

i84 STAND ALONE VSEP SYSTEM COMPONENT SPECIFICATIONS
 4/10/08

1] Filter Pack

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| Membrane: | MF, UF, NF, or RO |
| Membrane Area: | 940-1600SF (86.5-147M2) |
| Maximum Operating Temperature: | 160 °F (70°C) (Options for up to 130°C) |
| Allowable Feed Slurry pH Range: | 2-11 (Options for 1-14) |
| O-ring Material: | EPDM (Options for Viton) |
| Filter Pack Housing: | Vinyl Ester 8084 Derekane Fiberglass |
| Wetted Steel Trays: | 304 Stainless Steel .018 Gauge (Option for 316SS) |
| Wetted Plastic End Plates: | Polypropylene (Options for Teflon, Aluminum) |

2] Piping

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| Frame Materials: | Carbon Steel Painted |
| Maximum Working Pressure: | 550 psi |
| Process Piping: | 316L Stainless Steel Schedule 80 |
| Special VSEP Concentrate Pipe: | 1 1/4" Alloy 20 Stainless Steel .065 wall |
| Elastomers (Gaskets): | EPDM (Options for Viton) |
| Feed Inlet Connection: | <i>Victaulic</i> 2" Zero-Flex Style 07 EPDM |
| Permeate Outlet Connection: | <i>Victaulic</i> 2" Zero-Flex Style 07 EPDM |
| Concentrate Exit Connection: | <i>Parker</i> Compression x NPT 1 1/4" |

3] Vibration System

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| Motor: | <i>Baldor</i> CM4106T 460VAC, 3phase, 20HP, 3525 RPM |
| Vibration Amplitude: | 1/2 - 3/4 inch (peak to peak measured at the Filter Pack) |
| Frequency Range: | 49.0 hz to 56.0 hz (Approximate) |
| Maximum Decibels: | <85 |
| Bearing RPM: | 2800 to 3100 |
| Bearing Oil: | <i>Sullube</i> ~750 ml Compressor Oil |
| Bearing O-rings: | 2-263 & 2-270 Buna |

4] Operating Site Conditions:

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| Equipment Rating: | NEMA 4, Indoor/Outdoor protect from sunlight & rain. |
| Ambient Temperature: | 5 - 37°C |
| Storage Temperature: | 2 - 70°C (Protect Filter Pack from Freezing) |
| Max Relative Humidity: | <95%, non-condensing |
| Elevation: | 3300 ft maximum without derating |