

II CFU (CENTRE FOR EDUCATION MATERIALS) Soro – Denmark - CREATES A UNIQUE SORTING POINT

6,6 KM. OF SHELVES, AUTOMATICALLY HANDLED, SERVE 600 SCHOOLS



Zecchetti has, together with Thanex A/S and CFU Sjælland – (Center for Education Materials) delivered a new central warehouse in Sorø Denmark, build for all sorts of materials used for schools. The nerve in the system is two **30 meter long storage units (Mod. UNICO M10)** and a driven conveyor to and from the units. This is to ensure an efficient and fast handling of materials. There are in total 16 employed in the warehouse which was taken in use just after the summer holiday in 2010. The capacity in these Storage units are **6.6 km shelves**.

The material in the centers is all kind of materials used in the education system in Denmark, primary schools, gymnasiums and universities.

CFU consist earlier of 3 information collections. Before the new warehouse all materials were kept in three different warehouses in three cities but today all is kept in the new 1200 m² warehouse in Sorø. This is 1/3 of the previous area.



75 % of the "orders" comes from public primary schools and private schools. There are about 400-750 orders every day and the same amount of orders to be stored again after use.

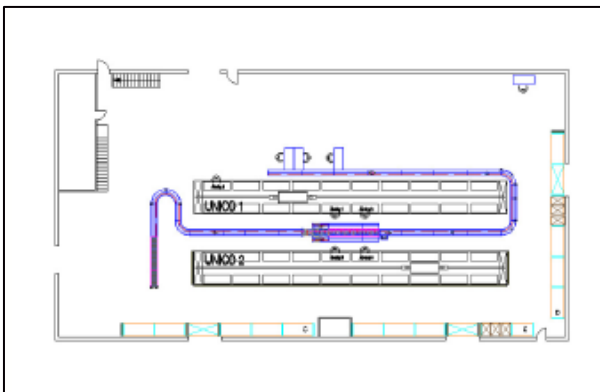
In the warehouse are 2 million articles where most of them are store in the 2 storage lifts.

The warehouse consist of 2 Unico storage lifts and some conventionally racking and is today one of Denmark's largest bookshelf's. The Unico's are each 30 meter long, 3 meters deep and 6.4 meters high. This gives a capacity of 6.6 km bookshelf.



On the left side is a layout of the building with the two lifts in the center of the building and a driven conveyors, which brings the material from the entrance to the access openings of the Unico's and later on to the packing and shipping area. Stationary racking is placed around the lifts.

Office facilities are in a separate building just in front of the warehouse.



Work procedure for orders:

All orders are handled in the software from Dantek Booking. A label is printed from this program and put in an empty box which is being moved to the access opening. When the box arrives the tray holding the materials already automatically moved to the access opening. The materials are picked and placed in the box which is moved to the shipping area.

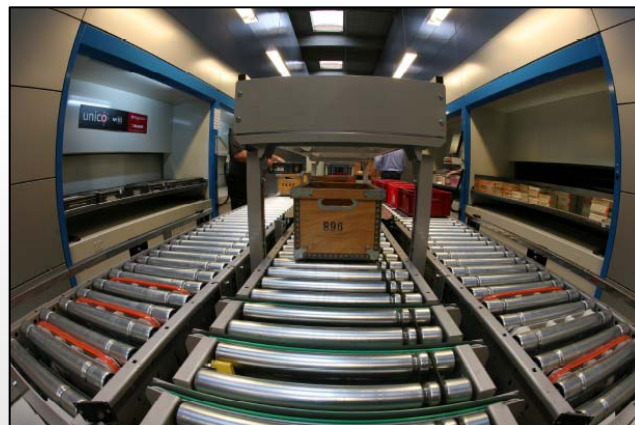


Are the materials stored in a rack, a print is made with the exact location for the operator to pick this manually.

When storing back the material, the books etc are checked and put in some special boxes and send to the access openings where the correct tray is already standing, and the operators are able to immediately store back the books.
Articles which are not suited to be stored in the lifts are stored in conventionally racking and are picked manually.



Boxes with the orders for the schools are sorted in 5 different routes, and every day 5 trucks deliver the orders to all the schools in the area. Every school in the area receives orders once every week.
There are a total of 660 schools etc. handled by CFU.



WAREHOUSE MODEL	2 Vertical Automated Warehouses Mod. UNICO M10 (10 modules)
DIMENSIONS AND FEATURES	L: 28.12 m. W: 3m – H: 6.35 m. with 5 bays at 3 different zones
TRAY TYPE AND QUANTITY	n. 695 trays 2417x807 mm – 400 kg./each
AVAILABLE STORAGE SURFACE	1330 m2
SURFACE OCCUPIED BY THE VERTICAL WAREHOUSE	170 m2
SURFACE PREVIOUSLY OCCUPIED BY THE TRADITIONAL WAREHOUSE	500 m2
TYPE OF THE STORED ARTICLES	Educational material
WORKING SHIFTS/DAY	1
N. OF OPERATORS/SHIFT	16
TYPE OF CUSTOMERS	Schools
AVERAGE TIME FOR ORDER HANDLING	6 hours
TYPE OF SHIPPING PACKAGE	Cases
DAILY MOVEMENTS (INFEED; OUTFEED)	Lines (100; 500)
OPERATION MANAGEMENT	Centre HOST
GOODS IDENTIFICATION SYSTEM	Barcode
SYSTEMS FOR DATA TRANSMISSION TO THE OPERATORS	Fixed terminal stations