



HPDE Vacuum Pump Package Components: A Cost Effective “Steel” Alternative

Liquid ring vacuum pumps are known for having a long service life, assuming they are selected with the correct material of construction (MOC) for the application and properly operated and maintained. But what about the components that are part of the pump system? If the pump is iron, it is typical to specify carbon steel (CS) accessories. Similarly, if the pump is stainless steel (SS), the components are SS. However, there is another option: “*High Density PolyEthylene*” otherwise known as HPDE. It is a corrosion and erosion resistant, durable material that can be a cost-effective alternative to carbon steel or stainless steel. HPDE offers a longer service life than CS and provides similar chemical resistance properties as SS. It has a much lower initial cost than SS and a lower total cost of ownership (TOC) when compared to CS. Here is an overview of the equipment available in HPDE:

Water Trap Silencer (standard)



Components Available in HPDE

Liquid ring vacuum pump **inlet separators** (horizontal or vertical), **discharge silencer/separators**, inlet and discharge **pump manifolds** (for vintage pump models, for ANY pump manufacturer), and **circular tanks (up to 7 ft in diameter)** for many services including sump or aeration tanks. ASME code is not available, but the vessels can be hydrotested up to 25 psig. HPDE components are manufactured by Monarch II Systems, Inc., which E.W. Klein represents in the Southeast.

Replacement Capability

Monarch II fabricates **bolt in replacements** for standard Vanec and Burgess Manning water trap silencers/separators and inlet separators. They also manufacture custom designed silencers and separators, as well as manifold or other piping assemblies. HPDE silencers are available with new and/or replacement vacuum pump packages.

Adjustable Legs



Custom Fabrication Options

Customization includes diameter and height, location and size of connections, NPT or flanged connections (offered in stainless, carbon, or galvanized steel), double walled vessels, inspection ports, and **adjustable legs**. Drawings for custom built vessels are provided to the customer for review and approval, at no upcharge or design fee.

Horizontal Separator



Warranty

Monarch II HPDE separators and components come with a 3-year warranty and are made in the USA. Delivery is 2 – 4 weeks for standard components and 6 – 8 weeks for custom items.

About E.W. Klein & Company

E.W. Klein has over 98 years of industrial experience with a portfolio that consistently delivers Performance, Value, Reliability, and Efficiency. Not only do we represent state of the art liquid ring vacuum pump and compressor brands including: NASH, Siemens, and Garo, we also offer vacuum “system” components such as water trap silencers and inlet pre-separators manufactured by Monarch II (HPDE) and Vanec (CS and SS). You can reach our main office at 404-256-9200 or at www.ewklein.com. For questions about this newsletter, please contact Allison Carroll, acarroll@ewklein.com