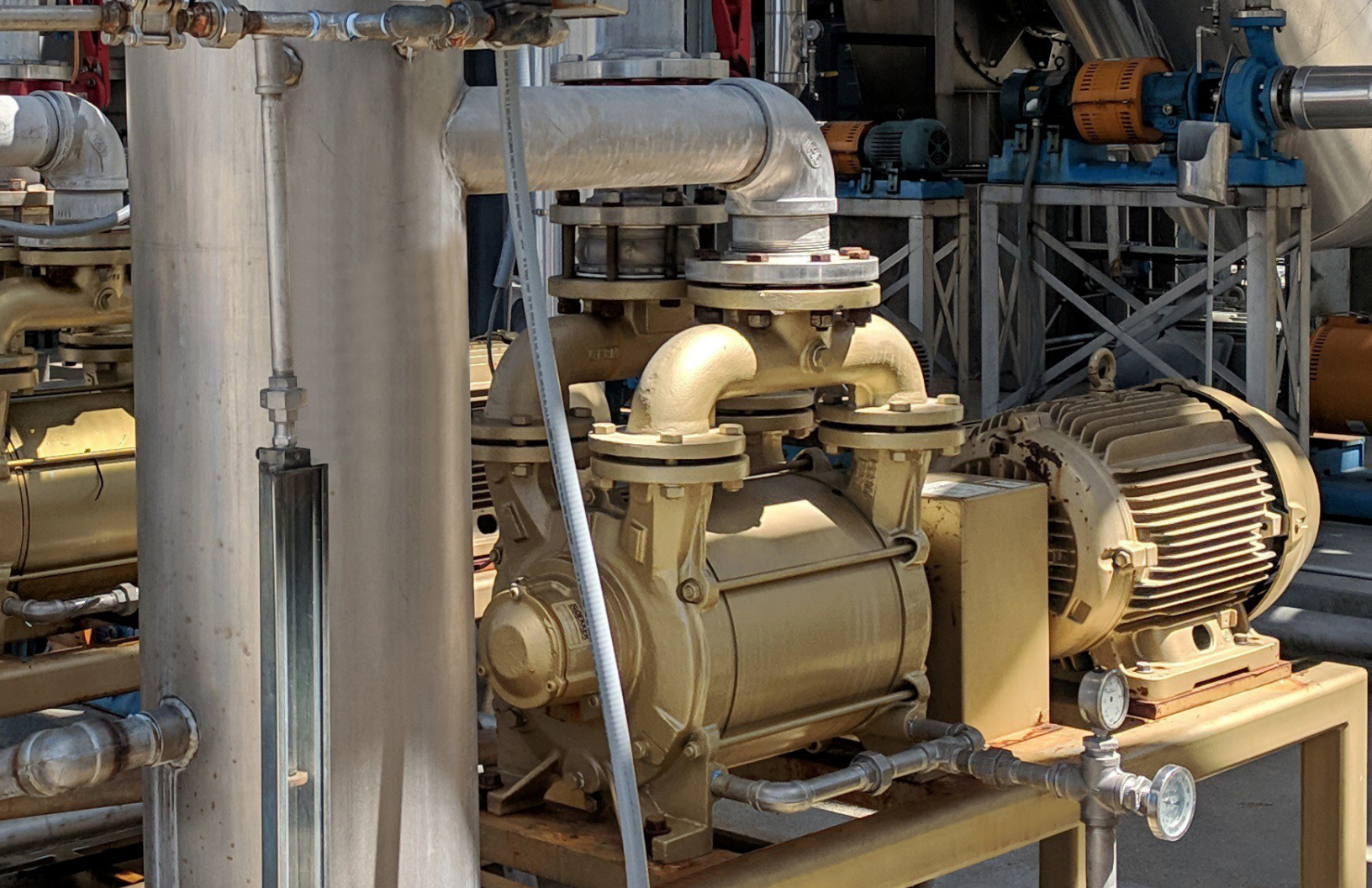


Vacuum Pumps & Systems

DEKKER
VACUUM TECHNOLOGIES



DEDICATED. DEPENDABLE. DYNAMIC. DEKKER.



The Dekker Difference

Dekker Vacuum Technologies, based in Michigan City, Indiana, is an industry leader in the manufacturing of tough and reliable vacuum solutions. The vacuum solutions designed and built at Dekker play a critical role in the demanding manufacturing processes like those in woodworking, food processing, medical, plastics and power generation. Backed by service and support you can always count on, Dekker's desire to exceed expectations is built into every vacuum product and is easily recognizable in the service and support after the sale. Dekker Vacuum Technology employees are proud to have earned the reputation of being - **Dedicated. Dependable. Dynamic. Dekker.**



Process Savings



Energy Savings



Environmental Sustainability



Optimized Performance



Knowledge Base

Applications

Where reliable and efficient vacuum solutions are needed, Dekker vacuum pumps and systems are built to deliver. The robust and efficient design of the wide range of Dekker products excels in the most demanding applications:

Woodworking

CNC hold down for cutting and routing, automatic loading and unloading, lamination, drying, palletizing

Chemical

Distillation, degassing, filling, gas recovery, priming, crystallization, blending, pneumatic conveying, compression, deodorizing, evaporation

Food Processing

General processing and packaging, conveying, tumbling and marinating, cheese processing, vacuum cooling of produce

Food Packaging

Fresh and cooked meats packaging, modified atmosphere packaging, filling and sealing, thermoforming, degassing, canning, filtration

Plastics & Rubber

Thermoforming applications, extruder barrel degassing, mold degassing, material handling

Electronics

Pick and place of components, PCB manufacturing, central vacuum systems

Power Generation

Condenser hogging, conveying, degassing, fly ash conveying, priming, turbine gland exhausting, flue gas desulfurization

Pulp & Paper

Presses (sheet fed, offset, etc.), bindery equipment including stitching lines and perfect binding, newspaper production, envelope machines

Material Handling

Vacuum lifting, pick and place, bulk material transfer, pneumatic conveying, bottling, canning, vacuum sewage

Medical Vacuum

Various surgical evacuation duties, anesthesia gas removal, central vacuum systems, dental vacuum, sterilization, vapor recovery

A photograph of two male workers in a factory setting. They are wearing yellow hard hats and high-visibility yellow safety vests. The worker in the foreground is wearing a maroon long-sleeved shirt and blue jeans, and is holding a clipboard and a pen, looking at it. The second worker is wearing a light-colored polo shirt and dark pants, looking towards the first worker. In the background, there is a conveyor belt with several dark plastic bottles with green caps. The scene is brightly lit, and the overall atmosphere is industrial.

Vacuum Pumps

Titan Series

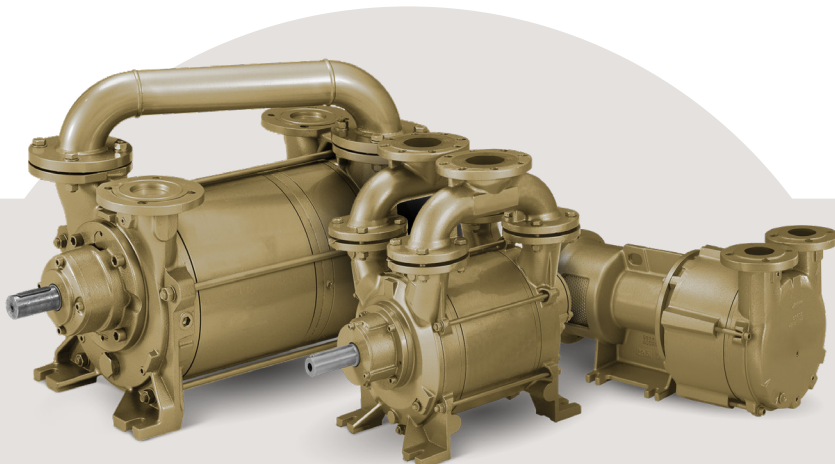
Single & Two-Stage Liquid Ring Vacuum Pumps

Performance Specs	
Single-stage vacuum pumps	
Nominal Capacity	6 - 1,200 CFM
Motor Size	0.75 - 100 HP
Two-stage vacuum pumps	
Nominal Capacity	15 - 1,000 CFM
Motor Size	2 - 100 HP
Single-stage compressors	
Nominal Capacity	15 - 1,100 CFM
Motor Size	up to 150 HP
Pressure	up to 28 psig

The Dekker Titan Liquid Ring Pumps series features a variable discharge port design, this port automatically adjusts to the internal compression ratio. It offers exceptional efficiency with a single stage design. The Titan series of vacuum pumps registers levels up to 29" HgV, and offer high volumetric efficiency with less seal liquid requirement.

Features

- Designed for heavy duty applications
- 316 stainless steel impeller is standard
- Sturdy Bearing pedestal mounts to standard NEMA C-face motor
- Manufactured to ISO 9001:2015 standards
- Low operating noise level
- Heavy duty bearings mounted external to the pumping chamber
- Features single face mechanical seal as standard
- Virtually no maintenance is required
- Pumps are available in different materials to suit your application
- Capable of handling saturated gas mixtures
- Capable of handling small amounts of liquids
- Only one moving part
- Operates using various seal fluids



Maxima Series

Single & Two-Stage Large Capacity Liquid Ring Vacuum Pumps

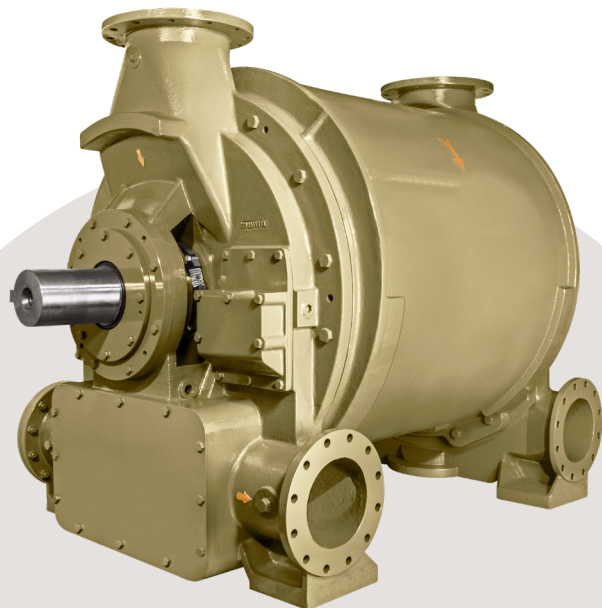
Maxima-K Series

The Maximum-K line of large capacity liquid ring vacuum pumps by Dekker features a single stage design utilizing flat port plates. This allows the pump to operate efficiently across a wide vacuum range. Available at capacities ranging from 1,500 CFM to 39,000 CFM, the Maxima-K can handle large amounts of condensables with maximum efficiency. This design can also reduce seal-liquid consumption with no metal to metal contact. The reliable, heavy-duty design of these pumps also offer low operating noise and low maintenance.

Maxima-C Series

The Dekker Maxima-C line of large capacity liquid ring vacuum pumps features a robust canonical porting instead of a flat plate design allowing it to handle more seal liquid or liquid carryover. The Maxima-C is a heavy-duty design with a 20 blade shrouded rotor and multiple inlet/discharge configurations. This design offers maximum efficiency, low noise, low maintenance, and offers exceptional reliability.

Performance Specs	
Maxima-K single-stage vacuum pumps	
Nominal Capacity	1,050 - 39,000 CFM
Motor Size	100 - 1,900 HP
Maxima-C single-stage vacuum pumps	
Nominal Capacity	200 - 22,600 CFM
Motor Size	10 - 1,200 HP
Maxima-C liquid ring compressor	
Nominal Capacity	up to 5,000 CFM
Pressure	up to 88 psig
Large Capacity two-stage vacuum pumps	
Nominal Capacity	600 - 2,800 CFM
Motor Size	32 - 230 HP



HullVac Series

Single & Two-Stage Rotary Piston Vacuum Pumps

Performance Specs

Single-stage vacuum pumps

Nominal Capacity 52 - 850 CFM

Motor Size 3 - 40 HP

Two-stage vacuum pumps

Nominal Capacity 32 - 340 CFM

Motor Size 3 - 20 HP

Offered as a single or two-stage model, the Dekker HullVac Rotary Piston Vacuum Pumps are expertly engineered for reliability and longer lifecycles. With great performance, low maintenance, and ease of use, these pumps are built for the toughest industrial environment. The HullVac line is affordable and can save money on energy costs with their efficient design.

Features

- Sealed Bearings - Bearing life is enhanced by isolating them from harmful process grit and solvents
- Heavy duty studs, springs and wear plates are mounted to hardened steel seats designed to prevent broken springs from falling into the pumping chamber
- Internal Sealing Fluid Channels - Sealing oil enters the pumping chambers through internal channels
- Oil Flow Indicator - An oil stream splashes onto the site port ensuring easy verification even when oil is opaque
- Redundant Shaft Seals
- One piece construction of caged hinge bar enhances wear life and reduces operating noise



DuraVane Series

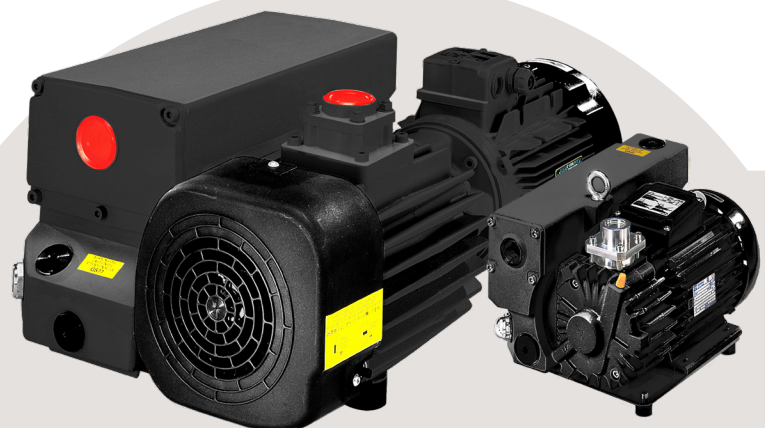
Lubricated and Oil-Free Rotary Vane Vacuum Pumps

The Dekker DuraVane lubricated and oil-free rotary vane vacuum pumps are a range of single-stage vacuum pumps and air compressors that expertly designed, to be reliable, and economical. They feature a compact design and a small footprint for ease of installation, low noise levels, and Longer time between maintenance and ease of service due to the modular design

Features

- The pump is designed using proven technology and built with industrial grade components
- With its low noise and vibration level and small footprint, the DuraVane series rotary vane vacuum pumps are suited for rough industrial application
- High reliability through a robust design and built with heavy-duty material for increased lifetime
- Easy to install due to compact, space-saving design
- The oil-separation circuit of the lubricated DuraVane series has been optimized to minimize oil vapors in the exhaust gas
- Oil-free series boasts operations with no emissions and contamination for your process

Performance Specs	
Lubricated rotary vane vacuum pumps	
Nominal Capacity	7.7 - 494 CFM
Motor Size	0.8 - 25 HP
Oil-free (dry) rotary vane vacuum pumps	
Nominal Capacity	3.6 - 88 CFM
Motor Size	0.2 - 5.3 HP
High vacuum rotary vane vacuum pumps	
Nominal Capacity	3 - 12 CFM
Motor Size	0.5 - 1.25 HP



Gryphon Series

Oil-Free Claw Vacuum Pumps

Performance Specs

Oil-free claw vacuum pumps

Nominal Capacity	48 - 204 CFM
Motor Size	3 - 10 HP


While simple in its design, the Gryphon dry claw vacuum pump comes packed with innovative features that make it more durable, service friendly, and efficient. Its exceptional performance and the contaminant-handling capability of these pumps make them the ideal choice for harsh application processes. Processes like those found in the woodworking, food processing, plastics, material handling and medical industries.

Features

- Dry (oil-free) pumping chamber
- Highly efficient and reliable motor
- Easily accessible pumping chamber for cleaning without accessing the gearbox and disturbing the timing
- Modular design allows flexibility and efficiency in terms of maintenance and life cycle costs
- Durable coated pumping chamber
- Corrosion resistant stainless steel claws
- Upgraded bearings and seals - Based on proven compressor and screw vacuum pump design for long trouble-free life even in the harshest applications
- Simple maintenance with contact-free internals eliminating wear



gryphon 

A low-angle, upward-looking photograph of a massive industrial structure, likely a cooling tower or a large-scale vacuum system. The structure is composed of a large, circular concrete shell with a textured, ribbed surface. Inside the shell, a complex network of dark metal scaffolding, pipes, and walkways is visible. At the top of the structure, a large, circular opening reveals a bright blue sky with scattered white clouds. The overall scene conveys a sense of scale and industrial complexity.

Vacuum Systems

Vmax Series

Oil-Sealed Liquid Ring Vacuum Pump Systems

Performance Specs

Compact liquid ring vacuum systems

Nominal Capacity 35 - 150 CFM

Motor Size 3 - 10 HP

Standard liquid ring vacuum systems

Nominal Capacity 35 - 1,200 CFM *

Motor Size 3 - 100 HP

Vmax^{PLUS} liquid ring vacuum systems

Nominal Capacity 155 - 465 CFM

Motor Size 10 - 30 HP

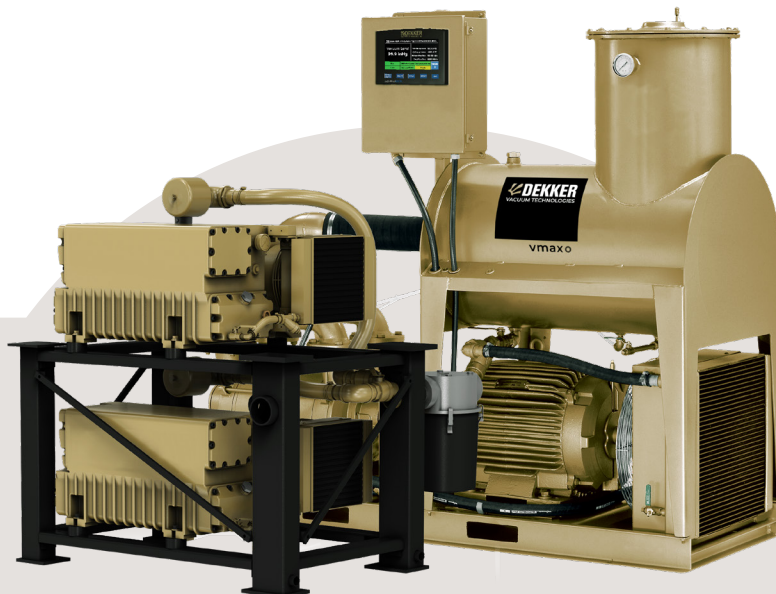
* Larger standard systems available up to 5,400 CFM

Note: Multiplexing available with Vmax^{PLUS}. Simplex, duplex, and triplex standard for Vmax^{PLUS} model.

Built for the most demanding applications, the Dekker Vmax line of vacuum pump systems offers a range of 35-5400 CFM. The rugged high-quality design eliminates the use of water and offers years of trouble-free operation. The system has an extremely low operating noise level and features continuous operation over the full vacuum range without overheating. The Vmax is a compact design that offers low power consumption.

Features

- Patented high-efficiency DX-5 separator eliminates oil carry over concerns
- UL/CSA EPACT compliant motor mounted design eliminates the use of V-belts or couplings
- Extremely low operating noise level makes this system desirable in today's workplace
- Carry over of soft solids and/or minimal amounts of liquid does not cause damage to the internal parts of the pump
- Air-cooled design is standard with water cooling available at no extra charge



ChemSeal Series

Solvent-Sealed Liquid Ring Vacuum Pump Systems

ChemSeal custom-engineered solvent-sealed liquid ring vacuum pump systems are specifically designed for the recovery of a variety of solvents. The inherent design features of the liquid ring pump have the great advantage of being able to use solvents as the seal liquid.

Dekker Vacuum Technologies has extensive experience in the engineering and manufacturing of solvent-recovery vacuum pump systems for a wide variety of applications. Whether an application is simple or complex, Dekker application engineers will offer the best solution at an affordable price.

The ChemSeal series of solvent-sealed liquid ring vacuum pump systems are used in the Chemical and Pharmaceutical industries for solvent recovery in applications such as distillation and vacuum drying. They may include a pre-condenser with condensate receiver and an after-condenser. The combination achieves a very high solvent-recovery rate. Systems can be manufactured in standard materials as well as a variety of special materials such as stainless steel and hastelloy.

Performance Specs

Single-stage vacuum systems

Nominal Capacity	15 - 39,000 CFM
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Single-stage compressor systems

Nominal Capacity	up to 5,000 CFM
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Pressure	up to 90 psig
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AquaSeal Series

Water-Sealed Liquid Ring Vacuum Pump Systems

Performance Specs

Single-stage motor mounted vacuum pumps

Nominal Capacity 20 - 150 CFM

Motor Size 1.5 - 10 HP

Single-stage vacuum pumps

Nominal Capacity 20 - 1,200 CFM

Motor Size 1.5 - 100 HP

Two-stage vacuum pumps

Nominal Capacity 15 - 500 CFM

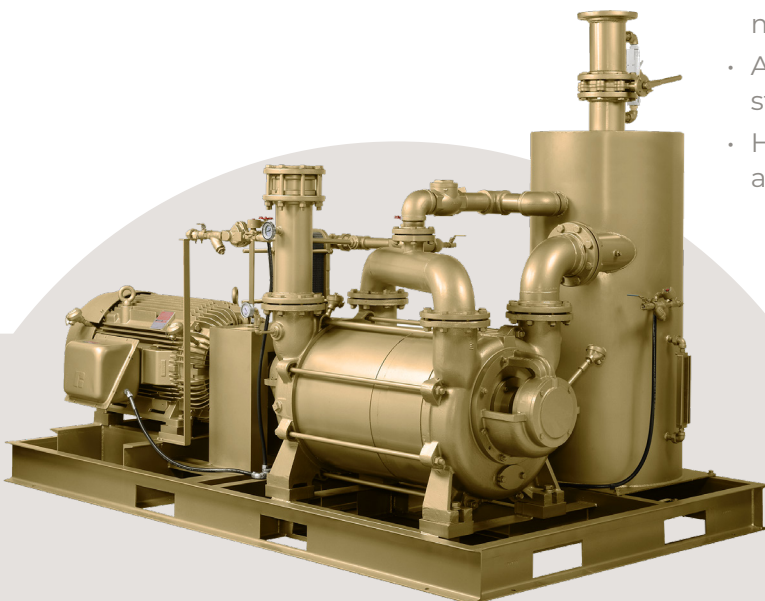
Motor Size 2 - 50 HP

Larger capacity systems, up to 39,000 CFM (1200 HP) are available, please contact factory for more details. Special materials, such as stainless steel, Hastelloy, etc are available upon request.

AquaSeal systems are ideal for tough applications where corrosive gases are present. These systems are designed to be environmentally friendly and minimize pollution. Available in a wide choice of materials and can be set up for fully automatic operation. The AquaSeal system can be configured with either single-stage or two stage liquid ring pumps, and designed to meet process needs as a full recovery, partial recovery or no recovery option. This system is low maintenance and can have minimal cooling water requirements.

Features

- Complete package design includes all necessary components
- Available in a wide choice of materials
- Custom design according to customers specifications are a Dekker specialty
- Electrical control panel, including skid wiring available as an option
- Available with either single-stage or two-stage liquid ring pumps
- Heavy-duty pump design requires minimum maintenance
- All pumps include mechanical shaft seals as standard
- Heavy-duty TEFC motors with service factor are included



VFD Technology

The benefits of Variable Frequency Drive Technology

CNC routers have maximum-hold control on work pieces with custom solutions that use the liquid ring oil-sealed vacuum pump systems. Variable speed technology allows equipment to respond more precisely to different loads with varied motor speed to match changing machine and usage requirements. The net result is better control and operation at up to 50% reduced horsepower – saving considerable energy and reducing waste due to part slippage caused by insufficient flow or vacuum level.

Vacuum systems equipped with Variable Frequency Drive provide:

- Control of power consumption
- Control of current inrush
- Control of vacuum
- Control of material damage and minimize waste
- Control of costs and ROI



System Monitoring & Control

ControlDEK™ PLC

Introducing ControlDEK™ PLC from Dekker Vacuum Technologies. The ControlDEK PLC is an easy to use, yet highly advanced, touch screen controller. The ControlDEK PLC is available across all of Dekker product lines, and is designed both for standard or custom applications. The ControlDEK PLC provides at a glance access to important system information and controls. The ControlDEK PLC offers many industry standard communication options.



Features and Advantages include:

- Single standard user-friendly interface across Dekker's full product line and systems
- Software updates that can easily be applied in the field
- Enhanced monitoring capabilities with optional Modbus or BACnet module
- Optional Phone App for Remote Access





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Service & Support

At Dekker® Vacuum Technologies, we are committed to optimizing your industrial processes and minimizing downtime. This means providing unrivaled customer service and support through the entire process, from helping you choose the ideal pump for your application to providing the maintenance needed to keep your business growing strong. To ensure the longest life cycle of your vacuum pumps, we highly encourage all our customers to follow the manufacturer maintenance recommendations and using genuine OEM Dekker® spare parts and oils.

Contact

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