Innovative dairy products and world class supply chain

Arla Foods is an international dairy company owned by 12.700 farmers from Denmark, Sweden, the UK, Germany, Belgium, Luxemburg and the Netherlands. Arla Foods is a strong player in the international dairy arena, with a wide range of dairy products of highest quality. Well-known brands like Lurpak® and Castello® belongs to the Arla family. Arla Foods is also the world's largest manufacturer of organic dairy products.

Way back in the 1880's, dairy farmers in Denmark and Sweden formed small cooperatives to invest in common dairy production facilities. Over the years, the cooperative idea proved increasingly attractive. Small farmer cooperatives merged and became stronger. They expanded from local to regional to national cooperatives. In 2000, the largest Danish dairy cooperative merged with its Swedish counterpart and Arla Foods, the first cross-border dairy cooperative, was formed. The cooperative idea also flourished in other countries and through recent mergers cooperative owners in the UK, the Netherlands, Germany, Belgium and Luxembourg have joined Arla Foods.

Arla Foods excels in eight dairy categories: milk and powder, milk-based beverages, spreadable cheese, yogurt, butter and spreads, specialty cheese, Mozzarella and value-added whey. In these, Arla Foods wants to excel not only with innovative products but also with a world class supply chain.

SGV automatically picks up a pallet of full trays from one of two robotic filling lines

SGV System Description

For its cheese dairy factory in Taulov (Denmark) Arla Foods invested in 4 JBT automated vehicles to facilitate the movements of pallets of trays. The vehicles transport full and empty trays between 2 levels of gravity racking, 2 production cells, and a storages area within the plant. SGV Manager Software controls the SGVs and communicates with the Arla host system.

To begin, the Arla host computer issues a movement request to SGV Manager, which dispatches a SGV to perform the task. The vehicle then travels to the designated pick-up location, performs the pick, and brings it to the drop-off position. After the movement is completed, the SGV reports back to SGV Manager, which then updates Arla's host system.

SGVs automatically exchange batteries during operation

The SGV System supports 2 robotic filling lines within the facility. It brings these production cells pallets of empty trays, deposits these trays on the conveyor infeed, and delivers trays to high bay storage once the filling line places blocks of cheese into the trays.

The SGVs are equipped with a standard fork attachment, which allows them to transport pallets of full and empty trays. They can lift 2m high and can interface with conveyors and racking.

Features

Location:	Taulov, Denmark
Number of Vehicles:	4
Vehicle Type:	Forked Counterbalance
Load Description:	Pallets of full/empty trays
Guidance Method:	Laser
Vehicle Capacity:	1,200kg (2,646lbs)
SGV Host Controls:	SGV Manager – Windows XP
Battery Charging Method:	Automatic Battery Exchange

Benefits

- Significantly reduce pallet and product damage
- Safe and reliable delivery of pallets
- Almost completely prevents accidents involving forklifts
- Inventory tracking throughout the system
- Flexible solution for plant's changing production demands
- Exceeded financial targets

www.jbtc-agv.com

John Bean Technologies Ltd.
Unit VI Winchester Avenue
Blaby Industrial Park
Blaby Leicester, UK, LE8 4GZ
Phone: +44 116 264 2250
Fax: +44 116 264 2279
uksgvsales@jbtc.com

John Bean Technologies Corp.
400 Highpoint Drive,
Chalfont, PA 18914 USA
Phone: 215-822-4600
Fax: 215-822-4553
sgv.sales@jbtc.com

SGV System Layout

Automated Tray Movement System