

A technical drawing of a vacuum pump is overlaid on a blue triangular graphic in the bottom left corner. The drawing includes various dimensions and labels such as '1380 [P4-3]', '1630 [P4-2]', '070', '0.8', '18.5', '30.8', '10.5', and '4.8'.

## Atlas Copco vacuum pumps drive efficient for sewage collection and drainage

**Region:** United Arab Emirates

**Sector:** Sewage Treatment and Waste Management

**Benefit:** 26% energy savings

Healthy environments create healthy communities. Which is why, quick and effective sewage treatment is essential. Our Dubai-based client is a leading entity in the sewage treatment with customers all over the GCC - namely municipalities, real estate companies, private developers, and facility management companies. They needed to increase the operational efficiency of the sewage collection and drainage stage which led to partner with Atlas Copco Vacuum.

## Challenge:

Vacuum pumps are used to convey either sewage or waste material from its source to the collection vessel, commonly known as sewage collection tanks. They are a central element of a vacuum sewage system, and a system cannot function if adequate vacuum is not created within the specified time in large volumes.

As a key player in the sewage treatment industry for the GCC area, our client needed a more efficient system that could meet its more demanding challenges. With energy and cost savings being high on everyone's list, they needed a pump that would adapt to the variable demand in their processes and help them cut down on operational costs and maintenance.

## Solution:

Atlas Copco's GHS VSD+ series is a range of intelligent, oil-sealed rotary screw vacuum pumps with Variable Speed Drive (VSD) technology. We proposed the GHS 730 VSD+ which helped to bring about substantial energy savings. The unique technical features allowed the pump to deliver only what was required, limiting the number of starts and stops and consuming less energy.

The speed drive and inbuilt control system of the vacuum pump automatically adjusts the speed of the pump as per the demand helping to boost energy savings by almost 26%. This enabled the overall vacuum sewer system achieve higher efficiency without unnecessary energy wastage.



User-friendly Elektronikon™ vacuum controller

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We replaced 3 oil-sealed rotary vane vacuum pumps which consumed 45 KW of energy. The Atlas Copco GHS 730 VSD+ consumes 33 KW in comparison. Not only that, the faster pumping down time of the Atlas Copco pump strengthens the station's ability meet high sudden demands, as compared to previous oil lubricated vane type vacuum pumps.

In terms of operational effectiveness, the GHS 730 VSD+ has an inbuilt, state-of-the-art monitoring system - the Elektronikon™. It is a highly intelligent component that offers the latest status updates and enables the pump to be operated remotely for better control and constant monitoring. Add in the longer service intervals which reduce the maintenance budget, and it is safe to say the GHS 730 VSD+ created a new level of efficiency in sewage operations.

## Outcome:

At Atlas Copco, we believe in creating vacuum solutions that help our clients work better, smarter, and sustainably. Keeping in mind our customer's operational goals when collecting and conveying sewage to the treatment plant, our GHS 730 VSD+ vacuum pump met each one successfully - helping to drive productivity and reduce energy wastage. Better vacuum levels, easy access to parameters and extra energy savings will ensure their processes run more sustainably for years to come.

## Overview of benefits:



Higher energy savings



Remote control capability



Lower operational costs



Reduced maintenance budget

**Atlas Copco**

[atlascopco.com/vacuum](https://atlascopco.com/vacuum)



To know more about the Atlas Copco GHS VSD+ series, scan the QR code