

Dear Reader,

MOVIGEAR® Drive system of SEW allowed Coca-Cola HBC Austria GmbH to reduce energy consumption by 75% in the application of PET bottles and packaging units.
To know more about execution of the project, please read the article below.

Brand & Communication Team
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Drive technology TODAY

MOVIGEAR® allowed Coca-Cola HBC Austria GmbH to reduce energy consumption by 75%.

The soft drink bottling plant is focused on reducing CO₂ emissions as well as energy costs. MOVIGEAR® drive systems provided unexpectedly high energy efficiency for transporting PET bottles and packaging units.

Overview

► Improved sustainability and significant reduction of the CO₂ footprint in the production area are the primary focus for the Coca-Cola Group's corporate policy. Production and bottling plants worldwide feel that it is their obligation to achieve this climate objective. Coca-Cola HBC Austria GmbH, in the Austrian capital Vienna, has also set itself this aim and is upgrading its plants accordingly.

With the promise of energy savings of up to 50%, thanks to innovative mechatronics for the drive technology, SEW-EURODRIVE received the order to upgrade transport line 2a at the end of 2009. In the area from the shrinkpacker to the palletizer, the plant processes PET bottles with a fill quantity of 0.5 to 2.5 litres.

We managed to exceed our customer's expectations:

The consistent application of our mechatronic drive technology, with its unmatched energy efficiency, and other additional measures reduced the transport line's energy consumption by 75%. This is demonstrated by the supporting measurements provided by Wien Energie GmbH. The public utility is involved in the entire modification, right from the start, with detailed energy consumption calculations.

The independent results speak for themselves:

A total energy saving of about 75% compared to the previous drive and control technology. CO₂ reduction of about 41,000 kg/year (based on the relatively positive CO₂ footprint in Austria, at a European level). ►



**Maximum energy efficiency and
low installation expenses reduce costs**

Coca-Cola HBC significantly reduced its operating costs thanks to the use of MOVIGEAR® drive systems. This is not just due to the outstanding 75% energy saving. The power supply and communication via SNI technology (Single Line Network Installation) also contributed to the cost reduction.

SNI technology allows for energy supply and communication transmission via a single shielded cable. This allowed the plant operator to significantly reduce the number of required components as well as their installation expenses.

This was made possible by the modification team in the bottling plant. The technicians completed the mechanical conversion of the plant over a long weekend, from Friday morning to Sunday evening. During this short period, they removed the old drives as well as the cabling, completed the mechanical and electrical installation of the new drives and performed the startup activities. Coca-Cola HBC was able to restart production on Monday morning.



MOVIGEAR® in SNI technology



Packaging unit transport



MOVIGEAR®



PET bottles transport

Amortization of the investment within the first year

This considerable contribution to the reduction of the overall costs and operating costs ensured that the investment in the plant modernization paid for itself in less than a year. This ideal efficiency result, in every respect, and other benefits were made possible by:

- 40 MOVIGEAR® of the energy efficiency class IE4 in SNI technology (Single Line Network Installation)
- Supporting control measures, such as speed optimization and improved jam shutdown by the integrated PROFIBUS
- SNI principle (Single Line Network Installation): Only one cable used for energy and information transfer
- Simplified plant planning and plant layout due to the reduced number of required components
- High degree of protection
- Tested resistance to normal cleaning agents
- Hygienic surface design for applications in the hygiene sector
- No churn up of air, contaminants or bacteria



Customer request

Energy saving and the reduction of CO₂ were the primary objectives for the transport line upgrade.

Our solution

The new mechatronic drive technology with MOVIGEAR® and SNI technology allowed Coca-Cola HBC to significantly exceed their set objectives: the 75% energy saving ensured that the investment paid for itself in just one year. ◀

Use of MOVIGEAR®

Here in Vienna we looked at a number of ways to reduce our carbon footprint. Today, I can say that this technology allowed us to achieve an energy saving of 75%. ...

Thus, SEW-EURODRIVE came forward with a proposal to optimize the gear units, which we use for our conveyor belts, by installing a new technology, the MOVIGEAR®.

A plant was selected for the installation of 40 of these drive units.

At the time, we could not imagine what this would mean for us. Today, I can say that this technology allowed us to achieve an energy saving of 75%. For us, this means that we will take further steps with SEW-EURODRIVE to implement this improvement both at this site and at a site for mineral water.

Erwin Langela

Supply Chain Director for Coca-Cola HBC Austria GmbH

Long-term measurement displays a 75 percent energy cost saving

We were able to demonstrate that the modification of this PET bottling line enabled an energy cost saving of 75 percent...

We installed a long-term measurement unit at the PET bottling plant to record the energy consumption and the load behaviour for the duration of one month. This measurement allowed us to demonstrate that the modification of this PET bottling line enabled an energy cost saving of 75 percent. This corresponds to an approximate amount of 41 tons of CO₂ emissions saved every year.

Albert Dechant

Energy Efficient Solutions, Wien Energie GmbH