

Research substances stored in a controlled environment

Pharmaceutical industry



Merck is a leading science and technology company in the pharmaceutical and chemical industry. Merck KGaA needed a special storage solution for its newly constructed research building at its Darmstadt, Germany facility. Kardex Remstar provided a customized solution for their storage requirements.

Advantages at a glance

- Secure storage in a refrigerated environment
- Easier access to stored goods
- Improved ergonomics
- 66% floor space savings

Further Information:
www.kardex-remstar.com



1 Customer



Merck is committed to changing the world through science and technology. Employing 50,000 people in 66 countries worldwide, Merck develops and supplies specialized products in the fields of healthcare, life science and performance materials. The Darmstadt site is Merck's largest research and development center.

2 Task definition

For the newly constructed research building at the Darmstadt site, three storage zones were planned in a global environment for the supply, preparation, management and storage of pharmaceutical research substances. The research substances require a special storage condition, therefore a cooled and a deep-frozen storage area was created. The laboratory staff needed access to the refrigerated warehouses from an area at room temperature. In addition, the controlled storage conditions had to be secured by a redundancy system.



3 Solution



Kardex Remstar implemented three standard Shuttle XPs at Merck which have been modified for use in chilled conditions. One Shuttle XP is used for each storage area. The trays of all three Shuttle XPs are equipped with dividing metal sheets for subdivision. In addition, laser pointers and position indicators have been installed. They indicate the exact position of the individual storage of goods on the tray and identify the correct product to be picked. The two air-conditioned Shuttle XPs are each cooled by a refrigeration unit. In addition, in the event of a fault, a redundant cooling unit with redundant sensors is available. The air is dehumidified by a drying device to prevent humidity from condensing and icing in the device. The Shuttle XPs are clad in insulation panels, which allows operators to access the air-conditioned units directly from the room temperature laboratory.

4 Scope of delivery

- 3 Shuttle XP 500 3,650 x 813 x 7,950 mm
- 3 cooling systems including redundancy system
- Hatch unit in front of the access opening
- Drying technology
- Thermally decoupled automatic tray extraction
- Laser pointer
- Warehouse management software Power Pick Global (interface to customer host system)



Personal information for optimizing your intralogistics:

info.remstar@kardex.com
www.kardex-remstar.com