Petro Specialties, Inc.

PetroVac - Vacuum Pump System (Patent Pending)

Short-Form Specification

Section XX XX XX – PetroVac Vacuum Pump System

Part of VPH Interstitial Monitoring with TLS-450Plus ATG

1. Provide PetroVac Vacuum Pump System by Petro Specialties, Inc. as the dedicated vacuum source for interstitial monitoring of double-walled tanks, piping, and sumps in VPH continuous monitoring systems, integrated with a Veeder-Root TLS-450Plus ATG with SCLD module.

2. PetroVac shall be a positive-displacement vacuum pump sized per manufacturer for total connected interstitial volume and line length, maintaining vacuum within the operating range required by tank/piping manufacturers and VPH regulations.

3. The system shall serve as the vacuum source for designated tank annulus, secondary piping, and containment sumps where STPs are not present or cannot be used as a vacuum source (e.g., alcohol tanks, generators, specialty systems, waste products or heavy petroleum storage).

4. Provide Veeder-Root pre-assembled Vacuum Sensor Monitoring Kits on each monitored interstice (tank, piping, sump), each kit including a Vacuum Sensor and its associated Liquid Sensor, installed and wired to TLS-450Plus per Veeder-Root instructions.

5. Program TLS-450Plus to:

    - Monitor all Vacuum Sensors and associated Liquid Sensors.
    - Execute positive shutdown of the PetroVac pump upon any liquid detection in a vacuum sensor.

- Lock out automatic restart until the alarm condition is corrected and manually reset by qualified personnel.

6. Show on drawings: PetroVac location, power requirements, vacuum header/branches, all interstitials served, and locations of each Vacuum Sensor Monitoring Kit.

7. Show on drawings the total volume of all interstices per zone to verify the correct model of PetroVac.

8. Install, start up, and functionally test PetroVac and sensors per manufacturer Installation and O&M Manuals, Installation Checklist, and Equipment Check Guidelines, including simulation of liquid detection to verify positive shutdown and manual reset sequence.

9. Provide PetroVac Installation Manual, O&M Manual, one-year limited parts warranty with registration and Installation Checklist documentation in the closeout package.