

Fewer components result in a lower failure risk

### Reliable rotary vane vacuum pumps from Atlas Copco

*Atlas Copco is replacing its GVS series of oil-sealed rotary vane vacuum pumps with the new GVS A series, which is up to 15% more efficient. These pumps have a very compact design and excel in reliability.*

**Hanover, 24 April 2017.** Atlas Copco is replacing its GVS series of oil-sealed rotary vane vacuum pumps with the completely new series GVS A. These pumps are suitable for both industrial production and research applications. Flow rates range from 16 to 700 m<sup>3</sup>/h (up to 840 m<sup>3</sup>/h with the 60 Hz pumps used outside Europe). The old GVS pumps only had a flow range from 20 to 305 m<sup>3</sup>/h (or 365 m<sup>3</sup>/h for the 60 Hz variant). Right from the start, two units with significantly higher capacities than in the past have been added to the range (GVS 470 A and GVS 630 A). In addition, from the GVS 60 A upwards, oxygen variants are available.

Atlas Copco is presenting its new GVS A series at ComVac, the leading international trade fair for compressed air and vacuum technology, in Hanover from 24 to 28 April (Hall 26, Stand B32). With their comprehensive accessories, these rotary vane pumps are suitable for packaging, wood processing, rubber, plastics, paper and printing, material handling and other demanding applications. With motor ratings between 0.75 and 15 kW (up to 18.5 kW at 60 Hz) the pumps have an ultimate pressure between 0.1 and 0.5 mbar.

#### **Cooler, quieter and more compact**

The new vacuum pumps have been designed to minimize total operating expenses. Compared with the earlier generation, power demand at the same volume flow is about 15% lower. In general, the new units are more compact, which make them easier to build in machines or install at the workplace. The vacuum pumps feature low vibrations and are about 3 to 5 dB(A) quieter than their predecessors. They operate at the lowest temperatures in the market, a feature that protects the oil consistency and extends its service life as well as maintenance intervals. All in all, wear is reduced by optimized shaft speeds, low operating temperatures and the special design of the new pump. The quantity of oil has been increased, offering clear benefits under arduous operating conditions if the oil gets contaminated by the process. This also increases the intervals between oil changes.

The GVS A pumps are all extremely reliable. Atlas Copco states that this is mainly the result of the sturdy design and very good oil retention capacity at all operating pressures. The pumps operate with internal injection channels, reducing the number of gaskets and the amount of external piping required. In total, the number of components has been reduced by 20% and the risk of leakage has been further minimized. These design improvements also reduce the risk of failure. In addition, the new GVS A generation can handle higher inlet pressures than other pumps including the previous GVS series. At

coarse pressures, other pumps could be prone to overheating or oil spills. The new GVS A series is therefore suitable for a much wider range of applications than its predecessor.

### **Protection against oil contamination**

The inlet non-return valve protects the vacuum pump against counter-rotation in the event of stopping without venting. This device also protects the point of use against back-sucking of oil. The oil separation circuit of the GVS A has also been optimized to minimize oil vapours in the exhaust gas. Thanks to their compact, space-saving design, all the models can be installed quickly.

The larger models in the series, GVS 470 A and GVS 630 A, benefit from further design improvements. The ball bearings feature permanent lubrication and are isolated from the process. This prevents bearing contamination, extends service intervals and further improves reliability. A special lubrication system also ensures homogeneous temperatures of the rotors without local overheating. This ensures better conditions for the oil and protects the pump. The guided rotary vanes reduce noise level and also extend the service life of the pump. In addition, they allow higher intake flows at lower pressure, reducing cycle times and improving productivity.

### ***For more information please contact:***

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**Atlas Copco** is a world-leading provider of sustainable productivity solutions. The Group serves customers with innovative compressors, vacuum solutions and air treatment systems, construction and mining equipment, power tools and assembly systems. Atlas Copco develops products and services focused on productivity, energy efficiency, safety and ergonomics. The company was founded in 1873, is based in Stockholm, Sweden, and has a global reach spanning more than 180 countries. In 2016, Atlas Copco had revenues of BSEK 101 (BEUR 11) and about 45 000 employees.

**Atlas Copco's Vacuum Technique** business area provides vacuum products, exhaust management systems, valves and related products mainly under the Edwards, Leybold and Atlas Copco brands. The main markets served are semiconductor as well as a variety of industrial segments. The business area has a global service network and innovates for sustainable productivity in order to further improve its customers' productivity. Principal product development and manufacturing units are located in the United Kingdom, Czech Republic, Germany, South Korea, China and Japan.

**Industrial Vacuum** is a division within Atlas Copco's Vacuum Technique business area. It develops, manufactures and sells sophisticated vacuum products and solutions for customers in the industrial process and rough vacuum sectors, for example steel, CPI (chemical process industries), metallurgy, petrochemical, food packaging and paper handling. The division markets products under the Atlas Copco, Edwards, Quincy and Leybold brands. The division's focus is to improve customers' productivity. The divisional headquarter is in Cologne Germany, the main production locations are in Cologne, Qingdao and Tianjin China, Lutin Czech, Valence France and Antwerp Belgium.