

VAPOR LIQUID SEPARATOR . VLW SERIES

Application:

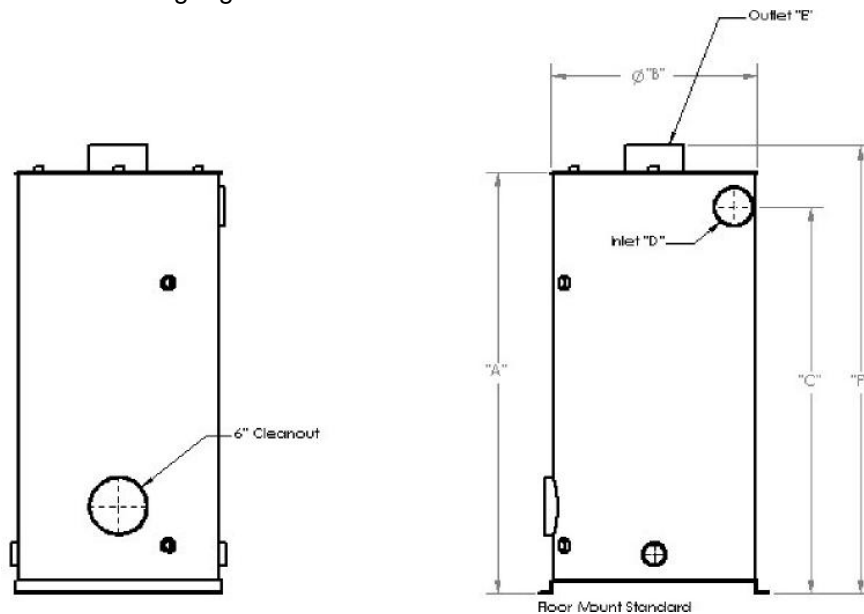
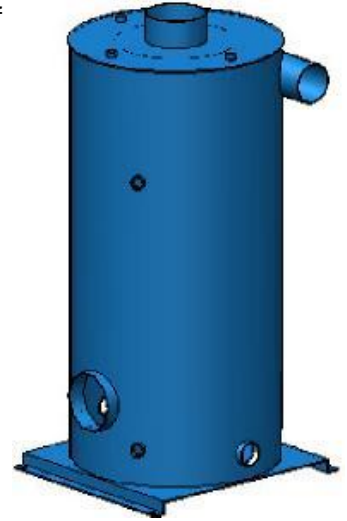
newterra VLW Series Vapor Liquid Separators are capable of capturing entrained water from a process air stream. The separators are designed with a tangential inlet to utilize centrifugal forces to aid in the air/water separation. The water collects in the bottom of the separator while the air exits the large discharge pipe at the top.

Construction:

The Vapor Liquid Separator is fabricated from 1/8+ and 3/16+ carbon steel. The exterior is epoxy coated. The separator is built standard with a 6+ cleanout in the bottom to allow access to the separator interior.

Standard Features:

- Carbon steel construction
- 6+ cleanout with plug
- **newterra** blue urethane exterior coating
- Floor mounting brackets
- 1.5+ drain coupling
- Baffle welded into base to reduce cyclonic swirling of water
- 1/2+ FNPT coupling on top of separator for vacuum gauge
- Brackets are standard to mount an optional demister element
- 1+ couplings for installation of sight glass



Dimension Chart:

| Part Number | A | B | C | D Dia. | E Dia. | F | Total Volume (US Gal) | Storage Volume (US Gal) | Shipping Weight (Lbs) |
|-------------------|-------|-----|-------|--------|--------|-------|-----------------------|-------------------------|-----------------------|
| VLW-90 (CW, CCW) | 46.5+ | 24+ | 42.5+ | 4+ | 6+ | 50.5+ | 90 | 56 | 250 |
| VLW-140 (CW, CCW) | 59+ | 27+ | 55+ | 6+ | 6+ | 63+ | 140 | 74 | 320 |
| VLW-240 (CW, CCW) | 59+ | 38+ | 53+ | 8+ | 8+ | 63+ | 240 | 118 | 500 |

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Specifications Chart:

| Specification: | VLW-90 | VLW-140 | VLW-240 |
|--|----------|-----------|-----------|
| Inlet | 4+MNPT | 6+Flange | 8+Flange |
| Outlet | 6+Flange | 6+Flange | 8+Flange |
| Maximum Air Flow Rate | 630 ACFM | 1050 ACFM | 2020 ACFM |
| Maximum Water Flow Rate | 20 GPM | 50 GPM | 100 GPM |
| Maximum Operating Vacuum | 29+HG | 29+HG | 29+HG |
| Pressure Drop at Maximum Air Flow (^a P=constant x velocity ²) | 10+wc | 15+wc | 20+wc |
| Removal Efficiency without Demister* | 96% | 96% | 96% |
| Removal Efficiency with Demister* | 99.9% | 99.9% | 99.9% |

*Note: Removal Efficiency is measured as a % of the total incoming water that is larger than 20 microns in size.

Optional Features:

| Option | Description |
|---------------------------|--|
| Orientation: CW or CCW | This determines which side of the separator the inlet pipe comes in on. CW indicates that the air flows around the separator in a clockwise motion. CCW indicates counter clockwise motion. |
| Demister | A demister pad is installed in the separator. This will capture an additional 98% of the water droplets greater than 20 microns that would otherwise be entrained in the air stream leaving the separator. The pad must be purchased for this option but the standard separator comes with the mounting brackets so the pad can be retrofitted afterwards if needed. |
| Sight Glass | Addition of a sight glass to the VLW assembly, including isolation valves for removal during cleaning. |
| Level Control | Includes a sight glass as described above with a column style level switch mounted inside (one to four position switch available). |
| Adaptor Connections | Adaptor connections for inlet and outlet connections are available to make the transition easier. Available sizes include 6+flange x 4+FNPT and 8+flange x 6+FNPT. |
| Materials of Construction | Each separator can be purchased in various grades of stainless steel as well as the standard carbon steel. |