

The Atlas Copco logo is positioned in the top right corner of the page. It consists of the company name 'Atlas Copco' in a white, italicized serif font, centered between two horizontal white bars. The logo is set against a teal rectangular background.

Atlas Copco

A large, semi-transparent teal triangle is overlaid on the bottom left and center of the page. Inside this triangle is a white technical drawing of a circular mechanical part, possibly a bottle neck or a cap. The drawing includes various dimension lines and numerical values such as 90, 1380, 1630, 0.72, 0.38, 18.5, 30.8, 4.18, 10.5, and 0.7. The background of the entire page is a blurred industrial scene showing two glass bottles being processed by machinery in a factory setting.

Phoenicia Glass Works Success Story

Region: Israel

Sector: Glass bottle manufacturing

Benefit: Energy savings of 43%

Phoenicia Glass Works, established in Haifa in 1934, is one of Israel's oldest manufacturers and distributors of glass containers and is the only Israeli company specializing in the production of a wide range of glass containers for the domestic and international food & beverage industry. Phoenicia's customers benefit from high-quality Israeli manufacturing which meets international standards and is ISO 9000 certified for glass jars and bottles for use in the food & beverage industry.

Challenge:

Phoenicia Glass works produces approximately 200 bottles per minute and nearly one million glass containers every day with a requirement of 200 mbar(a) and 10,000 m³/h. In addition to its high daily output, Phoenicia is a green-oriented company and consistently strives to be innovative while maintaining strict timetables and production schedules that satisfy the highest international standards.

Phoenicia Glass Works had been using five older models of rotary vane pumps. This installation required a high level of maintenance and offered poor energy efficiency. The key decision makers at Phoenicia Glass Works required an improved and stable vacuum level to meet their high-volume daily output while maintaining their 'green' goals.



Solution:

After meeting with Phoenicia Glass Works to understand their needs, we proposed the Atlas Copco GHS 1900 VSD+ oil-sealed screw vacuum pump. After witnessing its effectiveness, Phoenicia was convinced of the benefits of a screw vacuum pump with Variable Speed Drive, along with the opportunity to save energy and improve the level of vacuum. The new Atlas Copco centralized vacuum installation includes six units of the GHS 1900 VSD+, controlled by the ES16V controller.

The state-of-the-art set point control feature, meanwhile, allows the vacuum pump to deliver a stable vacuum level to help produce their high volume of production while enabling energy savings. The oil-injected screw element features solid screws and oversized bearings, while class-leading oil separation helps keep the pump running smoothly at all times. This translates into reduced maintenance requirements for the new vacuum system compared to the existing machines. The GHS VSD+ vacuum pump is neatly packaged into a plug-and-play canopy which protects the internals and dampens noise levels. The top-of-the-line Atlas Copco ES16V central controller allows Phoenicia to monitor and control the six GHS VSD+ vacuum pumps simultaneously with 'Virtual Machine' algorithm allowing to optimize the power consumption of the complete central.

Outcome:

Through careful measurements, we were able to demonstrate a 43% energy savings for Phoenicia Glass Works. Maintenance costs have also been reduced, thanks to longer service intervals which significantly lower the vacuum system's overall life cycle cost. Additional piece of mind comes from knowing that in case of emergencies, Atlas Copco's international network of dedicated service technicians are on hand to help.

