



*Atlas Copco*

A technical drawing overlay in white lines on a blue background, showing various mechanical parts and dimensions. The drawing includes circular patterns, lines, and text such as "1380 [S4.3]", "1630 [S4.2]", "Ø10", "Ø12", "Ø14", "Ø16", "Ø18", "Ø20", "Ø22", "Ø24", "Ø26", "Ø28", "Ø30", "Ø32", "Ø34", "Ø36", "Ø38", "Ø40", "Ø42", "Ø44", "Ø46", "Ø48", "Ø50", "Ø52", "Ø54", "Ø56", "Ø58", "Ø60", "Ø62", "Ø64", "Ø66", "Ø68", "Ø70", "Ø72", "Ø74", "Ø76", "Ø78", "Ø80", "Ø82", "Ø84", "Ø86", "Ø88", "Ø90", "Ø92", "Ø94", "Ø96", "Ø98", "Ø100".

# Energy savings and lower operational costs for a leading thermoforming manufacturer

**Region:** Ireland

**Sector:** Thermoforming

**Benefit:** 70% energy savings

## Challenge:

A company that is one of the leading thermoforming manufacturers across the world, wanted to upgrade their vacuum system. The manufacturing site in Ireland uses thermoforming machines to manufacture plastic packaging in their production site. This process involves heated plastic sheets are given desired forms through vacuum. The overall product quality, perfection and aesthetics depended heavily on the efficiency of the vacuum system.

However, the company's current vacuum installation consumed excess energy, was unable to adapt to the variable demand and was expensive to maintain and monitor.

## Solution:

Our Irish distributor for vacuum, Bay Enterprises carried out an energy audit on the old vacuum system in place. The data detailed an inefficient vacuum system and that large energy savings were possible.

To combat these challenges, we introduced them to the Atlas Copco GHS VSD+ series. A range of new generation, oil-sealed rotary screw vacuum pumps with Variable Speed Drive (VSD). Bay Enterprises installed the GHS 900 VSD+. The oil screw vacuum replaced 4 of their old oil vane vacuum pumps.

The oil vane pumps consumed a total of 14.5 kW of energy. The Atlas Copco GHS 900 VSD+ installations only loaded 4.4 kW, effectively bringing about 70% energy savings. This total to 69,000 kW's saved per year and over €19,000 saved to the electricity bill per annum.

The built-in Variable Speed Drive (VSD) optimized pump speed based on demand, resulting in increased productivity and reduced energy usage during production. Additionally, the next-generation HMI offered enhanced insights and control, while the vacuum pump's intelligent design facilitated straight forward on-site maintenance.




GHS 900 VSD+


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## Outcome:

Our customer's manufacturing prowess and brand reputation thrives on adaptability to market demands. Their search for a reliable vacuum pump, one robust enough for their thermoforming requirements and intelligent enough to reduce operational expenses - led them to Atlas Copco Vacuum. The GHS 900 VSD+ has revolutionized their production floor and operations.

## Overview of benefits:

 70% energy savings

 Limited maintenance

 Better monitoring and insights

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



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