

CASE STUDY

BEIJING DITAN HOSPITAL, CHINA



Transparency and cost reduction:
Realisation of a logistic concept with the
automated guided vehicle TransCar LTC2.

The customer and his requirements

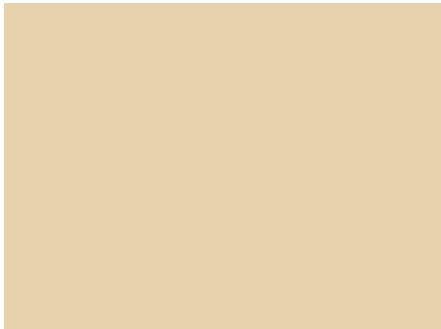
Beijing Ditan hospital is one of the biggest hospitals for infectious disease in China. The history of the hospital recalled in 1946. Most of the modern clinics have been set up in the recent 20 years, especially a high-level research in the field of AIDS, hepatitis, etc. Based on the development, Beijing Ditan hospital planned to construct a new building for providing the patients with better services.

Beijing Ditan hospital gradually realized the importance of the logistic processes between the different areas of infectious disease. Unique and innovative concepts have always been supported by the hospital manage

ment. Further optimisation have been addressed in the filed of in-house transport logistics like the transport of linen, food, or medical goods. Therefore the hospital was looking for the in-house logistic solution.

The Solution

Start-up:	2008
System:	TransCar LTC2
Track length:	1200 m
No. of stations:	98
No. of vehicles:	9
Control:	TCMS 2
Goods:	Linen, food, waste, drugs



Procedure

During the phase of planning the complex and resource intensive transport processes have been analysed. The results were compared with several alternative solutions. Positive side effect of the analysis was the coherent records for all transport processes including flow of commodity, amount of transports etc. within the relevant organisational units.

The final optimised and shortened processes were modelled based on the insights. Due to the change in the transport processes, a just-in-time delivery is possible. The necessary storage of goods has been clearly reduced. The whole logistic quality has been improved.

Requirements

The AGV system must ensure an automated transport of special containers for food, linen, waste, drugs and sterile goods.

Further success factors for the system were: Easy addressing of the containers by the insertion of transponder cards, easy handling of containers at the wards, no programming or input necessary on a keypad when sending a container.

The system provides very high flexibility. A possible change of the driving route or of time schedule can easily be realised supported by the on-board laser navigation system.

Project success

Most of the manual transports of containers could be replaced by the transport with TransCar, the Automated Guided Vehicle of Swisslog. This resulted in a significant decrease in personal resources used on manual transports. Up to 252 containers are being carried by 9 AGVs on each day. Each container can load up to 400 kg.

The TransCar delivers goods between 6.00 am and 8.00 pm to the following departments in the new hospital: 19 wards, pharmacy, refectory and centre of linen supply. The departments are located on 7 different floors. Total daily transport distance is approx. 38 km.



Benefits of the Solution

- > Cost reduction in the field of internal logistics processes
- > Acceleration of internal material handling
- > Transparency and control of delivery status
- > Just in time delivery of material
- > Avoiding cross contamination
- > Protection of stuff avoiding manually transports in high infections areas

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