

KINNEY®

Dry Claw Vacuum Pumps

Kinney® KVC Vacuum Pumps



Kinney KVC

Market Solutions

MD-Kinney now proudly offers KVC Series dry claw vacuum pumps within our Kinney portfolio. The KVC Series claw pumps offer a compact footprint requiring a minimal amount of floor space. Contactless operation means minimal wearing parts and maintenance needed, and oil-free compression. The KVC claw pumps have a highly efficient design for not only energy efficiency, but also efficiency for CFM per HP. Extreme Duty (XD) models are available for demanding applications and Low Pressure (LP) series available to meet the needs of applications requiring the highest ultimate vacuum.

Kinney claw pumps require minimal floor space and are very easy to install. Combined with extremely minimal service, this product is the perfect fit for wide range of application and markets.



Dry claw pump rotors.

Markets

Woodworking

Medical

Food & Beverage

Automotive

Plastics

Applications

Pick & Place

CNC Router Tables

Industrial Vacuum

Central Vacuum Systems

Thermoforming

Food Packaging

Degasification



Contact Free Efficiency

The KVC Series is a contact free dry claw vacuum pump that operates efficiently and economically. The claw pump has two claw-shaped rotors, turning in opposite directions from one another. These rotors are timed and synchronized using a high-performance gearbox. As the rotors turn, the claw travels over the suction connection, pulling inlet gas into the compression chamber. As rotors continue to rotate, gas moves from the suction side to the pressure side. It is then compressed by the reduction of volume between the rotors. During this process, the discharge channel is temporarily sealed by the lower rotor. The gas then travels out the discharge channel once it reaches maximum compression.

PERFORMANCE SPECIFICATIONS

Model	Nominal Displacement	Ultimate Pressure	Motor	Rotation Speed	Oil Capacity	Pump Weight <i>Includes Motor</i>	Noise Level Max
	CFM / m3/h	Torr / inHgV	60Hz HP / 50Hz kW	60Hz / 50 Hz	Gal. / Litros	Lb / kg	dB(A)
KVC-60	50 Hz 35.3 / 60 60 Hz 42.4 / 72	75 / 27	2 / 1.1	3450 / 2850	0.1 / 0.4	136 / 62	80
KVC-62**	50Hz 36.5 / 62 60Hz 43.5 / 74	75 / 27	2.4 / 1.5	1745 / 1450	.45 / .43	251 / 114	63
KVC-100	50 Hz 58.9 / 100 60 Hz 70.6 / 120	113 / 25.5	3 / 2.2	3450 / 2850	0.15 / .55	254 / 115	82
KVC-122**	50Hz 70.6 / 120 60Hz 84.8 / 144	75 / 27	4 / 2.7	3475 / 2897	.45 / .43	265 / 120	73
KVC-150	50 Hz 88.3 / 150 60 Hz 106 / 80	75 / 27	5 / 3.0	3450 / 2850	0.16 / 0.6	309 / 140	82
KVC-251	50 Hz 88.3 / 210 60 Hz 150 / 255	150 / 24	7.5 / 4.0	3450 / 2850	0.16 / 0.6	327 / 164	78
KVC-301*	50 Hz 170 / 290 60 Hz 205 / 350	113 / 25.5	7.5 / 5.5	3550 / 2950	0.4 / 1.5	612 / 278	77
KVC-401*	50 Hz 240 / 408 60 Hz 285 / 485	150 / 24	12 / 7.5	3550 / 2950	0.5 / 1.8	930 / 442	81
KVC-501*	50 Hz 295 / 501 60 Hz 355 / 603	150 / 24	15 / 11	3550 / 2950	0.5 / 1.8	1118 / 512	81
KVC-1000*	50 Hz 559 / 950 60 Hz 671 / 1140	150 / 24	30 / 18.5	3550 / 2950	0.7 / 2.7	1803 / 818	83

* XD optional

**XD only

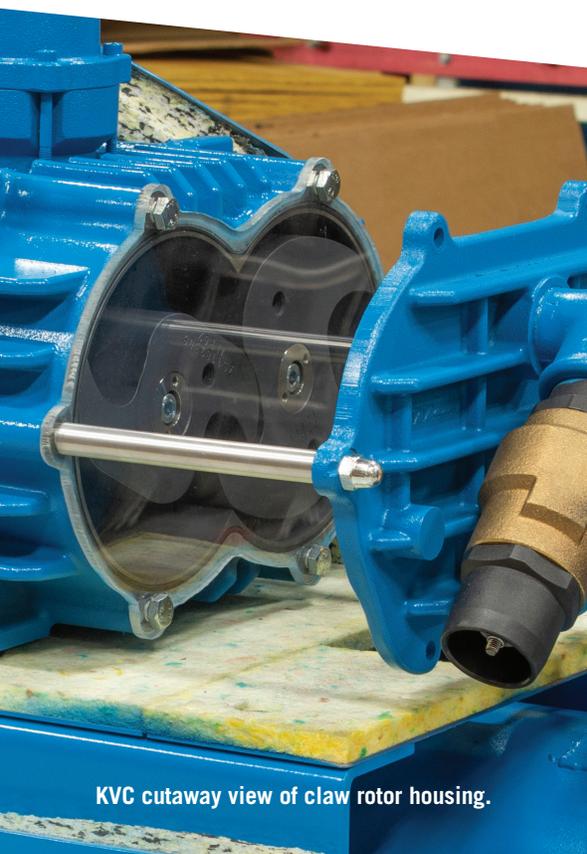


Achieve Even Deeper Vacuum

Introducing the KVC LP Series

The Kinney KVC LP (low ultimate pressure) Series represents the forefront of dry claw vacuum pump innovation, delivering exceptional performance, energy efficiency, and minimal maintenance requirements. Engineered for industries that demand reliable, oil-free vacuum solutions, the KVC LP Series offers a sustainable and cost-effective alternative to traditional vacuum technologies. Its compact, robust design ensures consistent operation even in the most demanding industrial environments.

Model	Nominal Displacement	Ultimate Pressure	Motor	Rotation Speed	Oil Capacity	Pump Weight <i>Includes Motor</i>	Noise Level Max
	CFM / m ³ /h	Torr / inHgV	60Hz HP / 50Hz kW	60Hz / 50 Hz	Gal. / Litros	Lb / kg	dB(A)
KVC-62 LP	50Hz 36 / 61 60Hz 44 / 74.8	34 / 28.6	2.4 / 1.8	1800 / 1500	.45 / .43	198 / 90	68.5
KVC-122 LP	50Hz 71 / 120.6 60Hz 85 / 144.4	30 / 28.4	4 / 3	3600 / 3000	.45 / .43	198 / 90	79
KVC-301 LP	50Hz 156 / 265 60Hz 188 / 319.4	23 / 29.1	10 / 7.5	3510 / 2925	1.6 / 6.1	477 / 216.4	77
KVC-401 LP	50Hz 244 / 414.6 60Hz 291 / 494.4	45 / 28.2	15 / 11.2	3500 / 2917	1.9 / 7.2	785 / 356.1	83
KVC-501 LP	50Hz 303 / 514.8 60Hz 351 / 596.4	45 / 28.2	20 / 15	3520 / 2933	1.9 / 7.2	817 / 370.6	83



Experience the KVC LP Advantage

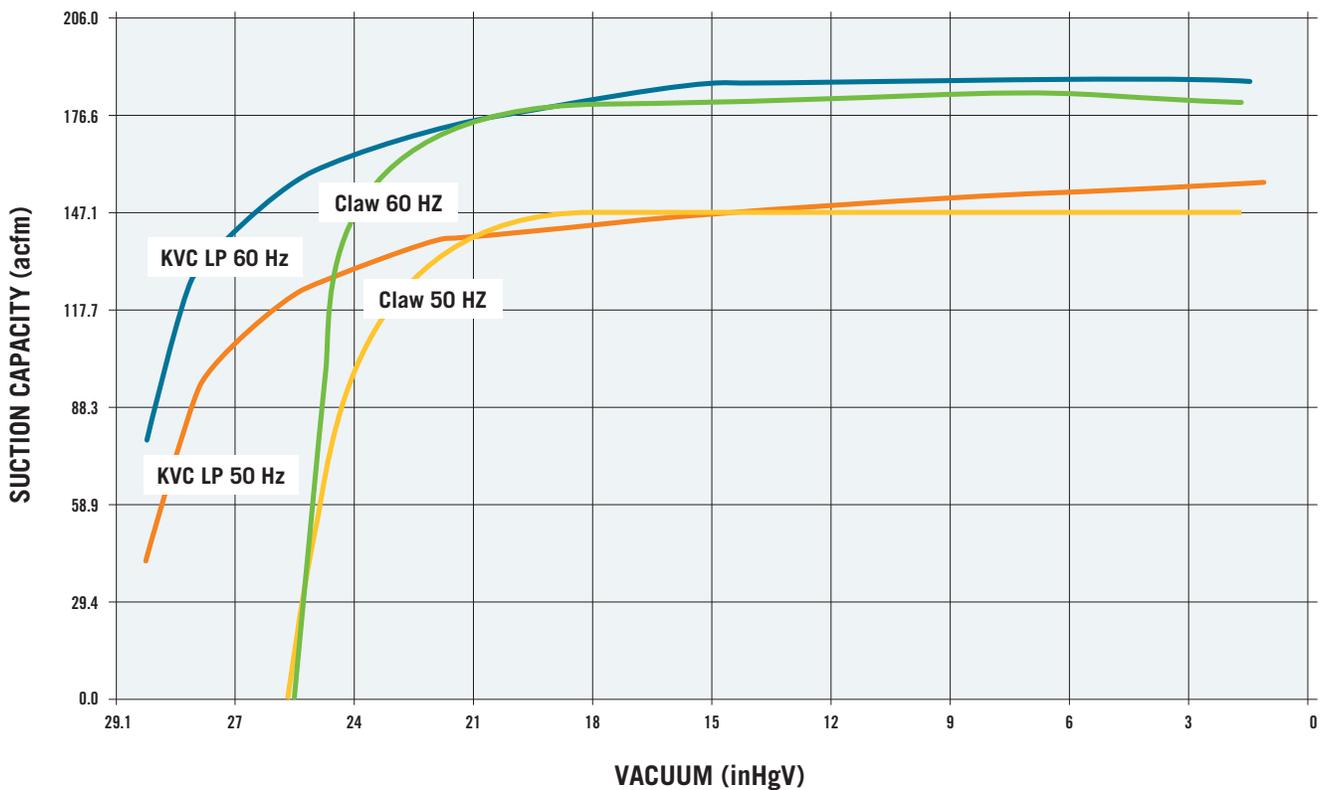
The KVC LP delivers **UP TO 17% LOWER ULTIMATE PRESSURE** than the competition, enabling more efficient process performance and greater operational precision. This superior vacuum level means faster evacuation times, improved throughput, and better control. Especially where precise pressure conditions are critical. The deeper vacuum capability of the KVC LP translates directly into higher product quality, reduced cycle times, and a measurable competitive edge.

New KVC LP Technology

- KVC LP 50 Hz
- KVC LP 60 Hz

Traditional Claw Technology

- 50 Hz
- 60 Hz



KVC Claw Features

(KVC301 Model Shown)

1. NEMA PREMIUM MOTOR

High Efficiency NEMA framed motors included and are compatible with Variable Speed Drives.

(IEC on 62/122)

2. AIR COOLED

Pump Cooling Fan linked to the drive motor, as well as vent cover openings to keep the unit cool.

3. LIFTING EYEBOLT

Lifting eyebolt for easy transport and placement. The pumping unit can be lifted and removed from the pump assembly frame and easily repaired during service intervals.

4. FULLY SYNCHRONIZED GEARS

These gears are synchronized to ensure maximum efficiency in rotor movement. The gearbox is lubricated by Kinney KV-150 premium gear lubricant.

5. OIL-FREE COMPRESSION

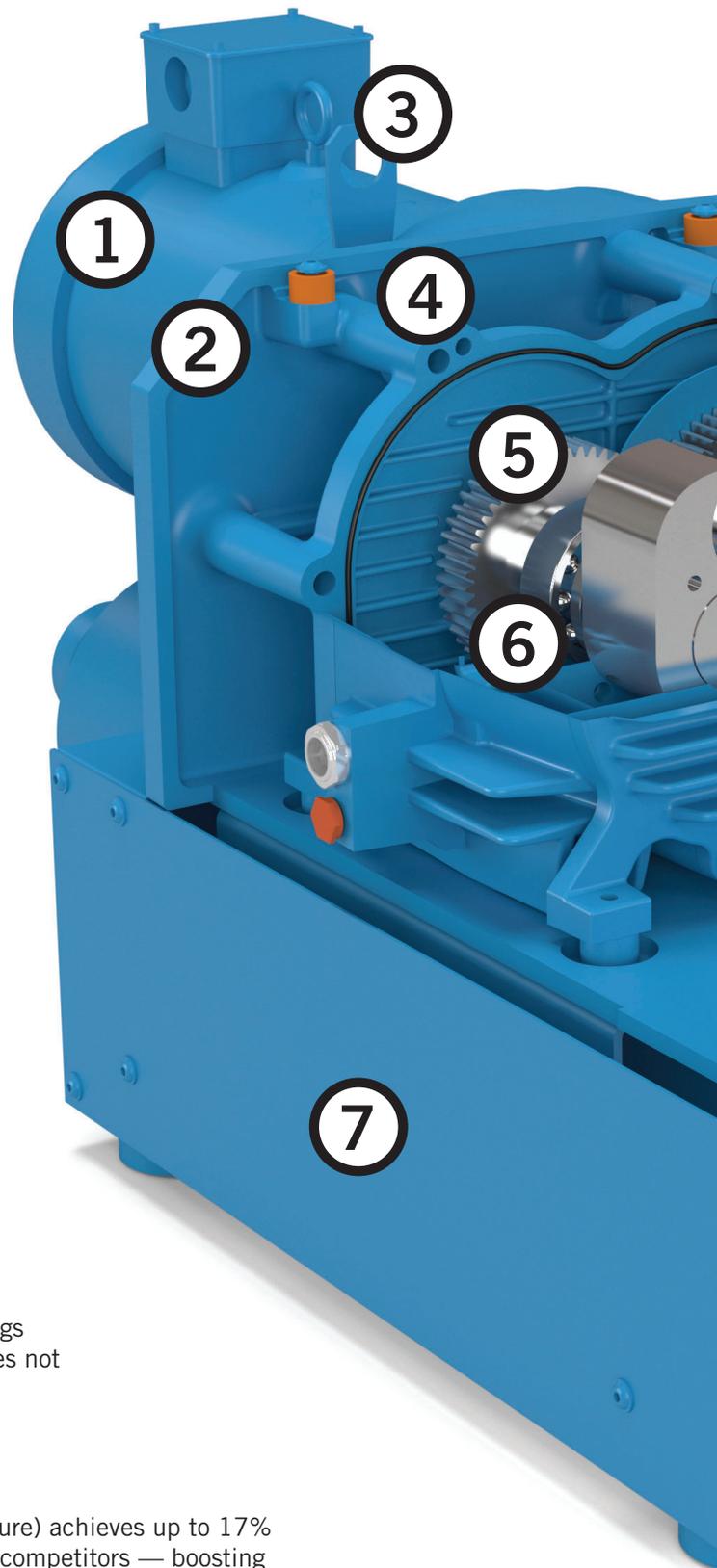
No contaminants released into the discharge air or process. Providing peace of mind and worry-free maintenance.

6. SEALING SYSTEM

Viton shaft seal and two labyrinth piston O-rings with atmospheric venting so the shaft seal does not become pressurized.

7. LP SERIES

KVC LP (low ultimate pressure) achieves up to 17% lower ultimate pressure vs. competitors — boosting process efficiency and operational precision.



8. **ULTIMATE VACUUM DOWN TO 27 inHgV (LP SERIES DOWN TO 29.1 inHgV)**

Ultimate Vacuum down to 27 inHgV / 75 Torr to support your application. LP options available for lower ultimate pressure applications requiring up to 29.1 inHgV / 23 Torr.

9. **XD SERIES**

Extreme Duty models include coated internals and flush ports for ease of cleaning compression chamber, maintaining smooth operation in demanding applications.

10. **HORIZONTAL SHAFT**

Optimized lubrication, better heat extraction, dissipation, and extended life of gears, bearings, and seals.

11. **CONTACTLESS OPERATION**

Ensures minimal wear of parts within the pumping chamber, reducing maintenance downtime.

12. **HIGH EFFICIENCY**

Top of class CFM/HP efficiency and low power consumption due to our overall rotor and cylinder designs.

13. **LOW MAINTENANCE**

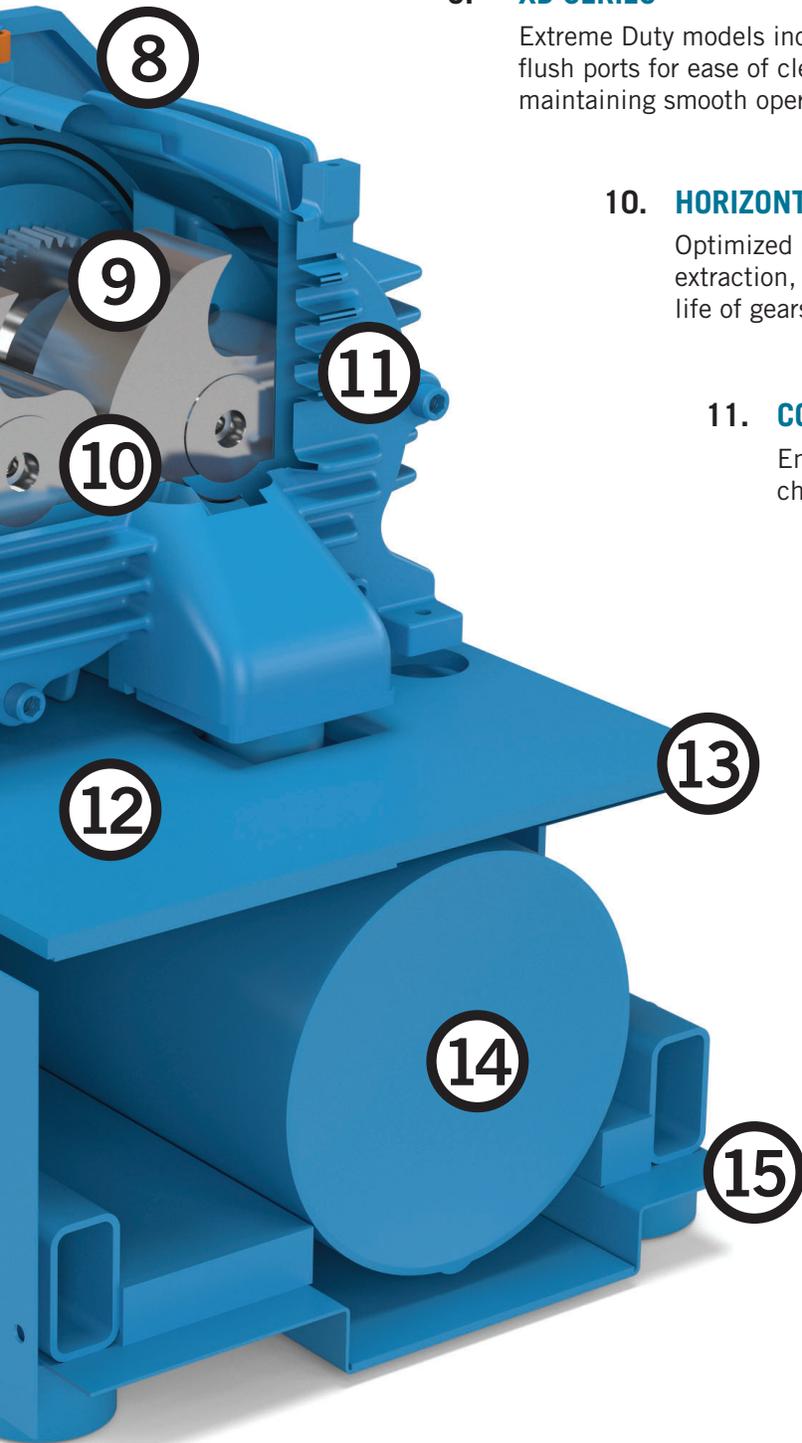
Service/Maintenance intervals up to 20,000 hrs. This leads to low cost of ownership and nearly a “set & forget” product.

14. **LOW NOISE**

Integrated internal discharge silencer offers some of the lowest sound levels with this technology and combined with the Kinney base and enclosure design features, can achieve sound levels as low as 63 dB(A).

15. **SMALL FOOTPRINT**

Unique stacked design enables a reduction of required floor space.



Benefits that Optimize Your Process

Kinney KVC Claw Pumps

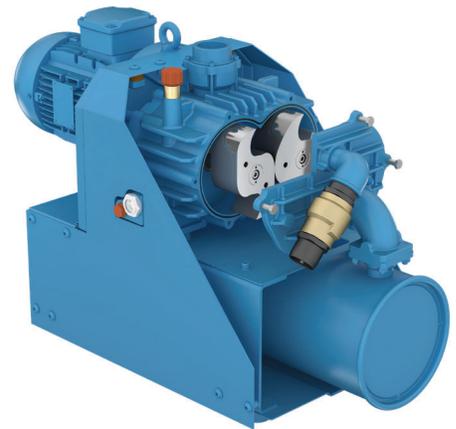
The KVC Claw series serves a variety of applications where high-volume air is required in applications up to 27 inHgV (75 Torr) for continuous operation. There are several pumps with capacity ranges from 43 to 671 CFM. LP options for lower ultimate pressure applications requiring 28-29 inHgV (45-23 Torr). Extreme Duty (XD) model options are also available.

Reliable & Efficient Design

The design of the KVC Series allows for dry compression, meaning no oil or sealing fluid is needed in the compression chamber. This also provides much less wear in the operation. The KVC design optimizes air flow for efficient air cooling. Along with the use of our premium motors, the Kinney design greatly reduces energy consumption and consequently lowers life cycle costs.

The Kinney KVC design excels in efficiency of higher CFM per HP by optimizing the relationship between the shape, size, and precision of the rotors and port design.

In industries where continuous performance, reliability, and energy efficiency are paramount, the Kinney KVC Series offers a smart, cost-effective solution backed by advanced engineering and proven durability.



KVC62 XD model in various angles.



High Efficiency & Contactless Claw Shaped Rotors

Our Claw shaped rotors are designed for contactless operation and are expertly designed for the tightest fitting tolerances which provides the highest efficiency in claw compression. None of the internal components make contact, extending the service interval and keeps the pump running longer. The Claws are designed to pass through small dry particles without impeding operation. The claw rotors are coated with a dry film that offers corrosion protection and is ideal for moist applications such as drying processes. It also repels dust and dirt and is a barrier against unwanted material entry.

The result of this design: exceptional performance with lower power consumption, reduced operating temperatures, and a longer service life compared to traditional vacuum pump technologies.

Compact Design & Low Noise Levels

Noise reduction is a critical factor in modern industrial environments, especially in facilities where workers spend extended periods in close proximity to machinery. KVC dry claw vacuum pumps are engineered to minimize operational noise, achieving industry-leading sound levels as low as 63 dB(A). Comparable to the ambient noise of a normal conversation or a quiet office.

This quiet operation is made possible by several design enhancements:

- Integrated Discharge Silencer
- Precision Rotor Design
- Sound-Dampening Enclosure
- Vibration Isolation

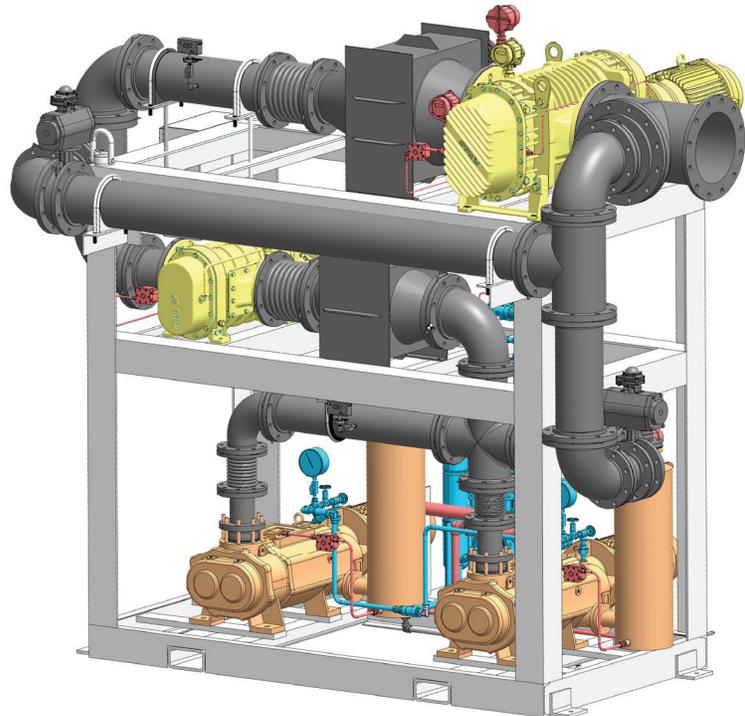


Custom Engineered Solutions From Concept to Reality

Kinney application engineers are ready to help you select the best system and combinations of components for your specific needs. Custom engineered system solutions to 12,000 CFM are available with a combination of vacuum boosters/air ejectors and roughing pumps for any vacuum application. Contact your Kinney distributor or call 800-825-6937 for assistance.

Engineered Solution Vacuum Accessories

- Vacuum Boosters
- Electric Motors
- Direct or V-belt Drive
- Coolant Recirculation Systems
- Instrumentation
- Controls
- Skid Piping
- Valves
- And More



Service & Repair

MD-Kinney Springfield, Missouri, USA is here to help. Call 1-800-825-6937 or visit us online at www.md-kinney.com to be connected to a MD-Kinney application engineer.

MD-Kinney also has a network of Authorized Service Centers offering local support to our customers. All centers are staffed with factory-trained personnel to ensure your equipment performs to factory specifications. KVC vacuum pump series repairs are only available via an Authorized Service Center.

To find your nearest Authorized Service Center call us directly at 1-800-825-6937.



Maintain Peak Vacuum Pump Power Genuine Aftermarket Parts

Kinney boosters and vacuum pumps are known worldwide for superior quality and performance. KV 150 full synthetic bearing and gear lubricants are specifically formulated for use in Kinney Rotary Claw Vacuum Pumps and is the only lubricant we recommend.

Genuine aftermarket parts are essential to maintain energy efficiency by reducing wear and preventing premature failures. In contrast, low-quality parts can cause friction, misalignment, or air leaks, leading to higher operational costs and system inefficiencies.

Benefits of Genuine Aftermarket Parts:

- Ensures proper fit and optimal performance
- Reduces downtime and costly repairs
- Maintains energy efficiency and airflow
- Prevents premature wear and failures
- Extends the blower's service life





KINNEY®

LOCAL CONTACT:

www.md-kinney.com