

Sweden

Behind the scenes at Ikea's birthplace

The Swedish low-cost furniture corporation Ikea is still firmly rooted in its birthplace in Älmhult, where it operates a huge distribution facility with state-of-the-art technology. The ITJ visited the centre and had a look around.

Ikea's first retail store was opened in Älmhult just 51 years ago. Since then the group has spread its activities to 36 countries practically all over world, with Europe accounting for the largest share of sales (82%).

It goes without saying that efficient and sophisticated logistics techniques are essential for supplying all these stores with Ikea's products, and a visit to the company's main distribution centre for Scandinavia, just outside Älmhult, shows how Ikea organises its logistics processes.

Two fully automatic warehouses, built in 1979 and 2000, are at the heart of the facility. The newer storage building boasts some impressive figures: it is 23 m high, 200 m long and 50 m wide.

Swisslog technology

The facility is equipped with nine fully computerised cranes, of which seven are for handling Europalettes and two for Ikea's special long pallets.

The total of 42,750 slots could theoretically hold the entire stock in Älmhult, according to Anders Kroon, Ikea's internal communicator, but this is not feasible due to the larger dimensions of some items. The goods in this warehouse are the ones most frequently in demand, with the most popular nearest the front.

«Our maximum handling capacity amounts to 100 inbound pallets and another 100 outbound per hour, but in fact we rarely get close to this level,» Kroon said. «But we do try to move one pallet in and one out in a single crane movement.»

Global IT network

The warehouse was constructed by Swisslog, an intralogistics provider from Switzerland with worldwide operations.

The Atlas software system deployed in the centre was developed in 1979 by Swisslog together with Ikea, for the first automatic warehouse. The Atlas software is linked to Ikea's general warehouse management system Astro, which it uses in its warehousing and distribution centres all over the world, including Poland, Romania, the United Kingdom, Germany, Spain, Italy, the United States of America, Switzerland, China and Japan.

Plastic instead of wooden pallets

The quality of the wooden pallets is an issue all by itself. «We have to have very good quality all round, including pallets, as defective units lead to poor efficiency and cause irritation for our workers,» Kroon explained. «So we check both the incoming goods as well as the pallets, and immediately remove pallets that are in a bad state.»

To solve the problem concerning qualitatively inadequate pallets, Ikea is experimenting with plastic loading ledges to support the lower edge of consignments on all four sides during transportation. At the moment they are being used together with wooden pallets, but the plan is to phase out the latter in one or two years. «This way we will be able to achieve better load factors, as well as save space,» Kroon pointed out.

Efficient distribution

Despite Ikea's desire to use rail transport as much as possible for environmental reasons, it has proved difficult to do so, particularly in Sweden. Some of the goods are delivered to the Älmhult facility by train, into a covered hall with capacity for 17 wagons, but distribution



Photo: Green

An Ikea high bay warehouse in Älmhult (Sweden).

to Ikea's Scandinavian stores is another matter.

«We have an agreement to supply the 29 stores in Scandinavia with our goods in a short and guaranteed lead time of three days,» Kroon told the *ITJ*. «The Swedish railfreight operator Green Cargo requires up to one day to reposition its trains, which means we know in advance that we will not be able deliver on time.»

Expanding intermodal options

«But we have now found an intermediate solution, which we started a year ago, wherein we load the container, take it on one of our trucks to the intermodal terminal a kilometre away, and put it on a scheduled Green Cargo freight train. We supply nine out of the 29 stores this way, and hope that even more shops will be able to make use of our intermodal transportation approach in future,» Kroon elaborated.»

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