The North American Vacuum Dehydrator (NAV) uses vacuum dehydrating technology to remove both free and dissolved water, and gases, from oil. In addition to water and gas, the NAV also removes solid contaminants from the oil with the use of highly efficient filter elements installed on the unit. The NAV is designed for use with larger applications, such as the conditioning of oil in larger hydraulic and lube reservoirs.

**Features and Benefits**

- Water Sensor standard on all units to show percent saturation
- Removes 100% of free and over 90% of dissolved water, as well as 100% of free and over 90% of dissolved gases
- Maintenance, operating, troubleshooting instructions are in HMI (touchscreen)
- Automatic mode enables user-defined system shutdowns
- Use of a low maintenance, dry running claw vacuum pump helps to avoid any dangerous, chemically reactive by-products

### Specifications

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>39&quot; W x 76&quot; L x 74&quot; H (99.06 cm x 193.04 cm x 187.96 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Mass:</td>
<td>1990 lbs (903 kg)</td>
</tr>
<tr>
<td>Inlet Connections:</td>
<td>2&quot; NPT</td>
</tr>
<tr>
<td>Outlet Connections:</td>
<td>1 ½&quot; NPT</td>
</tr>
<tr>
<td>Flow Rate:</td>
<td>30 gpm (114 L/min)</td>
</tr>
<tr>
<td>Inlet Pressure:</td>
<td>22 in. Hg - 10 psi</td>
</tr>
<tr>
<td>Outlet Pressure:</td>
<td>110 psi (7.6 bar)</td>
</tr>
<tr>
<td>Fluid Service Temperature:</td>
<td>39°F to 170°F (3.8°C to 77°C)</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>39°F to 105°F (3.8°C to 40.6°C)</td>
</tr>
<tr>
<td>Fluid Viscosity:</td>
<td>150-3280 SUS (23-700 cSt)</td>
</tr>
<tr>
<td>Power Supply:</td>
<td>460V or 575V</td>
</tr>
<tr>
<td>Attainable Water Content:</td>
<td>&lt;10ppm</td>
</tr>
<tr>
<td>Relative Humidity Display:</td>
<td>Standard, 0 - 99%</td>
</tr>
<tr>
<td>Constructions:</td>
<td>Base Frame: Carbon Steel</td>
</tr>
<tr>
<td></td>
<td>Vessel: Carbon Steel</td>
</tr>
<tr>
<td></td>
<td>Seals: Viton</td>
</tr>
<tr>
<td>Protection Class:</td>
<td>NEMA 4</td>
</tr>
</tbody>
</table>
North American Vacuum Dehydrator

How to Build a Valid Model Number for a Schroeder NAV:

BOX 1  BOX 2  BOX 3  BOX 4  BOX 5  BOX 6  BOX 7
NAV

Example: NOTE: One option per box
NAV  30  M  2  A  H  10 = NAV30M2AH10

BOX 1  BOX 2  BOX 3  BOX 4  BOX 5  BOX 6  BOX 7  BOX 8
Series  Flow Rate  Operating Fluid  Type
NAV  30 = 30 gpm  M = Mineral Oils (including oils w/ max. Viscosity as identified in specifications

BOX 5  BOX 6  BOX 7
Voltage/Frequency  Heater  Filtration Rating
A = 460V / 60Hz / 3Ph+PE  H = Standard  3 = 3 Micron
B = 575V / 60Hz / 3Ph+PE  5 = 5 Micron

Power Requirement = 480V/3PH/60Hz

SYSTEM SPECIFICATIONS:

Voltage/Frequency
A = 460V / 60Hz / 3Ph+PE
B = 575V / 60Hz / 3Ph+PE

OUTLET PUMP/MOTOR GROUP, 4 HP COOLER

Condensate Catch Tank & Sight Glass

VACUUM PUMP SPEED = 3450 RPM

INLET PUMP SPEED = 1750 RPM

OUTLET PRESSURE 30 inHg - 0

FILTER DP 0 - 60 PSID

DR1 - DR4 -08 SAE 37 DEG FLARE

PORT ID CONNECTION

OU1 1 1/2" FNPT

IN1 2" FNPT

Start Push Button

Reset Push Button

Stop Push Button

Port Matrix

M = 5" PHENOLIC CASTERS,

CONDENSATE CATCH TANK & SIGHT GLASS

TOWER LEVEL SIGHT

RLT COALESCING ASSEMBLY

ABF BREATHER

2 SWIVEL & 2 FIXED

VIKING CAST IRON PUMP

OUTLET PUMP/MOTOR GROUP, 4 HP COOLER

OUTLET PRESSURE 30 inHg - 0

QLF15 40" FILTER

Temperature Switch

15 kW HEATER

AS1008 MOISTURE SENSOR

VLR60 VACUUM PUMP & MOTOR

30 GPM INLET PUMP/MOTOR GROUP

INLET BASKET STRAINER, 20 MESH

Temperature Switch

Voltage/Frequency
A = 460V / 60Hz / 3Ph+PE
B = 575V / 60Hz / 3Ph+PE

Power Requirement = 480V/3PH/60Hz

SYSTEM SPECIFICATIONS:

Voltage/Frequency
A = 460V / 60Hz / 3Ph+PE
B = 575V / 60Hz / 3Ph+PE

OUTLET PUMP/MOTOR GROUP, 4 HP COOLER

Condensate Catch Tank & Sight Glass

VACUUM PUMP SPEED = 3450 RPM

INLET PUMP SPEED = 1750 RPM

OUTLET PRESSURE 30 inHg - 0

FILTER DP 0 - 60 PSID

DR1 - DR4 -08 SAE 37 DEG FLARE

PORT ID CONNECTION

OU1 1 1/2" FNPT

IN1 2" FNPT

Start Push Button

Reset Push Button

Stop Push Button

Port Matrix

M = 5" PHENOLIC CASTERS,

CONDENSATE CATCH TANK & SIGHT GLASS

TOWER LEVEL SIGHT

RLT COALESCING ASSEMBLY

ABF BREATHER

2 SWIVEL & 2 FIXED

VIKING CAST IRON PUMP

OUTLET PUMP/MOTOR GROUP, 4 HP COOLER

OUTLET PRESSURE 30 inHg - 0

QLF15 40" FILTER

Temperature Switch

15 kW HEATER

AS1008 MOISTURE SENSOR

VLR60 VACUUM PUMP & MOTOR

30 GPM INLET PUMP/MOTOR GROUP

INLET BASKET STRAINER, 20 MESH

Temperature Switch

Voltage/Frequency
A = 460V / 60Hz / 3Ph+PE
B = 575V / 60Hz / 3Ph+PE

Power Requirement = 480V/3PH/60Hz

SYSTEM SPECIFICATIONS:

Voltage/Frequency
A = 460V / 60Hz / 3Ph+PE
B = 575V / 60Hz / 3Ph+PE

OUTLET PUMP/MOTOR GROUP, 4 HP COOLER

Condensate Catch Tank & Sight Glass

VACUUM PUMP SPEED = 3450 RPM

INLET PUMP SPEED = 1750 RPM

OUTLET PRESSURE 30 inHg - 0

FILTER DP 0 - 60 PSID

DR1 - DR4 -08 SAE 37 DEG FLARE

PORT ID CONNECTION

OU1 1 1/2" FNPT

IN1 2" FNPT

Start Push Button

Reset Push Button

Stop Push Button

Port Matrix

M = 5" PHENOLIC CASTERS,

CONDENSATE CATCH TANK & SIGHT GLASS

TOWER LEVEL SIGHT

RLT COALESCING ASSEMBLY

ABF BREATHER

2 SWIVEL & 2 FIXED

VIKING CAST IRON PUMP

OUTLET PUMP/MOTOR GROUP, 4 HP COOLER

OUTLET PRESSURE 30 inHg - 0

QLF15 40" FILTER

Temperature Switch

15 kW HEATER

AS1008 MOISTURE SENSOR

VLR60 VACUUM PUMP & MOTOR

30 GPM INLET PUMP/MOTOR GROUP

INLET BASKET STRAINER, 20 MESH

Temperature Switch

Voltage/Frequency
A = 460V / 60Hz / 3Ph+PE
B = 575V / 60Hz / 3Ph+PE

Power Requirement = 480V/3PH/60Hz

SYSTEM SPECIFICATIONS: