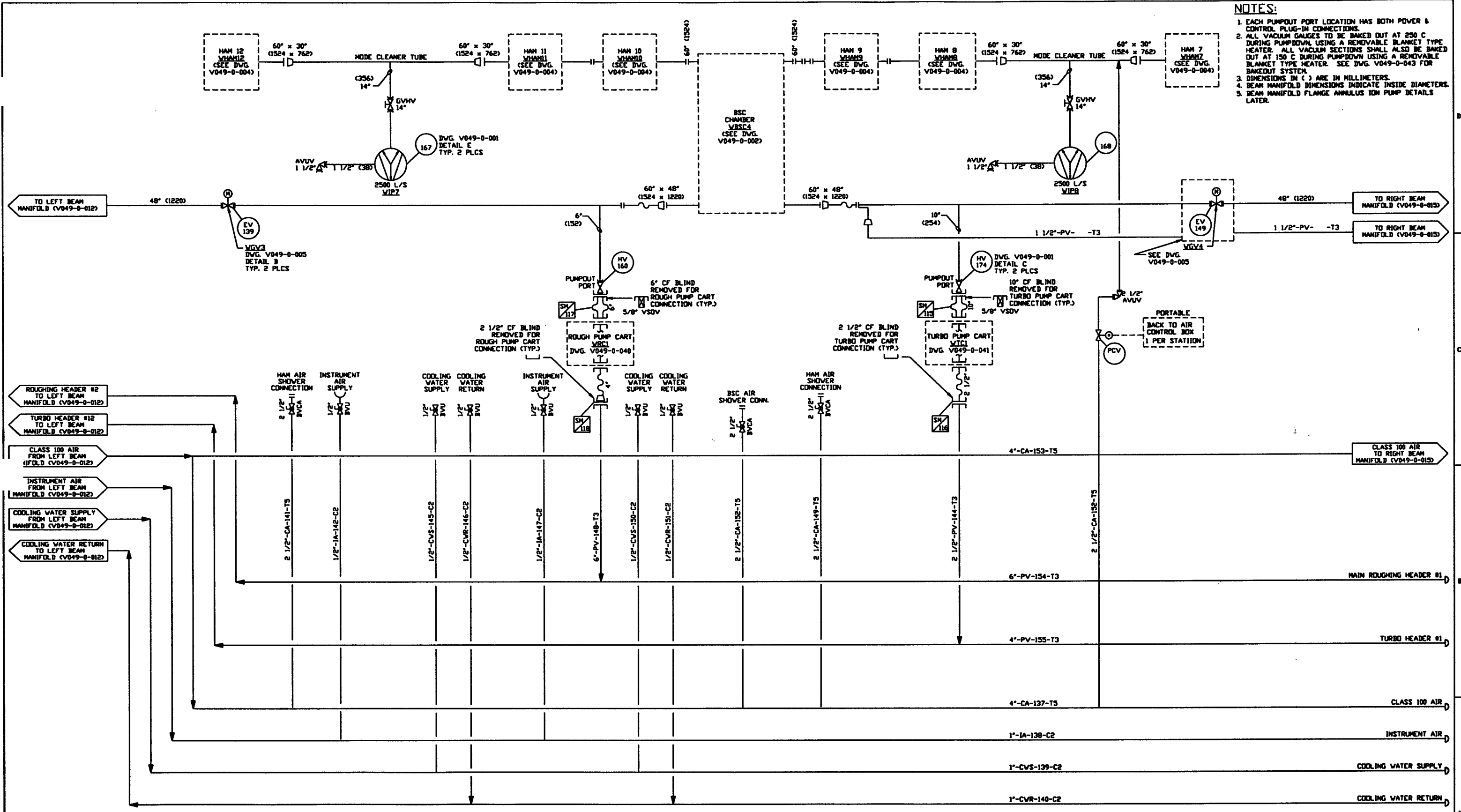


NOTES:

1. EACH PUMPOUT PORT LOCATION HAS BOTH POWER & CONTROL PLUG-IN CONNECTIONS.
2. ALL VACUUM GAUGES TO BE BAKED OUT AT 250 C DURING PUMPDOWN USING A REMOVABLE BLANKET TYPE HEATER. ALL VACUUM SECTIONS SHALL ALSO BE BAKED OUT AT 150 C DURING PUMPDOWN USING A REMOVABLE BLANKET TYPE HEATER. SEE DWG. V049-0-043 FOR BAKEDOUT SYSTEM.
3. DIMENSIONS IN () ARE IN MILLIMETERS.
4. BEAM MANIFOLD DIMENSIONS INDICATE INSIDE DIAMETERS.
5. BEAM MANIFOLD FLANGE ANNULUS ION PUMP DETAILS LATER.



LIGO D961079-01-V

<p>SECRETARY AND CONFIDENTIAL</p> <p>DOCUMENT CONTAINS PROPRIETARY INFORMATION BELONGING TO PROCESS SYSTEMS INTERNATIONAL, INC. OR ITS UNITED COMPANIES AND SHALL BE KEPT ONLY FOR THE PURPOSES FOR WHICH IT WAS SUPPLIED. IT SHALL NOT BE COPIED, REPRODUCED OR OTHERWISE DISSEMINATED WITHOUT THE WRITTEN CONSENT OF PROCESS SYSTEMS INTERNATIONAL, INC. AND SHALL BE RETURNED UPON REQUEST.</p>		<p>V049-0-040 P & ID MAIN ROUGHING PUMP CART</p> <p>V049-0-015 P & ID RIGHT BEAM MANIFOLD</p> <p>V049-0-012 P & ID LEFT BEAM MANIFOLD</p> <p>V049-0-004 P & ID HORIZONTAL ACCESS MODULE</p> <p>V049-0-002 P & ID BEAM SPLITTER CHAMBER</p> <p>V049-0-001 P & ID LEGEND</p>	<p>V049-0-041 P & ID TURBO PUMP CART</p>	<p>EQUIP. THIS DWG.</p> <p>VHAM7 VJP7</p> <p>VHAM8 VJP8</p> <p>VHAM9 VTC1</p> <p>VHAM10 VRC1</p> <p>VHAM11 VGV3</p> <p>VHAM13 VGV4</p> <p>VBS4</p>	<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES: FRACTIONS: ± ANGULAR: ± 30° ± 15' ± 30" ± 1.5" ± 0.005" ± 0.002" ± 0.001" ± 0.0005"</p> <p>DO NOT SCALE THIS DRAWING</p> <p>USED ON: _____</p> <p>NEXT ASS'Y: _____</p>	<p>1 ISSUE FOR FOR</p> <p>0 ISSUE FOR DESIGN</p> <p>P1 PRELIMINARY DESIGN UPDATE</p>	<p>REV TS RT HS DWV RLV</p> <p>REV TS RT HS DWV RLV</p> <p>REV TS RT HS DWV RLV</p>	<p>04.26.96 0134</p> <p>01.03.96 0031</p> <p>09.26.95 0063</p>	<p>PROCESS SYSTEMS INTERNATIONAL, INC. 20 WILBUR DR. NEEDHAM, MASSACHUSETTS 01946 USA</p> <p>PIPING & INSTRUMENTATION DIAGRAM LIGO VACUUM EQUIPMENT WASHINGTON SITE DIAGONAL SECTION</p> <p>CAD FILE: V0490014, SHEET: D, DWG. NO: V049-0-014, REV: 1</p>
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