-506 | U | 150 | 6 | 20 | 508 | 29 | 40 | 1016 | 14½ | 2 | 2 | 25¾ | 6¼ | 18 | 7¼ | 2¼ | 215 |
| JVSR-19-507 | U | 150 | 8 | 20 | 508 | 29 | 40 | 1016 | 14½ | 2 | 2 | 26¼ | 5¼ | 18 | 7¼ | 2¼ | 290 |
| JVSR-19-508 | U | 150 | 10 | 30 | 762 | 39 | 55¾ | 1416 | 19 | 2 | 2 | 37½ | 9⅝ | 24 | 8⅝ | 2⅝ | 625 |
| JVSR-19-509 | U | 150 | 12 | 30 | 762 | 42 | 58¾ | 1492 | 21 | 2 | 2 | 37½ | 8⅝ | 24 | 8⅝ | 2⅝ | 800 |
| JVSR-19-510 | U | 125 | 14 | 36 | 914 | 58 | 78 | 1981 | 31½ | 2 | 2 | 46¾ | 10¾ | 30 | 13¼ | 2 | 1493 |
| JVSR-19-511 | U | 125 | 16 | 42 | 1067 | 72 | 96 | 2438 | 36 | 2 | 2 | 50½ | 12½ | 30 | 18 | 3 | 1690 |
| JVSR-19-512 | U | 125 | 18 | 48 | 1219 | 77 | 103¾ | 2635 | 41 | 2 | 2 | 55¼ | 13¾ | 42 | 18 | 2¼ | 3035 |
| JVSR-19-513 | U | 125 | 20 | 54 | 1372 | 85½ | 115 | 2921 | 45 | 2 | 2 | 61 | 16 | 48 | 20¼ | 2⅝ | 3200 |
| JVSR-19-514 | U | 125 | 24 | 66 | 1676 | 92½ | 130 | 3302 | 47½ | 2 | 2 | 72 | 19 | 60 | 22½ | 3 | 5210 |

Dimensions are subject to change
Weights are approximate
*Stock model





JVSR Series (with Strainer)

PRESSURE DROP CHART FOR TANGENTIAL AIR SEPARATORS WITH STRAINER

