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

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
• ¼” compression fitting for nitrogen (qty 1)
• ¾” compression fitting for compressed air to actuated control valves (qty 1)
• 1½” 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)
General Arrangement Drawings & P&ID

Nozzle Schedule
N1: ANSI 150# 1-½” from Reactor System
N2: ¼” tube - Nitrogen Inlet
N3: 1-½” FNPT - Exhaust
N4: ¼” tube - Actuator Air Supply
N5: ANSI 150# - ½” Condensate Drain

Major Components
1: Vacuum Pump
2: Vacuum Control Valve
3: N2 Control Valve
4: Control Panel