



TRAVAINI PUMPS USA

Liquid Ring & Rotary Vane Vacuum Pumps and System

Travaini Pumps USA, Inc.

Design Features of DynaSeal Vacuum Pump Systems for Medical Applications

Our DynaSeal, oil sealed liquid ring vacuum pump systems were developed about 15 years ago. The closed loop sealed system concept was designed to eliminate the need for the ever increasing cost of water and the disposal of it. All systems are air-cooled and feature our rugged new generation of high efficiency liquid ring vacuum pumps. The listing of features and benefits shown below proves that DynaSeal systems are the superior choice for medical vacuum applications in the Health Care industry.

- DynaSeal systems are built to the latest NFPA 99 specifications.
- Minimum maintenance: This may be the strongest advantage of the DynaSeal system. Unlike Rotary Screw or Rotary Vane vacuum pumps which require frequent oil changes, our DynaSeal systems, under normal operating conditions, only requires an oil change after 10,000 hours of operations. The reason for this is that the oil is not a lubricant, but rather a seal fluid for creating the liquid ring pumping action. The impeller runs freely in an isolated pumping chamber with no metal contact. The bearings are grease lubricated and mounted external. Shaft seal leakage is eliminated by the use of mechanical seals.
- No inlet filters or Oil filters to maintain: Unlike Rotary Screw and Rotary Vane vacuum pumps, DynaSeal systems require no inlet or oil filters which means the elimination of possible exposure to bacteria traps when changing the filter element.
- Low noise level: DynaSeal systems run extremely quiet (75-80 dBA) No special sound enclosures are required, as is the case with Rotary screw vacuum pumps.
- Durability: DynaSeal systems can pass liquids or soft solids without causing any damage to the pump. Using oil as the seal fluid protects the pump and system components from corrosion, which translates into a long life for all system components.
- Automatic temperature control: The operating temperature of the pump system is controlled by an automatic temperature control valve, which maintains the system operating temperature at 160-180 F°. This elevated temperature minimizes bacteria growth.

- Quick payback on replacement cost: DynaSeal systems require no water like the conventional water sealed liquid ring pumps and therefore the purchase can easily be justified by the savings in water usage and the disposal cost. In addition the maintenance cost is reduced to an absolute minimum.
- Complete factory packaged design: DynaSeal systems are designed and built in our own manufacturing facility in Yorktown, Virginia. This will ensure you as the customer with single source responsibility and a high quality piece of equipment, backed by a two year factory warranty and a nation wide service network.

The above features are so important for today's health care environment that more and more hospitals regard our DynaSeal systems as the preferred choice for medical vacuum.