

Case Study

# Sterile Storage and Picking





# Optimize material management & space

## Customer and task

As traditional shelves cannot record validity periods, nurses must carefully check each instrument when preparing for a surgery. Expired instruments waste storage space and reduce work efficiency of nurses.

Given the number of elective surgeries, limited-term surgeries and emergency surgeries, nurses are required to quickly and accurately prepare hundreds of instruments. As traditional shelving racks do not indicate where the needed instruments are stored, nurses must search the correct location for every item. To avoid a loss in efficiency, smart storage solutions for surgical instruments should be in place.

## Solution

Three Vertical Carousel Modules from Kardex met the requirements of over 20 operating rooms. The units automatically store all instruments in the best available storage location, based on their size and height. Thus, making full use of the available space. Compared to traditional shelving, they save over 70% of space.

Using the Vertical Carousel Modules, staff simply scan the code on the work counter and easily store or retrieve the instruments as needed. Location, quantity and other information is seen on the screen in real time.

The Kardex Power Pick System improves item-, warehouse-, space- and order management, but also tracks and records all instruments. It follows the first-in-first-out principle and selects instruments in the storage unit according to the effective date of the instruments recorded by the disinfection center and order requirements.

## Case at a glance

### How we took our customer from task to solution

In a grade A hospital in Shanghai, China, surgical instruments must be kept sterile. With traditional shelves unable to track the varying disinfection validity periods, expired surgical instruments waste storage space and reduce efficiency. Kardex provided three Vertical Carousel Modules to create easy access to goods. The Kardex Power Pick System software was also integrated to further improve operating efficiency through intelligent management.

Saving  
**space**  
by over 70%

Improving  
**efficiency**  
by over 50%

Increasing  
**accuracy**



**Scope of delivery**



3 Vertical Carousel Modules in 2 different zones



Kardex Power Pick System



Integrated with hospital disinfection system