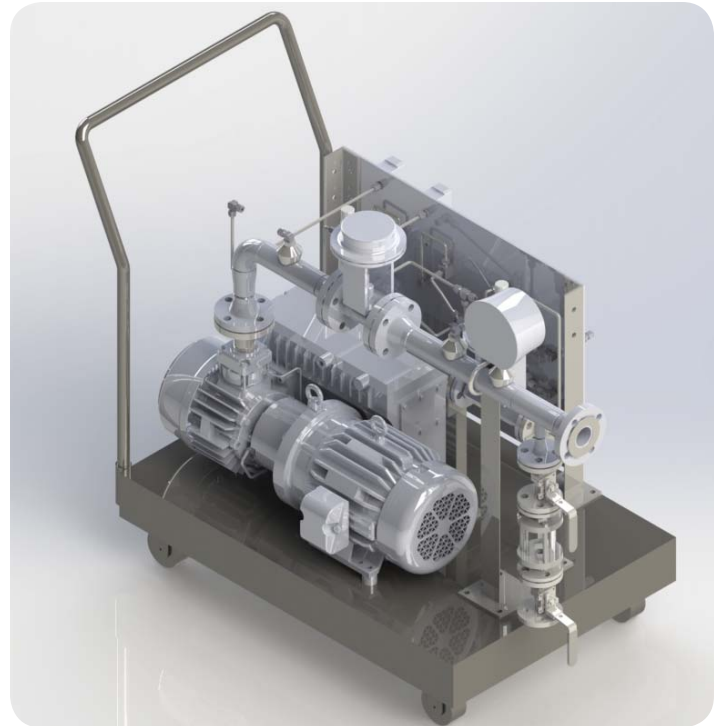


Product Description

DDPS' Portable Vacuum Cart is used to control the vacuum level in a reactor or process vessel. It features the ability to automatically hold a pressure set-point with precision and repeatability. By using nitrogen as the make-up gas, the skid can also be used to purge or blanket the vessel. The skid requires only a single connection to the vacuum line of the vessel, reducing the difficulty of installing the skid in a new or existing system. Unlike other vacuum control methods, this cart does not increase the load of the system condensing unit.

Design Features

- High accuracy process pressure / vacuum
- Automated set point control
- Reactor purge or blanket
- Quiet, vibration free operation
- Minimizes excess nitrogen usage and reactor condenser load
- Remote operation via computer or PLC
- Cart-mounted for portability
- Customized for individual system requirements



Vacuum Cart modeled in Solidworks

MAIN COMPONENTS

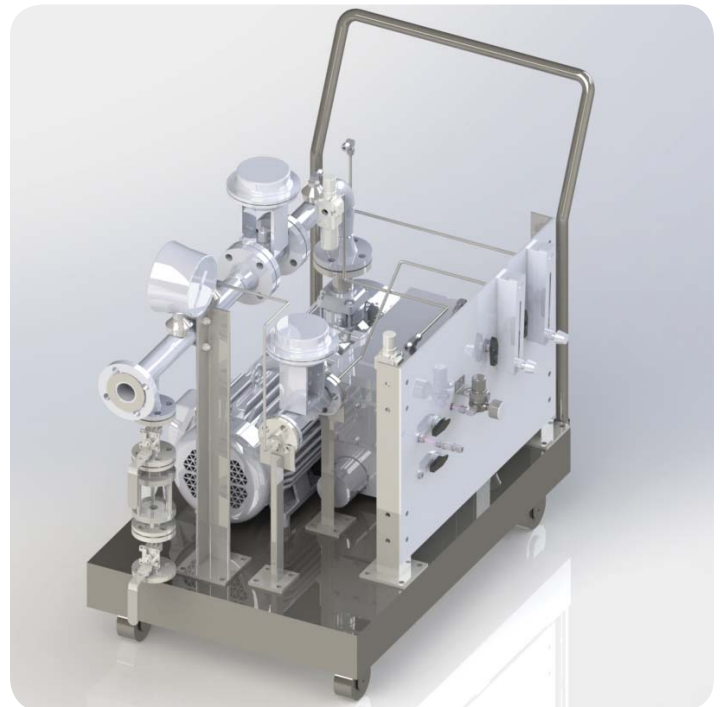
- Air-cooled Rotary Vane Vacuum Pump
- Dual control valves on inlet of Vacuum Pump and nitrogen supply for pressure control
- Local operator panel and pressure indicator for fine tuning Nitrogen flow purge and blanket
- All wetted parts are stainless steel

PROCESS CONNECTIONS

- 1/4" compression fitting for nitrogen (qty 1)
- 1/4" compression fitting for compressed air to actuated control valves (qty 1)
- 1 1/2" 150# ANSI flange connection for reactor vacuum (qty 1)

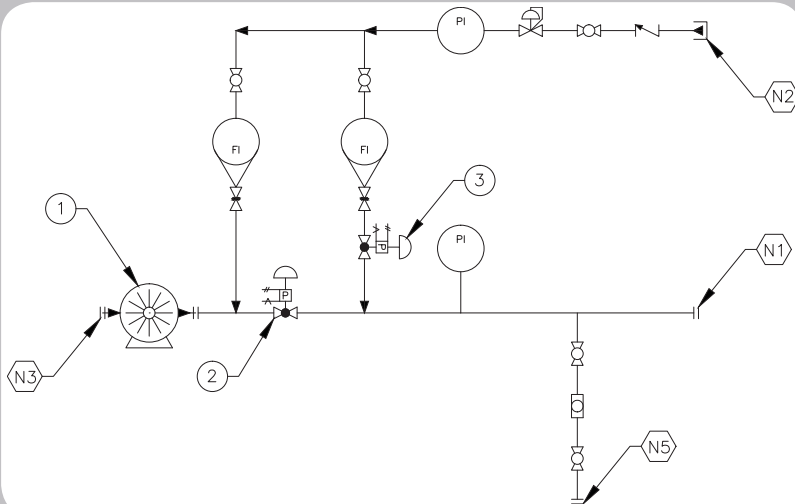
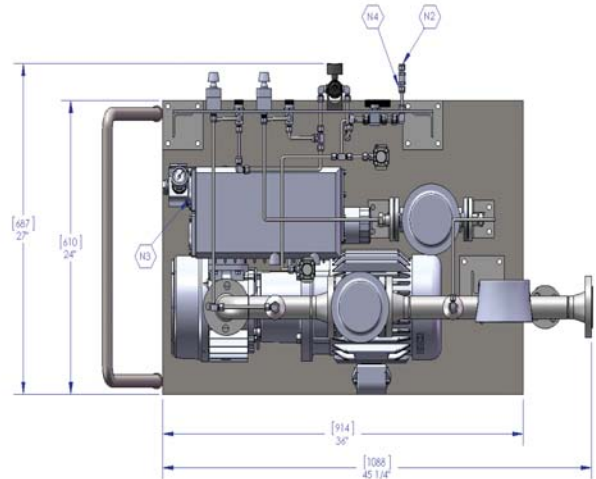
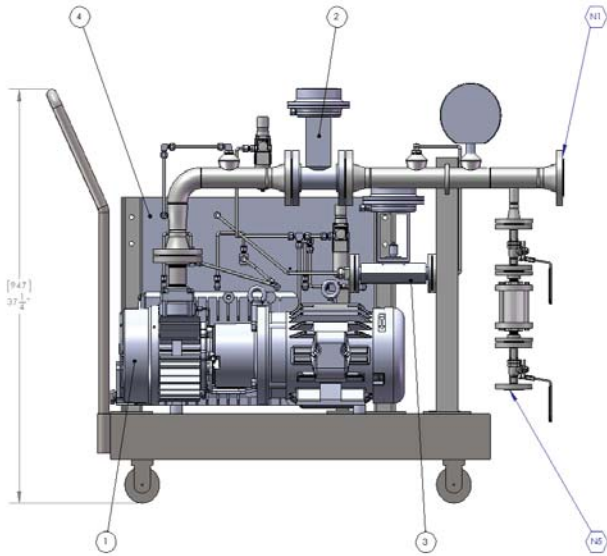
CAPACITY/SIZE

- 29.9 inches Hg, 35 ACFM
- 45" (L) x 27" (W) x 38" (H)



Vacuum Cart modeled in Solidworks showing control panel

General Arrangement Drawings & P&ID



Nozzle Schedule

- N1: ANSI 150# 1- 1/2" from Reactor System
- N2: 3/4" tube - Nitrogen Inlet
- N3: 1- 1/2" FNPT - Exhaust
- N4: 3/4" tube - Actuator Air Supply
- N5: ANSI 150# - 1/2" Condensate Drain

Major Components

- 1: Vacuum Pump
- 2: Vacuum Control Valve
- 3: N₂ Control Valve
- 4: Control Panel

