BRUKS Siwertell
BULK HANDLING & WOOD PROCESSING



CONVEYING - SWEDEN

AIR-CUSHION CONVEYING FROM SAWMILL TO PULP PLANT

Sustainability forerunner, Södra Cell Värö, needed to convey wood pellets and sawdust from a sawmill and pellet plant to its nearby pulp mill, constituting a conveying distance of around 600m. Bruks Siwertell's Tubulator air-cushion conveyors proved to be an excellent candidate for the task.

Customer need

International forestry industry group and Sweden's largest forest owners' association, Södra, prides itself on being ahead of its time when it comes to sustainability. This includes switching production to chlorine-free pulp and becoming fossil fuel-free in its daily operations.

Part of these capabilities lie in the raw materials it handles, wood. In 2016, Södra's Värö site, originally opened in 1972, was completely rebuilt, making it one of the world's largest, advanced softwood kraft pulp mills. With a production capacity of 700,000 metric tons per year, it also generates 1.6 TWh of bioenergy annually and has become an important supplier of renewable power.

During the site's rebuild, the connection between Södra's sawmill and pellet plant, producing the critical source of renewable fuel for its nearby softwood kraft pulp mill, came under scrutiny. The most efficient way of transferring the processed wood material to the lime kiln at the mill, was through a direct link. The conveyors would need to be totally enclosed to protect the environment from dust emissions and spillage, and offer high efficiencies and capacities over a very long conveying distance.

Our solution

The resulting solution saw Bruks Siwertell deliver its longest yet air-cushion Tubulator conveying system. At an overall length of 602m, it offers wood pellet and sawdust handling at a rate of 20t/h.

Bruks Siwertell's low-friction conveyors eliminate the use of idlers along their conveyor lengths by the use of a cushion of air. The risk of friction fires, from idlers seizing in operation, is therefore eliminated, along with the need for maintenance walkways and huge maintenance costs.
As well as savings, air-supported conveyors are totally enclosed and because they offer a smooth ride, ensure the quality of materials in terms of degradation.

FACTS

CATEGORIES:

- **Conveying**

MATERIALS:

- **Biomass**

CUSTOMER:

Södra Cell Värö

ADDITIONAL FACTS:

Product	Tubulator conveyor type-CT518
Material handled	Wood pellets and sawdust at a rate of 20t/h (30 m3/h)

PRODUCTS:

- Conveying

LOCATION:

Väröbacka, Sweden

SCAN THE QR-CODE:
View the Case online

A consistent quality of biomass pellets is essential for destination boilers, as they do not burn evenly and the efficiency of the combustion process is reduced if they are degraded. This makes gentle conveying over very long distances even more essential.

Bruks Siwertell's Tubulator is an excellent choice for these lengthy conveying lines. Their innovative suspension cable tower technology also means that they can be fitted at significant heights but are rigid enough to only need minimal supports; ideal for integrating into an existing site.