Chart's VS-DSS (Distributor Storage System) Series of vertical bulk storage stations are engineered for superior performance, durability and value. Equipped with our proprietary Composite Super Insulation™ (a light-weight system offering better thermal performance than Perlite), the VS-DSS series provides reduced product losses and a slower rate of pressure rise during periods of non-use. Backing up this performance is a competitive 2-year vacuum warranty.

Available in the 1500, 3000, and 6000 gallon (5700, 11,400, and 23,000 liter) models, the VS-DSS series features the industry standard thermal performance. The modular plumbing system has been selectively optimized to meet the flow requirements of a complete range of liquid or gas applications. With a comprehensive set of plumbing features, each circuit has been carefully designed to match the demands placed on these vessel sizes. Dual safety relief devices are standard, and tank mounted vaporizers are optional on 1500 gallon sizes.

**PRODUCT ADVANTAGES**

- Sizes, pressures and configurations to meet most applications
- Backed by our standard 2-year vacuum warranty
- Leg design provides better access to anchor bolts for quicker installation
- Lower tare weight reduces freight and pad costs
- Long-life urethane paint system
- Plumbing built in accordance with ASME B31.3 code and leak tested at 1.1 times the MAWP
- Inner vessel designed and built to ASME Section VIII Division 1 code
## Nomenclature

- **PSV-1B** | Pressure Safety Valve, Inr Ves
- **S-1** | Strainer, Pressure Building
- **TSV-2** | Thermal Safety Valve, Fill
- **TSV-3** | Thermal Safety Valve, Economizer
- **TSV-4** | Thermal Safety Valve, PB Circuit
- **VP-1** | Vacuum Port
- **VR-1** | Vacuum Readout, Outer Vessel

*NOTE: Optional valves (not shown)*

- **HCV-18** | Valve, Liquid Withdrawal (from C-1)
- **HCV-19** | Valve, Vapor Return (from C-2)
- **HCV-21** | Valve, Sec Aux Liquid (from C-3)
- **HCV-22** | Valve, Sec Aux Vapor (from C-4)

* Dashed lines represent optional components

### VS-DSS SERIES

**VERTICAL DISTRIBUTOR STORAGE SYSTEM**

<table>
<thead>
<tr>
<th>Model</th>
<th>Gross Capacity</th>
<th>Net Capacity</th>
<th>MAWP*</th>
<th>Flow Capacity**</th>
<th>Diameter</th>
<th>Height</th>
<th>Weight***</th>
<th>NER %/day</th>
<th>NER %/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1500SC-DSS</td>
<td>1,640</td>
<td>1,580</td>
<td>250</td>
<td>9,000</td>
<td>66</td>
<td>196</td>
<td>6,200</td>
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<td>.56</td>
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<td>18,000</td>
<td>86</td>
<td>228</td>
<td>12,800</td>
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<td>.40</td>
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<tr>
<td>VS 6000SC-DSS</td>
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<td>18,000</td>
<td>86</td>
<td>228</td>
<td>21,500</td>
<td>.15</td>
<td>.24</td>
</tr>
</tbody>
</table>

*MAWP - Maximum Allowable Working Pressure
**Flow capacity rating down to a 20% contents level with a maximum fall off in tank operating pressure of 15 psi (1 bar)
***Weights are for ASME designs (NER) = Normal Evaporation Rate