

Leybold offers a dry claw pump for robust rough vacuum applications

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Especially for rough industrial processes Leybold introduces the uncomplicated, dry rough vacuum CLAWVAC pump. Besides food processing, packaging and environmental technology applications, it is suitable for drying and sterilization processes. The pump, which is offered in three pumping speed classes, is specially designed for continuous operation at every working pressures. Additionally the special pump design avoids that oil comes into contact with pumped gases, what allows higher Oxygen applications. At the same moment, Leybold also offers with the CLAWVAC System series a new multiple pump system. These systems are based on CLAWVAC and offer a redundant plug-and-play solution.

Uncomplicated handling

The daily use is uncomplicated: Thanks to the self-supporting construction, the vacuum generator is easily accessible. What allows to directly clean the pump on-site. The simple handling of the robust pump can also be attributed to its operating principle: A pair of claw rotors rotating in the pump stator completely free of contact and wear. It also distinguishes itself from standard claw pumps on the market by the choice of materials. Rotors made of stainless steel and a corrosion-resistant coated vacuum chamber, it proves its worth even under harsh process conditions. This makes an important contribution to reliable operation.



Disassembly in a few minutes

The modular pump design allows a quickly dismantling, opening and cleaning of the pump essentials as the pumping chamber and the silencer. For a mechanic these steps can be done in a few minutes and the frequency is purely depending on the hardness of the process. Except the 20 000 hr oil & lipseal replacement, no further regular maintenance is required and additionally it is independent of the application. "Thanks to this pump characteristic, we have reduced the amount of servicing required and improved the environmental balance," explains Niels Gorrebeeck, Product Manager Rough Vacuum, Leybold, Cologne.

Minimal downtimes

The design allows the user to disassemble and clean the claws quickly and easily as the rotors can be removed without having to readjust the synchronization. This primarily relieves customers with rough & dirty processes, whose pumps previously needed a synchronization at the manufacturer side. The set-up is based on a quick component replacement, which has to ensure a minimal downtime and low service costs.

Wide range of applications

On the basis of CLAWVAC, Leybold also has a new multiple pump system in its program, a powerful plug-and-play solution. Especially for packaging plants, pneumatic conveying lines or clamping devices of CNC machines the multi claw pumps are a reliable solution. This also applies to plastics processing machines, drying processes and central vacuum supplies.

Low energy consumption, low CO2 output

Depending on the required flow rate, the systems contain two to four CLAWVAC pumps in one housing. "The robust, long-life pumps operate in an intelligent controlled dry and air-cooled solution" summarizes Niels Gorrebeeck. "On top of that, CLAWVAC System only delivers the required vacuum." One pump is speed-controlled, that allows the exact adjustment of the generated vacuum. The intelligent control activates or deactivate the other fixed speed pumps based on the vacuum need. This speed control reduces the necessary energy consumption and CO2 emissions.

A constant & redundant vacuum supply

"During the design we strongly focused on the customer needs as a high redundancy level, minimal maintenance needs and stable vacuum supply even in harsh environments" explains Niels Gorrebeeck. The earlier mentioned constant vacuum level guarantees the customer product quality in all conditions, the same intelligent control equalizes the running hours of the fix speed pumps. The control principle is even as such developed that your CLAWVAC System keeps on running, even with half of it pumps active. CLAWVAC Systems clearly meets all its targets.

Housing reduces noise and heat

With this multiple pump system, Leybold brings all necessary components under one acoustic enclosure and offers at the same way a compact, intelligent system solution. The robust housing protects the pumps, reduces noise and heat and combines all the technology necessary for operation in one box.

Choose with CLAWVAC System for an innovative and effective vacuum solution, which has a positive effect on your overall performance. Leybold offers these space-saving systems with pumping speeds between 604 and 1144 m³/h. As with the individual claw pumps, the system also allows a ultimate pressure up to 140 mbar absolute.