

Further references and application cases:

www.nord.com/references



Can conveying, screw conveyors, agitator drives



Modular drive system in a wash-down design



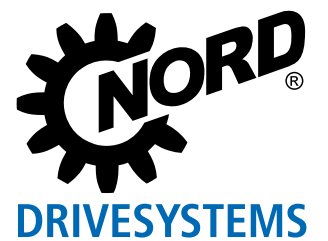
Continuous speed control

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Drive Solutions for can filling systems

Case study: Swiss Can Machinery AG





To comply with the stringent hygiene requirements of the food industry, the Swiss company Swiss Can Machinery uses wash-down-optimised drive technology from NORD DRIVESYSTEMS.



"The modular NORD range optimally meets our stringent requirements for hygiene and performance, and allows us the flexibility we need for our machines."

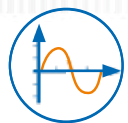
Marc Grabher, Technical Manager and Proprietor of Swiss Can Machinery



Food industry
Can conveying, mixing
product feeding



Geared motors
IE4 geared motors
with smooth surfaces,
worm gear motors



Frequency inverter
NORDAC BASE SK 180E

Project requirements

The demands on hygiene and cleanliness in the food industry are exceedingly high. The requirements on drive technology are correspondingly strict. For Swiss Can Machinery – a specialist in innovative filling systems for powders and dry products – the hygienic design of its plant and machinery is absolutely essential.

Innovative technology for sensitive products. Powdered milk is a difficult product to fill. It can have different filling characteristics, depending on recipe, fat content, drying method, granulation and fineness. Even the characteristics of the same product can vary according to the production conditions. Swiss Can Machinery machines automatically adapt to the continuously changing filling conditions and fill the powdered milk cleanly, precisely and efficiently.

Fully automated from empty to full can. The latest new development – the “SCM Line V-matic 127-3 2020” – is a fully automated can filling and seaming system for powdered milk and baby food. The plant automatically performs all of the work stages from empty to full can. A special protective gas technology ensures a residual oxygen value of less than 0.5% in the can. This ensures a maximum shelf life for the packaged product.

Application solution

"The Swiss Can Machinery machines must be reliable and flexible. This is why the company uses drive technology from NORD DRIVESYSTEMS."

Michael Grabher, Managing Director and Proprietor of Swiss Can Machinery

Smooth surfaces for easy cleaning. On the conveyor lines, NORD IE4 geared smooth surface motors with integrally mounted NORDAC BASE SK 180E frequency inverters provide optimal speed and efficient transport of the cans. The NORD smooth surface motors are specifically designed for easy cleaning and have even and regular surface transitions wherever possible. Thus, cleaning liquids and foam can wash off easily. Thanks to protection class IP66 they are optimally protected against the entry of dirt dust-proof), contact and strong water jets

from all directions. The use of energy saving three-phase motors with efficiency class IE4 also enables high efficiency with low operating costs.

Flexible in operation, simple in maintenance. The NORDAC BASE provides the necessary continuous speed control. Installation of the inverter directly on the motor increases flexibility and simplifies maintenance and repair processes. NORD smooth motors are also used on the screw conveyors. A robust worm gear motor with a cover drives the agitator. The compact drive units provide a high power density, excellent reliability and ensure trouble-free operation.



Digital

The motors are connected in series via Profinet. This reduces the amount of cables and simplifies communication.



Application video

Customer Profile

Founded in 2013, Swiss Can Machinery is one of the leading manufacturers of fully automated filling systems for powders and dry products today. The Swiss company globally implements tailor-made packaging solutions that meet the highest hygienic standards – from individual machines up to entire filling systems. One focus is on the baby food industry.



The project at a glance

NORD smooth motors with mounted NORDAC BASE SK 180E frequency inverters are used for can conveying and screw conveyors. A robust worm gear motor with a cover drives the agitator.

- ▶ Uniform, hygienic solution for the entire system
- ▶ Reliable technology with a robust design
- ▶ Modular system