



Atlas Copco



Vacuum solutions for every application

Energy-efficient & innovative industrial
vacuum pumps and systems

OIL-SEALED VACUUM PUMPS

With impressive performance capability and optimized energy consumption, Atlas Copco's range of oil-sealed vacuum pumps offer energy-efficiency, sustainability and flexibility for industrial applications. The innovative, intelligent and Industry 4.0 ready technology at the heart of our vacuum pumps include our revolutionary Variable Speed Drive (VSD) technology and HEX@™ vacuum control. With a wide range of dedicated point-of-use machines and central vacuum systems. We are able to offer reliable, flexible and high performance solutions to customers in a wide range of rough industrial applications and industries.

Our range of oil-sealed vacuum pumps include:

- GHS VSD+ screw vacuum pumps
- GVS single-stage vane vacuum pumps
- GVD double-stage vane vacuum pumps
- GVC tank-mounted systems
- GLS rotary piston pumps



OIL-SEALED ROTARY SCREW VACUUM PUMPS



GHS 350-1900 VSD+
GHS 1202-2002 VSD+
GHS 3800-5400 VSD+

We are proud to introduce the next generation GHS VSD+ range of variable speed driven oil-injected screw vacuum pumps with HEX@™ revolutionary vacuum pump control and connectivity. Building on our first generation of GHS VSD+ oil-injected

screw vacuum pumps, we've taken a leap ahead to meet the requirements for Industry 4.0. Now with better performance, optimal oil separation, a smaller footprint and an innovative new controller which equips your vacuum system ready for Industry 4.0.



High energy efficiency

Variable speed and setpoint control offers optimum vacuum levels with reduced energy wastage. High efficiency motors contribute as well to a low power consumption.



Environment friendly

Patented design for oil retention that achieve a carry over of less than 3mg/m³, gives you an optimal exhausted air quality. The silent components, canopy and variable speed drive helps reduce noise levels.



HEX@™ vacuum pump control

Monitor and control your pump from anywhere and at any time. You can receive feedback and review pump operating status, vacuum levels, and upcoming scheduled events for your vacuum system.



Plug and play solution

Easy and fast installation, comes as standard with the HEX@™ controller, cubicle and canopy in a single, neat enclosure with a small footprint.



IE5 permanent magnet motor*

Equipped with a permanent magnet assisted synchronous reluctance motor for lowest power consumption at all speeds, contributing to the high efficiency of the complete vacuum pump.

Available with GHS 1402-2002 VSD



Neos Next inverter for energy savings

Equipped with Neos Next, Atlas Copco's second generation inverter which revolutionizes inverter performance to set new standards in energy savings, sustainability, and reliability.

OIL-SEALED SINGLE STAGE ROTARY VANE VACUUM PUMPS



GVS 16-630 A
GVS 80-400 VSD+

Providing highly efficient vacuum pumping performance, the GVS 16-630 A series is ideal for critical applications in packaging, woodworking, rubber, plastics, electronics, paper and printing, material handling, and other exacting industries. Moreover, with 11 models offering pumping speeds ranging between 16 and 840 m³/h (at 60 Hz), you

will definitely find the right model for your application. GVS 80-400 VSD+ series is a range of compact direct-driven rotary vane vacuum pumps that are single stage, oil sealed, air cooled and have our VSD+ inverter-drive technology built in. The VSD drive located on top of the pump ensures pressure setpoint control in the most compact package possible.



Innovative features

The built-in gas ballast valve is fitted as standard to assist in water vapor handling capability. Other functions include the lubricant retention and return mechanism which means that these machines are suitable for continuous operation between atmospheric pressure and their ultimate pressure.



Oil mist separator

Mounted directly onto the vacuum pump element, the oil mist separator utilizes multi step separation. The fine oil coalescing filter maximizes oil retention, allowing the vacuum pump to be located close to the point of use.



Reliable technology

The GVS 16-630 A series has been successfully used for many years in all general industrial vacuum applications. It is robust and highly regarded product with reliable technology and design.



Remote monitoring

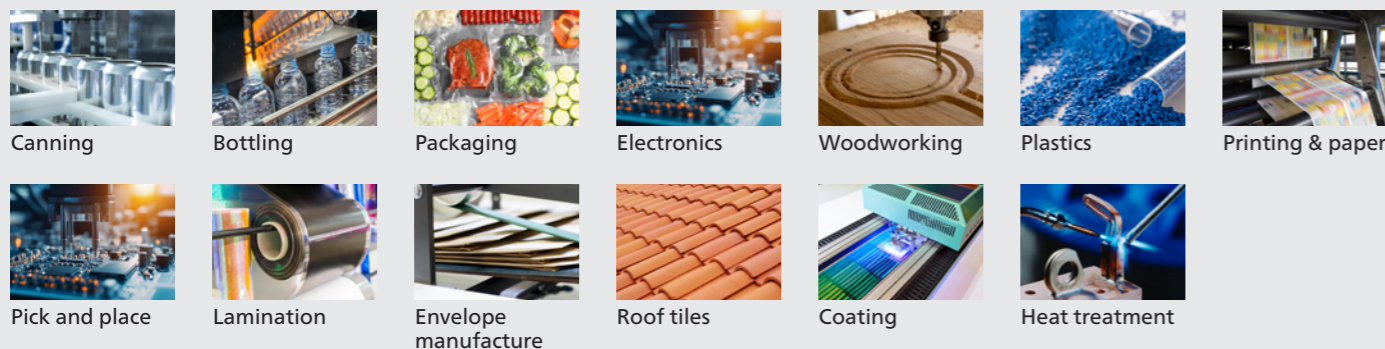
The GVS VSD+ series can be controlled and monitored with the Atlas Copco VSD+ app, offering live visualizations of pump performance via Bluetooth.



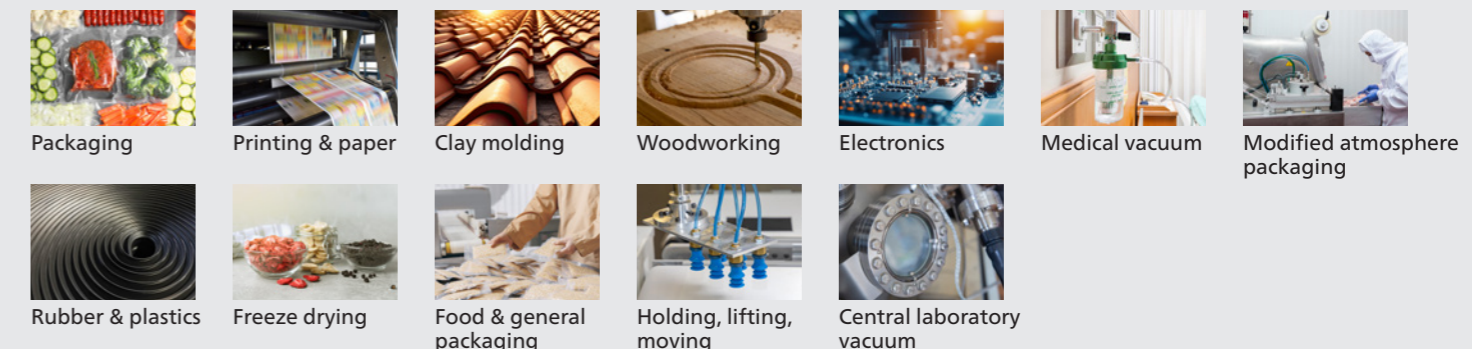
Inlet non return valve

The inlet non-return valve protects the vacuum pump in the event of the pump stopping without the prior venting of the point of use.

Industries



Industries



OIL-SEALED DOUBLE STAGE ROTARY VANE VACUUM PUMPS



GVD 0.7-275

GVD 0.7-275, our next generation oil-sealed double-stage rotary vane vacuum pumps are engineered for ultimate performance and efficiency. These innovative pumps are designed to elevate your operations

by delivering exceptional ultimate vacuum pressure, high pumping speeds, improved vapor handling capabilities, and low noise levels - all while ensuring reduced ownership costs.



Improved performance

High pumping speeds, with enhanced tolerance for handling vapors makes the GVD range ideal for humid applications.



Low total cost of ownership

Overall cost efficiency is achieved with low power consumption, exhaust filter with oil return capabilities, and an economical design that simplifies service and maintenance.



Flexible and adaptable

Multiple size variants available, along with pump systemization options, featuring a wide-range voltage IE4 motors.



Built for reliability and robustness

Designed to deliver exceptional ultimate vacuum pressure, high pumping speeds and superior vapor handling capabilities with low noise levels.



In-built oil mist filter

Oil-mist filter to capture exhaust carry over and protect the nearby environment. The collected oil can be reused.

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

TANK - MOUNTED VACUUM PUMP SYSTEMS WITH ROTARY VANE PUMPS



GVC

The GVC are our tank-mounted, centralized systems incorporating single-stage, oil sealed rotary vane pumps. They provide a dependable solution for numerous vacuum demands. They are supplied ready to use with a tank, an electrical cabinet with controller and a filter in front of each pump. These mini systems can

be composed with 1 to 3 pumps (typically the GVS A vacuum pumps) and offer plug & play installation and with the possibility of pressure regulation. Even in challenging production conditions, the GVC delivers reliability and outstanding performance.



Easy to service

Each pump can be isolated anytime for maintenance. Additionally the GVC comes with oil thermal switch, oil level monitor and overpressure indicator on the filters are provided.



Dependable operations

High reliability through a rugged design and optimal oil retention at all operating pressures maintaining low noise and vibration levels.



User-friendly monitoring

The GVC is available in two versions, basic and full feature. The full feature versions using our MK5 controller for total control.



Energy savings

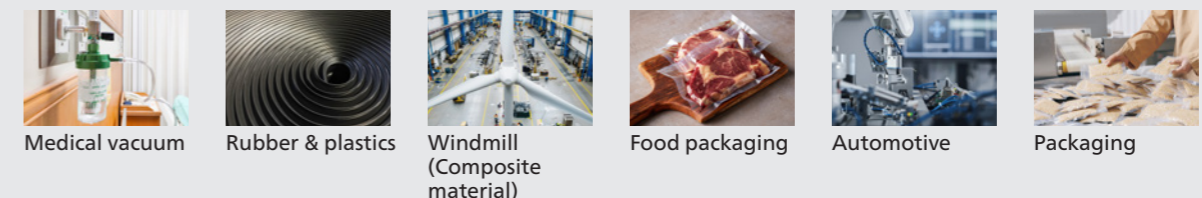
Due to pressure regulation, the GVC ensures significant energy savings in running only when vacuum is needed.



Plug and play

The system is provided with a tank, an electrical cabinet with controller and a filter in front of all the pumps – so ready to use.

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

OIL-SEALED ROTARY PISTON VACUUM PUMPS



GLS 250-500

The GLS 250-500 rotary piston pump sets the standard for performance and reliability as the industry's most efficient, space-saving design. With an advanced balancing that reduces vibration, the pump is synonymous with

dependability. Made for easy maintenance with minimal moving parts, the GLS ensures shorter process downtime, especially crucial in demanding applications.



Low lifecycle cost

Slow rotational speeds ensures high reliability while compact design saves up to 50% on floor space.



High performance

Features an efficient design with high uptime with minimal moving parts and large clearance.



Reduced maintenance

Our optimized water cooling system ensures correct operating temperatures whilst minimizing water consumption.



Rugged construction

The GLS is made with a robust cast and ductile iron construction that provides a reliable operation and durability.



Automatic lubrication

Designed with proper flow of oil to bearings and sealing surfaces for maximized lifetime and performance. The GLS design also prevents back flow in case of a power failure or loss of vacuum.



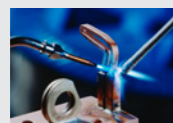
Low noise and disturbance

New valve design virtually eliminates valve maintenance and noise, and advanced balancing reduces vibrations.

Industries



Metallurgy



Heat treatment



General applications



Chemical processing



Large area glass coating



Transformer drying & cable fluid conditioning



Vacuum coating



PET processing



Pharmaceuticals



Vacuum melting



Leak detection

For a complete list of industries, contact your local Atlas Copco sales representative.



DRY VACUUM PUMPS

Dry vacuum pumps play an important part in many vacuum applications, Atlas Copco has a variety of solutions to meet your needs. The main advantage of 'dry' pumps is that there is no lubrication in the main pumping chamber thus eliminating the contamination of the process.

The Atlas Copco dry vacuum pumps are supporting industries all around the world in numerous complex applications. Their optimal and robust design ensure reliable performance and low maintenance costs. They are also equipped with our revolutionary Variable Speed Drive technology and smart controllers for added efficiency.

Our range of dry vacuum pumps include:

- DZS, DZS VSD+ A series dry claw vacuum pumps
- DZM VSD+A multi-claw dry vacuum system
- DWS dry screw vacuum pumps
- DWS VSD+ intelligent dry screw vacuum pumps
- DSS dry scroll vacuum pumps
- DVS dry rotary vane vacuum pumps
- DB Series side channel blowers
- DRB & DRB VSD+ mechanical booster pumps
- ZRS mechanical booster pumps



DRY CLAW VACUUM PUMPS



DZS 065-300A DZS 100-400 VSD+A

The DZS A series vacuum pumps are also crafted with innovative coatings and materials of construction. This achieves lower maintenance costs and a lifetime of reliable operation in a wide variety of applications and harsh conditions. The DZS VSD+A series are equipped with Variable Speed Drive (VSD+)

on the motor enabling PI-Loop functionality, these compact machines with a small footprint deliver high reliability through a rugged and robust design. The DZS 100-400 VSD+A series also display a marked improvement on product durability by increasing the pump's lifespan, reducing downtime and maintenance costs.

Enhanced performance
Higher pumping speeds, faster processes and increased productivity meet demanding production requirements.

Simplified maintenance
Long life bearings and seals, a separate and isolated pumping element, quick access to the pumping chamber make for easy cleaning in the event of product carry-over. Prevents overheating when running at ultimate vacuum.

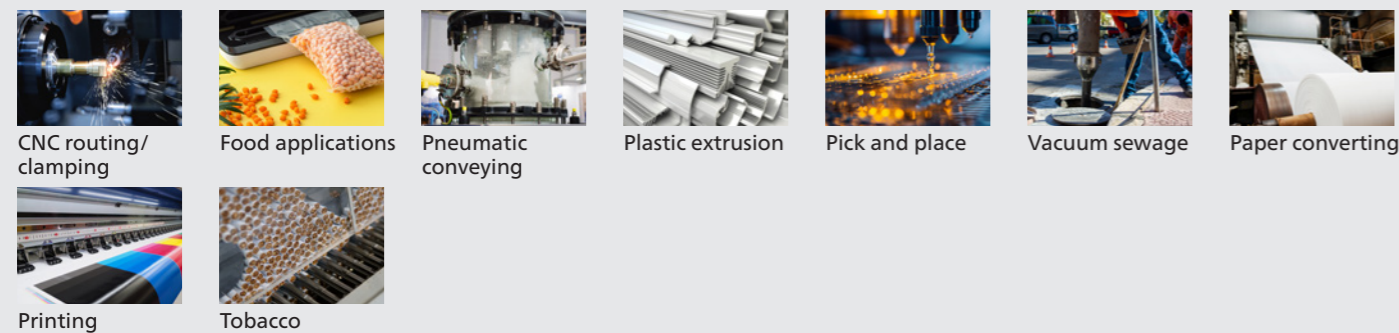
Lower noise levels
Our redesigned silencer significantly reduces noise levels while maintaining vacuum performance.

Smart kit
Prevents overheating when running at ultimate vacuum.

Improved reliability
Stainless steel claws ensure longer lifespan and improved durability. This reduces downtime and maintenance costs.

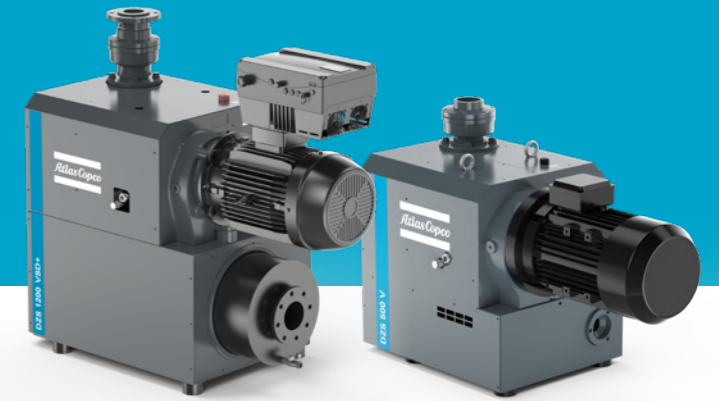
Improved cost savings
Variable speed drive and IE4 motor variant reduces operational costs and energy consumption.

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

FIXED AND VARIABLE SPEED DRY CLAW VACUUM PUMPS



DZS 500-1000 V DZS 600-1200 VSD+

The DZS 500-1000 V series are fixed speed, contactless dry claw vacuum pumps constructed from a modular design; pumping and gear chambers are separated by using labyrinth seals. They offer continuous duty operations. The inlet non return valve protects customer vacuum levels in the event of a slow down or shut down of the DZS pump. The pumps are directly driven by a flanged motor

via a coupling. The DZS 600 VSD+ and DZS 1200 VSD+ are single stage, oil-free, air-cooled and with the VSD+ inverter drive technology built-in. They are durable pumps with very low maintenance for rough vacuum applications. These pumps also have Bluetooth connection for easier control through your smartphone.

Vacuum relief valve
The pumps are equipped with a vacuum relief that protects the unit when approaching ultimate vacuum levels.

Inlet non return valve
The inlet valve isolates pump from process when the pump is shut off and you can integrate your vacuum pump into a central vacuum system.

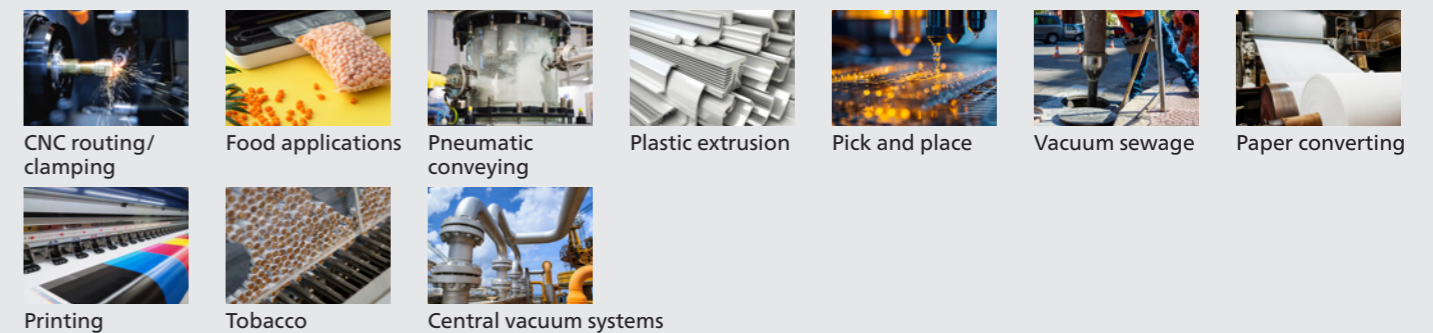
Tough coating
PEEKCOAT on process wetted parts and rotors ensures durability in harsh applications that feature high water vapor loads.

VSD+ drive
Integrated VSD+ inverter drive and pressure setpoint control enables elevated rotor speeds while matching the motor speed to the load coming from the process.

Low noise
The reduced noise from the pump ensures a quiet work environment with low noise distractions.

Wide range
The pumps are available in bare shaft, fixed speed (IE4) and VSD+ variants according to your needs.

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

MULTI-CLAW DRY VACUUM SYSTEM



DZM VSD+A

The DZM VSD+A is a complete smart multi-claw vacuum system mounted on a skid. Designed to meet larger process demands or for central vacuum installations, this system offers controllable flows from 24 to 1,560 m³/h integrated in one platform with a “plug & play” concept. At the heart of this system is the

DZS 300A claw vacuum pump providing efficiency, robustness and better ultimate performance. Each DZS 300A pump is equipped with a VSD to maximize performance and guarantee stable vacuum level.



Low noise

The DZM VSD+ is an environmentally friendly solution with low noise emissions ensuring a quieter workspace



VSD+ drive

The DZM multi-claw vacuum system is equipped with 4 Variable Speed Drives (VSD), which guarantees a stable vacuum level at the process, while at the same time maintaining equal running hours between all pumps.



Easy maintenance

Easy access to each pump without stopping the system or needing additional equipment for basic maintenance actions.



Expandable options

Two sizes - DZM 1200 VSD+A, DZM 1600 VSD+A - are available to expand the central vacuum system with centrally controlled multiple packages.



Plug & play

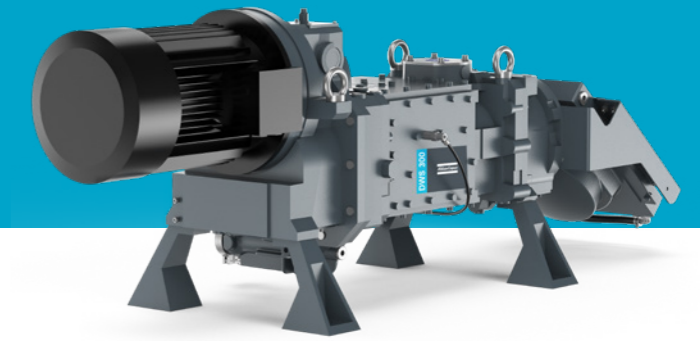
The package consists of the pumps and common inlet manifold and an exhaust manifold resulting in two simple pipe connections.



Smart kit

Prevents overheating when running at ultimate vacuum.

FIXED SPEED DRY SCREW VACUUM PUMPS



DWS 200-500

The Atlas Copco DWS range of fixed speed dry screw vacuum pumps features an innovative design with variable pitch dry screws. Engineered to deliver clean and reliable vacuum flow, the DWS series are a robust series of dry vacuum pumps. The dry screw technology offers lower maintenance costs and are used

in diverse industrial applications requiring no lubricants in the pumping chamber. At the heart of the DWS Dry Screw pump is the tapered variable pitch dry screw mechanism, quick pump-down times, high pumping speed and high tolerance for particulates are core benefits of the product.



Robust pumps for flexible systems

The DWS range is flexible to be fitted into kinds of vacuum systems, either light duty process in general industry or harsh applications in chemical/pharmaceutical.



Easy to configure dry vacuum pump

Configuration options for hazardous process environments are available and the pump can be easily customized to a dry vacuum pump system.



Lower energy consumption

The hybrid rotor design uses a combination of parallel and tapered rotor profiles, helping to optimize performance while limiting the footprint and power consumption.



Wide range of accessories

A wide range of accessories are available, including service kits, booster support kits and silencer kits.



Purge protection

Purge protection helps extend service intervals and prolong pump-life - the DWS is built to handle harsh contaminant ingress.



Variants available

Available in water-cooled and air-cooled variants. Direct and indirect air-cooled options are available with the DWS 200 and DWS 500 available exclusively as an air-cooled option.

Industries



Pad printing



Pick and place



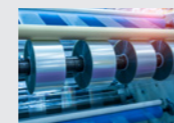
Drying



Suction



Paper cutting



Adhesive films



Wastewater treatment



Roller cleaning



Auto body shops



Wine production



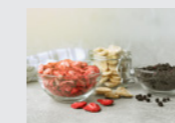
Pneumatic conveying



Central vacuum systems

For a complete list of industries, contact your local Atlas Copco sales representative.

Industries



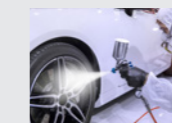
Freeze drying



Heat treatment



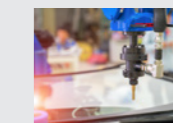
Lithium-ion batteries



Automotive coating



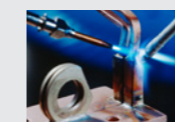
Renewable energy



Industrial glass coating



Solar cell manufacturing



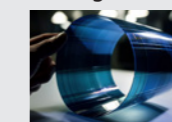
Brazing



Plastic extrusion



Pharmaceuticals



Thin film deposition

For a complete list of industries, contact your local Atlas Copco sales representative.

INTELLIGENT DRY SCREW VACUUM PUMPS



DWS 450-750 VSD+

The new Atlas Copco DWS VSD+ dry screw vacuum pump is a plug and play industrial vacuum pump. Intelligently engineered for long-life operations and designed for harsh applications, the DWS VSD+ dry screw vacuum pump series offers improved operational performance and stable vacuum. Screw vacuum technology is an ideal solution for

many applications in packaging, drying, electronics, plasma processes, Li-batteries, LED manufacturing, and solar. The vacuum pump is friendly on the environment - the dry screw operations of the DWS VSD+ mean there is no contaminated or dirty oil to dispose of lowering recurring maintenance costs significantly.



Robust pump for harsh industrial applications

Constant flow sealing system, gas system with manual gas ballast control and non-contacting long-life seals ensures longer uptime and low maintenance.



Pre-wired and systemized for easy installation

Electrical connections are connected, wired and assembled making this a plug and play dry screw vacuum pump.



Pneumatic inlet valve included

Included as standard scope of supply the pneumatic inlet valve enables warm-up/shutdown cycles and can easily fit into central vacuum system installations.



Intelligent features and connectivity

Equipped with Elektronikon™ enabling advanced pump monitoring parameters such as status, running/stopped hours, programmable timers and setpoint control.



Designed for dry operations

The gearbox is protected from contamination and the vacuum mechanism is kept free of oil.

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

DRY SCROLL VACUUM PUMPS



DSS 065-100

With only one moving part and oscillating scroll design, the all-aluminum construction of the DSS dry scroll vacuum pump is robust, oil-free, highly efficient and low maintenance. The DSS vacuum pump is ideal for vacuum generation across the vacuum pressure range. Moreover, it is a welcome fit to any production floor due to its simple and elegant design. It is

a dry and durable pump for stable vacuum at small to medium flow rates working from atmospheric pressure to <math><1 \text{ mbar(a)} / (0.75 \text{ torr})</math>. The DSS series offers lower lifecycle costs, higher productivity, less energy consumption, simple operation and control and also easy maintenance.



Robust design

Simple and clean design with removable front cover for easy access to scroll mechanism.



Clean and dry

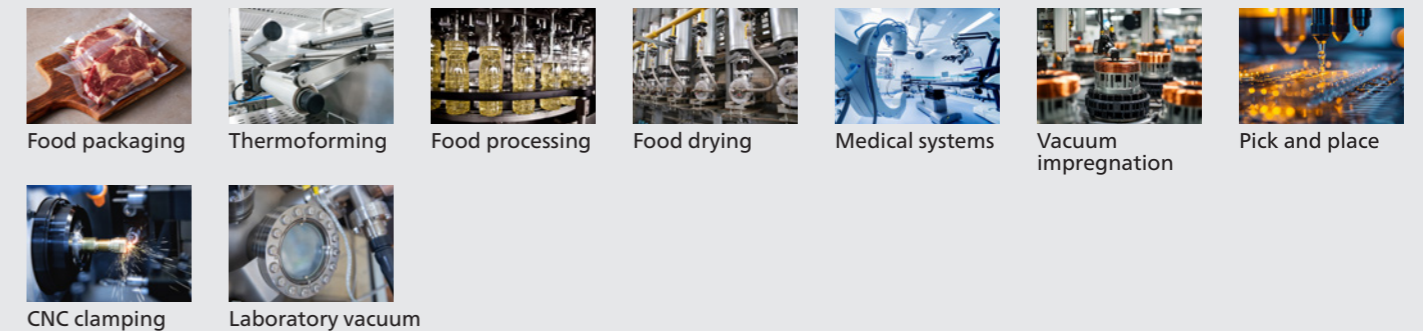
Class 0 certified according to ISO 8573-1 with no oil required for sealing or cooling.



Superior performance

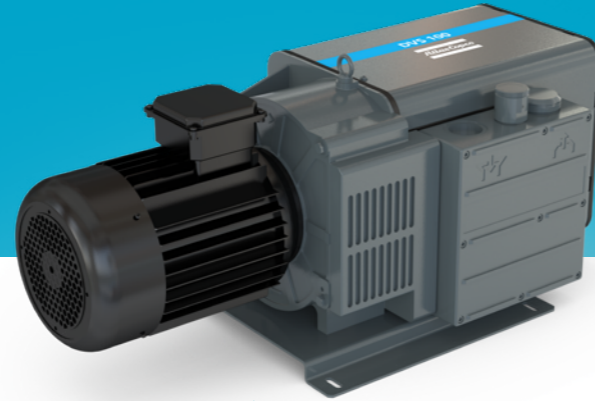
Complete controllability with the ability to be inverter driven and low service and maintenance costs.

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

DRY ROTARY VANE VACUUM PUMPS



DVS 5-140

Our comprehensive range of oil-free dry rotary vane vacuum pumps – the DVS series. The DVS series are positive displacement vacuum pumps offer a clean operation, free of emissions and no contamination to the process. These dry rotary vane vacuum pumps are designed to be robust, clean, compact, and

silent suited for rough industrial applications with high efficiency. The DVS range of dry rotary vane vacuum pumps are available with nominal suction flow from 5 m³/h to 140 m³/h and ultimate vacuum level up to 120-150 mbar(a).



Clean and oil-free

The DVS series ensures a clean operation free of emissions and no contamination to the process.



Suited to a wide range of industries

With its low noise level and small footprint, the DVS series dry rotary vane vacuum pumps are suited for rough industrial applications.



Robust construction materials

Highly resistant graphite vanes help achieve maximum durability with minimal wear and tear leading to reduced maintenance.



Ease of maintenance

Long mean time between maintenance and ease of service due to the modular design and efficient pump mechanism design.



Efficient design principle

The oil-free, minimal friction sliding vanes design feature leads maximize vacuum levels and lower overall lifecycle costs.

Industries



Packaging



CNC clamping



Medical systems



Printing



Pick and place



Pneumatic conveying



Holding, lifting, moving



Woodworking



Laboratory vacuum

For a complete list of industries, contact your local Atlas Copco sales representative.

SIDE CHANNEL BLOWERS



DB

The Atlas Copco DB series Side Channel Blowers are a tested and reliable technology for rough vacuum levels suitable for industrial applications. The DB series are available in single and double-stage variants. Clean and dry, the DB series does not require oil to operate. This ensures a clean operation,

free of emissions and no contamination to the process. They are designed to be robust, clean, compact, and silent suited for rough industrial applications with high efficiency. The modular construction of DB side channel blowers ensures efficient performance with minimal energy consumption.



High efficiency

Highly efficient side channel blowers with low energy consumption across the range and IE3 motors as standard.



Reliable and long-lasting

Housed in a fully enclosed aluminum unit with PTO thermal protection on the motor and long-life bearings.



Low noise levels

Optimized blade design of the DB series leads to low noise levels and a safer, quieter working environment on the production floor.



Wide range of pumps available

With more than 80 models in single-stage, double-stage, single and twin impellers to choose from, we have the suitable blower available for your application.



Clean and oil-free

Due to the non-contact and oil free working principle, the DB series side channel blowers have clean exhaust air without oil and dust contamination.



Minimal maintenance needed

Modular design, non-contacting parts, no oil and nearly maintenance free.

Industries



Pneumatic conveying



Pick and place



Drying



Suction



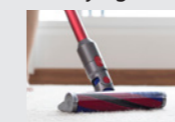
Paper cutting



Adhesive films



Wastewater treatment



Roller cleaning



Auto body shops



Wine production



Pad printing

For a complete list of industries, contact your local Atlas Copco sales representative.

MECHANICAL BOOSTER PUMPS



DRB 250-2000
DRB 1500-3000 VSD+

The DRB and DRB VSD+ series of pumps are best suited to applications where rapid evacuations need to be achieved in the shortest possible cycle times. The most frequent use of the DRB roots vacuum booster pumps is as an enabler for smaller primary

vacuum pumps. They are designed to boost the most demanding requirements for modern vacuum-based production processes. They are generally used to increase the pumping speed of a system or with the goal of reaching a lower ultimate vacuum level.

Simple and smart design
The DRB series non-contact rotational design offer increased pumping speeds for backing pumps. Smart design features include an integrated by-pass and protection against thermal overloading.

Robust technology
The robust pump design boosts the most demanding requirements for modern industry. Service intervals are longer and requires minimal, simple on-site maintenance.

Easy and flexible installation
Easy to integrate into existing vacuum systems due to its compact design. It is also easy to implement conversion from vertical to horizontal flow. The DRB VSD+ series can also be set up using our mobile APP thanks to the onboard VSD+ module.

Energy efficiency
The DRB series of pumps are equipped with IE3 three-phase motors and consuming less energy, resulting in lower carbon impact. They also boast low noise levels too!

MECHANICAL BOOSTER PUMPS



ZRS 450-4200

The ZRS mechanical booster pumps, based on the simple roots principle, are ideal for applications where high pumping speeds are required for pressures in the region of 0.01 to 50 mbar. These pumps have a high

quality, oil-free pumping mechanism and offer a quiet, vibration free operation, rugged and corrosion resistance, and an advanced shaft-seal technology with no oil contamination of the process chamber.

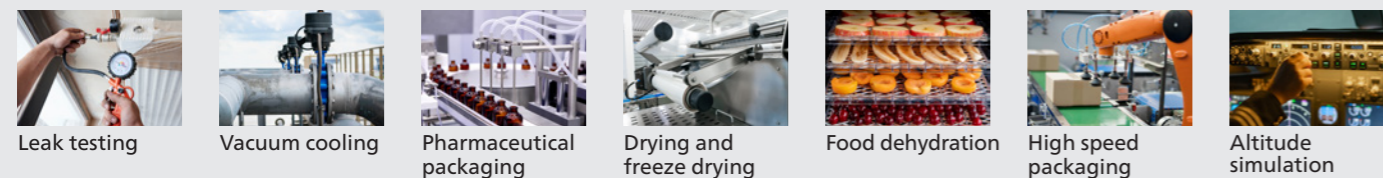
Cost savings
Save money on installation and operation as capital costs are reduced because you do not need valves, by-pass lines and pressure switches.

Quicker pump-down times
The hydrokinetic drive allows the booster pump to be started at the same time as the backing pump as it prevents motor overload, assisting the pumping process from the start of pump-down.

Pumps with hydrokinetic drive
ZRS booster pumps have a unique and patented hydrokinetic fluid drive, which couples the motor to the pumping mechanism. No pressure sensors, by-pass lines or valves.

Automatic overload protection
The hydrokinetic drive automatically varies the rotational speed of the pump, protecting the motor from overload and preventing over-heating. This allows the pump to operate with high-pressure differentials.

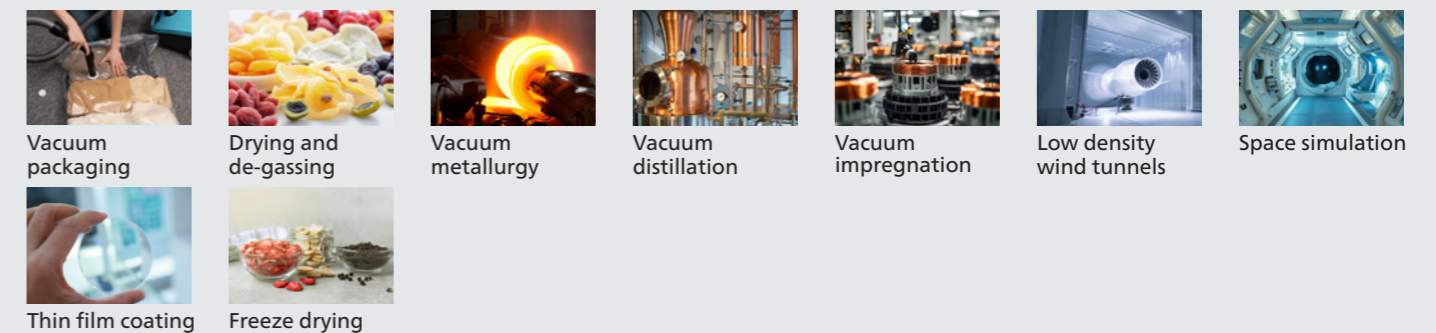
Industries



Leak testing Vacuum cooling Pharmaceutical packaging Drying and freeze drying Food dehydration High speed packaging Altitude simulation

For a complete list of industries, contact your local Atlas Copco sales representative.

Industries



Vacuum packaging Drying and de-gassing Vacuum metallurgy Vacuum distillation Vacuum impregnation Low density wind tunnels Space simulation
Thin film coating Freeze drying

For a complete list of industries, contact your local Atlas Copco sales representative.

LIQUID RING VACUUM PUMPS

From food processing to petrochemical and construction, the Atlas Copco liquid ring pumps are tough, dependable and have a proven operating principle. Our liquid ring vacuum pumps are uniquely engineered to suit complex requirements are used mostly in the humid, dusty and demanding environments. The AW series liquid ring pumps are offered as pre-engineered plug and play modules and the LRP offers superior vacuum performance and connectivity.

Our range of liquid ring vacuum pumps include:

- AWC and AWC A single stage liquid ring vacuum pumps
- AWD and AWD A double stage liquid ring vacuum pumps
- AWL single stage liquid ring vacuum pumps
- AWS and AWS A single stage liquid ring vacuum pumps
- LRP VSD+ intelligent liquid ring vacuum pumps



SINGLE-STAGE LIQUID RING VACUUM PUMPS





AWC 30-500
AWC 25-350 A

At the heart of each variant is our flat port plate design single stage, liquid ring pump element that is optimized for operation across the rough vacuum pressure range. The AWC

product line is available with motor sizes from 1kW to 18.5kW and with flow ranges from 30 to 500 m³/h (18 to 294 cfm).

 **High performance to power ratio**

 **Lantern style flange mount available for automatic motor alignment**

 **Robust and proven design**

 **Automatic center-line adjustment for seal liquid fill**

 **Compact pumping element**

 **Flat port design with variable port plate**

 **Corrosion resistant – stainless steel impeller as standard**

DOUBLE-STAGE LIQUID RING VACUUM PUMPS




AWD 200-4510
AWD 100-660 A


All liquid ring pumps can be available as part of standard pre-configured modules manufactured according to Atlas Copco design principles for easy installation, use and service. AWD and AWD A two stage liquid

ring vacuum pumps are created for extreme reliability and are ideal for continuous general industry vacuum service below 200 mbara, particularly vacuum distillation, drying, degassing and evaporator duties.


 **Two stage design - peak efficiency at high vacuum**


 **Rugged, robust construction**

 **Operates across entire vacuum range**

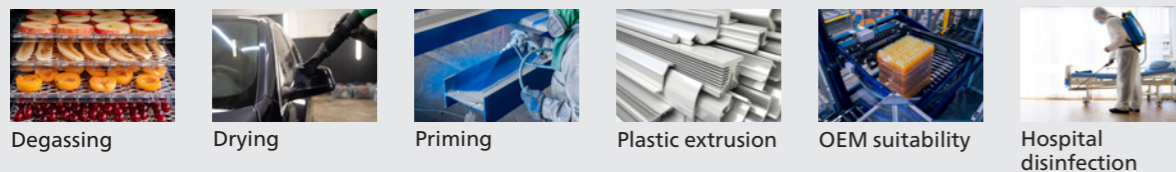
 **Minimum number of body joints for optimal performance reliability**

 **Mechanical shaft seals**

 **Externally mounted bearings**

 **Choice of construction materials**

Industries



Degassing Drying Priming Plastic extrusion OEM suitability Hospital disinfection

For a complete list of industries, contact your local Atlas Copco sales representative.

Industries



Distillation Evaporation Degassing Power Bottling Chemical applications
Dairy Condenser applications Chemical

For a complete list of industries, contact your local Atlas Copco sales representative.

SINGLE-STAGE LIQUID RING VACUUM PUMPS



AWL 4000-37500

Atlas Copco AWL liquid ring vacuum pumps feature single stage design for outstanding performance and durability at high-capacity ranges. Atlas Copco AWL liquid ring pumps are ideal for pumping dry or wet gasses,


with a high tolerance to liquid carryover, especially in humid processes. The AWL range of pumps offer economical vacuum solutions to processes with high flow requirements at vacuum pressures down to 160 mbar(a).

 Simple single stage operation principle


 Low maintenance requirement

 Flanged center body for strength

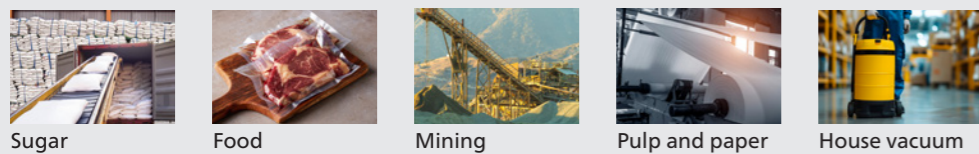
 Exceptional vapor/humidity handling

 High suction capacities

 Stable self-regulating performance

 V-Belt or gearbox drive option

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.


SINGLE-STAGE LIQUID RING VACUUM PUMPS




AWS 180-26000
AWS 530-1400 A


AWS and AWS A single-stage liquid ring vacuum pumps feature a highly efficient impeller design and best in class compression technology to achieve reliable and efficient vacuum performance from atmosphere down


to ultimate vacuum. Our AWS and AWS A series are flexible, dependable and sure to deliver the performance needed with a low service demand.


 The advanced bearing design allows reduced clearances and improved suction performance

 Internal and external seal flush option

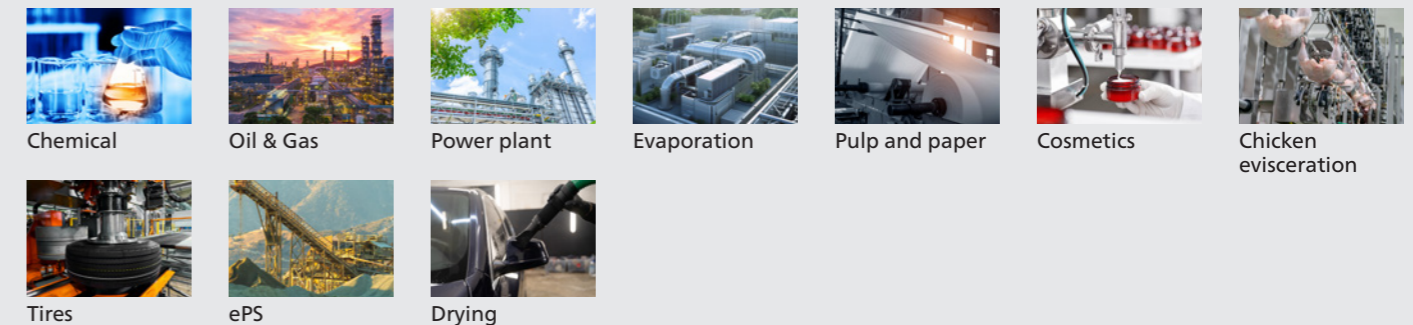
 Variable area discharge porting for optimum efficiency across all inlet pressures

 Internal water recirculation for reduced water consumption
(Available for only AWS 180-26000)

 Mechanical seals as standard

 Inlet manifold and discharge separator manifold included as standard for reduced footprint

Industries



For a complete list of industries, contact your local Atlas Copco sales representative.

INTELLIGENT LIQUID RING VACUUM PUMPS



LRP 700-1000 VSD+

The LRP VSD+ intelligent liquid ring vacuum offers superior vacuum delivery and connectivity. It provides optimum energy efficiency along with low operational and maintenance costs. Its ease of use, integration into existing processes and centralization capabilities make this a truly unique liquid ring vacuum pump. With a small footprint, the LRP

VSD+ is delivered in a single neat enclosure. The noise containing canopy significantly reduces noise pollution in the immediate working environment with an operating noise level in the range of 65 dB(a). Equipped with Atlas Copco's MkV Elektronikon® controller as standard, the LRP VSD+ has a comprehensive in-built vacuum management system.



Twin variable speed drives

The first VSD for vacuum set point control to maintain and match required vacuum levels. The second VSD regulates the water circulation pump, offering you optimized water flow and stable vacuum levels.



Multiple variants available

The LRP VSD+ series of liquid ring vacuum pumps are available in total recovery (standard and stainless steel), once-through (centrifugal pump and proportional valve), total recovery system with shell & tube heat exchanger variants.



Plug and play

Cleverly engineered in a smart design the LRP VSD+ series is enclosed under a strong canopy offering a sleek and ergonomic look with the HMI, inlet, outlet and main cable connections located on top of the canopy.



Anti - seizure prevention algorithm

A safe operation that prevents the LRP VSD+ vacuum pump from seizure after a prolonged period of inactivity resulting in maximized lifetime and less maintenance.



Ease of service

IP54 rated cubicle, horizontal serviceability, mechanical seals, lantern flange arrangement with automatic alignment of the motor, the removable heat exchanger and the convenient multiple access port enable ease of cleaning and service.



Cavitation prevention

Standard total recovery configuration results in lower water consumption meaning reduced cost of ownership.

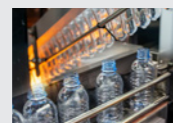
Industries



Food processing



Cheese



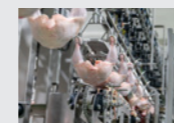
Bottling



Milk evaporation



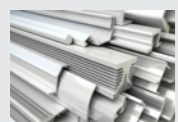
Fruit processing



Poultry and meat evisceration



Conveying



Plastic extrusion



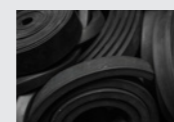
Drying



Evaporation



Expanded polystyrene forming



Rubber vulcanization and forming

For a complete list of industries, contact your local Atlas Copco sales representative.

INTELLIGENT CONTROLLERS

Optimized vacuum system performance, configuration and insights at your fingertips. The Atlas Copco complete range of smart controllers includes the newly launched HEX@™ and HEX@GRID Industry 4.0 vacuum pump controllers and the VSD+ app for next-level monitoring and connectivity. Explore easy-to-read insights and intelligent scheduling as you integrate and connect your systems to the level you require for better control anytime, anywhere.

Our range of intelligent controllers include:

- HEX@™ industry 4.0 vacuum pump controller
- HEX@GRID industry 4.0 Multiple pump and vacuum system controller



INDUSTRY 4.0 VACUUM PUMP CONTROLLER

HEX@™



HEX@™ is Atlas Copco Vacuum Solution's new evolution in vacuum pump control. HEX@™ evolves our plug and play vacuum pump concept to a truly connected, intelligent and integrated vacuum system. Designed with customer empowerment in mind,

you can configure your interface, receive the information you desire and adjust your vacuum system to your own needs. Providing insights and recommendations based on live and historic data, HEX@™ really gives a level of vacuum pump control like no other.



Get what you need

Configure your interface and receive the information as per your priority and adjust your vacuum system to specific requirements.



Intelligent scheduling

You can schedule actions such as purge cycles, auto clean, set-point adjustments to repeat continually based on your timetable and your process demand.



Easy to read insights

Get insights and recommendations based on live and historic data including vacuum uptime, pump performance, economy or pump health.



Secure web-based interface

Using a PC, laptop, tablet, or smartphone, you can access the secure, web-based user interface to connect directly to your pump or fleet of pumps. Using highest level security protocols, remote access is only possible for the people you chose.



Plug and play

Your system is up and running with a simple connection via ethernet cable. If ethernet connection is not possible, wireless or cellular connections can be used. No special software, complicated wiring or installation are required.



Flexible connectivity

HEX@™ fully supports the latest and most common protocols found in industrial markets today including Modbus, Profinet, Profibus, Ethercat, Ethernet IP. Etc.

STANDARD FEATURES

- Plug and play connection
- KPIs for process optimization
- Insight cards with real time pump recommendations
- Configurable interface and mode
- Automatic software update for all LAN connected pumps
- Reliable access management and security
- Intelligent scheduling of pump actions
- Vacuum pump trends and comparisons
- Notifications and alerts

INDUSTRY 4.0 VACUUM CONTROLLER

HEX@GRID



HEX@GRID is Atlas Copco Vacuum's Industry 4.0 multi-pump controller. A new central brain for your entire vacuum system, HEX@GRID comes equipped with extra central vacuum features and functionality. HEX@GRID leverages the powerful capabilities of HEX@™, Atlas Copco's new controller to help you optimize operations, saving you energy and maintenance costs while offering Industry 4.0 level connectivity. HEX@GRID

is pivotal to manage and enhance a central vacuum system with multiple VSD pumps and maintain stable pressure. With smart control strategies like Virtual Machine Control and Optimizer, HEX@GRID offers optimal control with low maintenance costs and reduced energy consumption. With back-up integration, the back-up pumps in the vacuum system are rotated for optimal maintenance.



Control multiple vacuum pumps

Equipped with the latest generation of the HEX@™ platform, HEX@GRID enables you to connect, coordinate and accurately control your entire vacuum system. Bring all of your pumps into one system, with seamless control.



Multiple options available to suit your need

Choose between our suite of software options to bring the additional features you need for your process. Increased efficiency, specific system enhancements and more are available in the HEX@™ suite of softwares.



HEX@GRID optimizer algorithm

HEX@GRID Optimizer guarantees low energy consumption of your central vacuum system at every operating point. With our state of the art optimization algorithm every pump in the central vacuum system will operate to the most optimal working point resulting to a significant reduction in energy consumption.

MAIN FEATURES

- Adjust your pumps responsiveness using pre-set configurations
- Add schedules and actions
- Truly connect and control your system irrespective of technology, type or brand of pump
- Simple connect and control via any smart device
- Reduce and combine the maintenance of your pump with equal wear
- Clear, intuitive and customizable interface accessible on any smart device

ACCESSORIES

Well chosen accessories and fitting not only bring the performance of your vacuum pump or system to the next level, but can improve pump lifetime and reduce maintenance needs. They are specifically designed to complete and protect your vacuum installation and to provide an added level of efficiency to your processes. From filtration systems, liquid separators to valves and vessels, each component enhances the functioning of your vacuum installation to monitor pressure, filter air and ensure smooth operations at all times.

Our range of vacuum accessories

- Inlet dust removal filter
- Inlet liquid removal filter
- Oil mist exhaust filter
- Three stage heavy duty filter
- Vacuum receiver tank
- Vacuum auto drain



ACCESSORIES



Atlas Copco specializes in providing top-of-the-line vacuum accessories designed to enhance the performance, efficiency and longevity of vacuum pumps and systems. Our extensive range of filtration and separation solutions, as well as other components that

are indispensable for virtually all vacuum applications, ensure optimal functionality and reliability. The right accessories ensure that your vacuum pump and system always achieves peak performance.

TYPES OF VACUUM ACCESSORIES

Filtration solutions

Vacuum filters are essential for removing dust and other particles. Depending on your vacuum applications and type of vacuum pumps, you can select from a wide range of inline vacuum filters to improve their performance and longevity. These filters offer superior protection for vacuum pumps and save on maintenance costs, and energy consumption. The primary ones include standard inlet filters and kits, T inlet filters and cyclonic prefilters, bacteriological filters/medical filters.



Standard inlet filters



Medical filters



T inlet filters



Cyclonic filters

Separation Solutions

Separation solutions for vacuum pumps are made to remove potentially harmful liquids, moisture, sludge, and particulates and prevent these contaminants from reaching and damaging vacuum pump inlets. Our solutions have features that make installations, inspections, monitoring and maintenance simple and hassle-free. We constantly explore ways to offer new, upgraded solutions for industries - for example, the BFS 900 is a unique mechanism that controls excess foam and protects the vacuum pump.



Beer foam separator (BFS 900)



T liquid separator



Liquid separator



Three stage vacuum filter



Automated vacuum drain

ACCESSORIES

Valves, gauges and more

Apart from filtration and separation solutions, we also offer several other accessories and fittings to complete and protect your vacuum installation.



Vacuum vessels/Tanks



Vacuum gauges and transducers



Valves

Industries



Canning



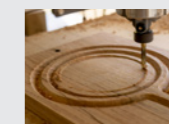
Bottling



Packaging



Electronics



Woodworking



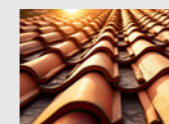
Plastics



Medical vacuum



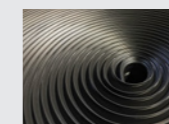
Printing & paper



Clay molding



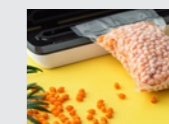
Freeze drying



Rubber & plastics



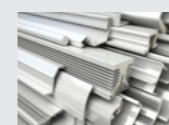
Holding, lifting, moving



Food applications



Pneumatic conveying



Plastic extrusion



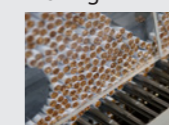
Pick and place



Vacuum sewage



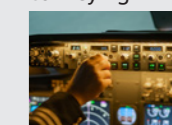
Paper converting



Tobacco



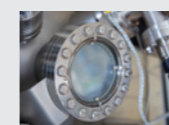
Central vacuum systems



Altitude simulation



CNC routing/clamping



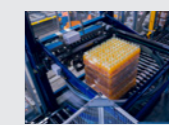
Central laboratory vacuum



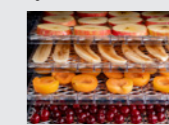
Modified atmosphere packaging



Vacuum metallurgy



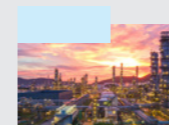
OEM suitability



Degassing



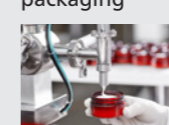
Power plant



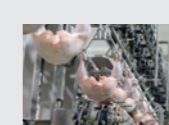
Oil & Gas



ePS



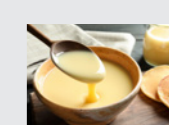
Cosmetics



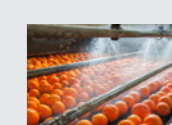
Poultry and meat evisceration



Expanded polystyrene forming



Milk evaporation



Fruit processing

SYSTEMS + SOLUTIONS

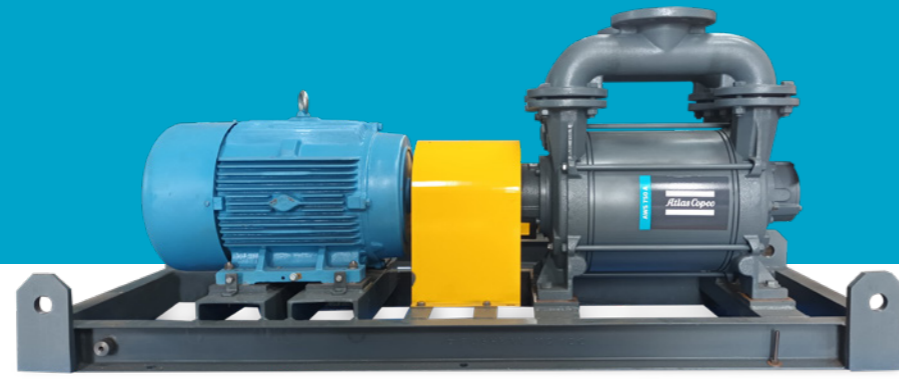
Atlas Copco's extensive range of vacuum pumps and application expertise enables us to custom design vacuum systems for your industrial process or application. Our Systems portfolio varies from standard solutions for common applications through to custom engineered turnkey projects tailored to your needs. We design, procure and manage your project from conception to handover. Our global engineering, production, sales, and service centers enable us to offer reliable assembly, testing, custom software programming and on-site commissioning. With each new design, we focus on creating solutions that make your manufacturing process cleaner, smarter, economical, and environmentally friendly.

Our range of Systems + Solutions

- Central vacuum systems
- Liquid ring vacuum pump systems
- Dry vacuum systems
- Small vacuum systems with oil-sealed vane pumps



SYSTEMS + SOLUTIONS



Our network is worldwide and we have solutions specialists who are close by you and can support you through every aspect of your project. Working in close collaboration with your local sales organization, Atlas Copco Systems + Solutions provide support from conceptual design through to project

handover. Production sites in North America, Europe, India and Asia ensure proximity to our customers, providing local design and compliance, assembly, test capabilities and efficient order execution. This makes our team a true global player and a market leader in the field of custom vacuum systems.

OUR PORTFOLIO



Central vacuum systems

Our global teams specialize in process vacuum, heat transfer and mass transfer applications in the process sector. We provide centralized vacuum systems and services to the food, glass, brick industry and many more. We have a dedicated team to support customers globally in the design, development and installation of multi-stage systems for a range of applications.

For a complete list of industries and applications we serve, please contact your local Atlas Copco representative



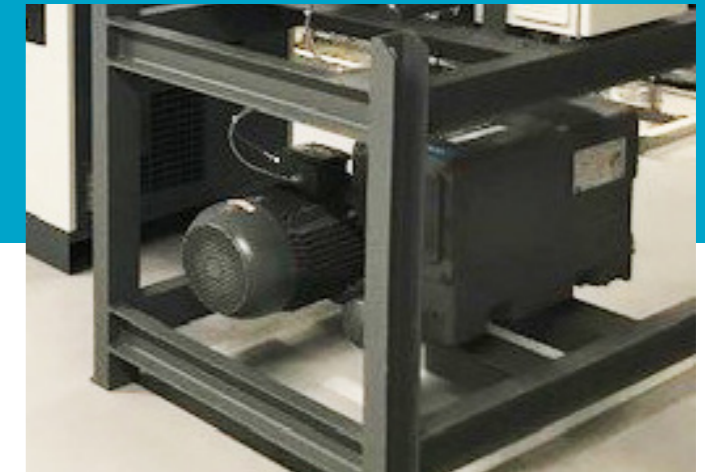
Liquid ring vacuum pump systems

For more humid and complex applications, our project team can develop tailored and specific systems to suit. Our liquid ring pumps form the backbone of multi-stage systems in materials of your choice to the specifications you need. With the help of our vacuum engineers, the possibilities are endless.



Dry vacuum systems

Dry (Hydrocarbon free in the process) vacuum pumps play an important part in many vacuum applications and environments and we have a variety of solutions to meet your needs. The main advantage of dry pumps is that there is no lubrication in the main pumping chamber thus eliminating the contamination of the process.



Small vacuum systems with oil-sealed vane pumps

Our tank mounted systems with a control station can be composed with 1 to 3 pumps and offer plug & play installation and with the possibility of pressure regulation. Each pump can be isolated at any moment.

Two GVC versions are available: Basic and full feature. Oil thermal switch, oil level monitor and overpressure indicator on the filters are provided in the basic version. User-friendly monitoring with PLC controller – MK5 controller on the full feature.

Industries



Oil and gas



Petrochemicals



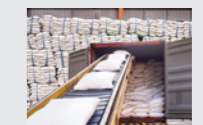
Pulp and paper



Biogas



Carbon capture



Sugar



Mining and filtration



Chemical and pharmaceuticals



Seawater deaeration



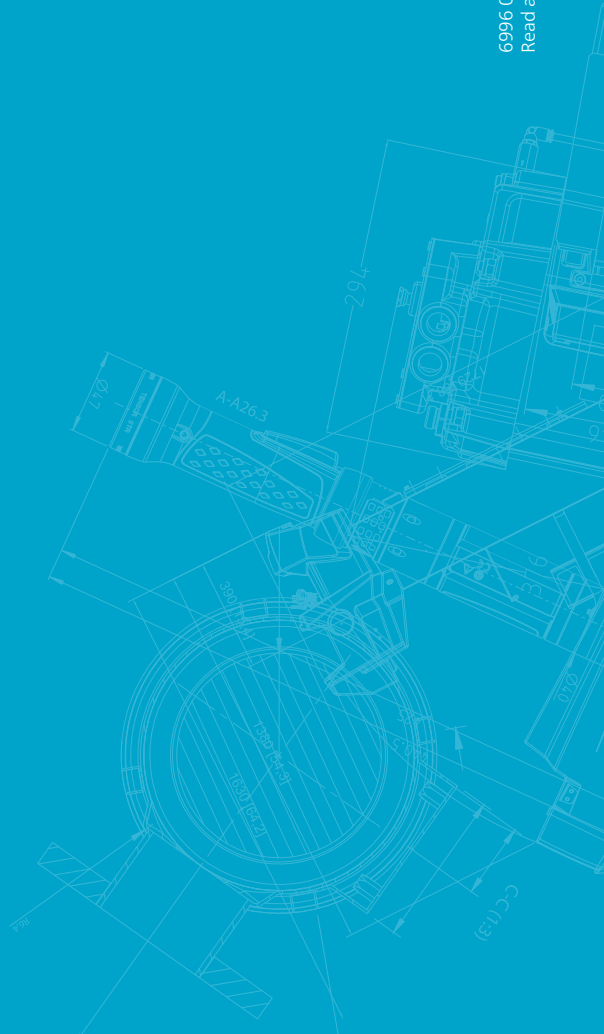
Seawater desalination



Condenser hogging and holding



Atlas Copco AB
atlascopco.com/vacuum



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