

# Dyane SmartKanban®

Management solution for hospital ward storerooms



# Palex Medical

## Smart solutions with RFID: inventory management in real time

At **Palex Medical**, we seek to provide the latest innovations for healthcare professionals.

Our Hospital Logistics division has ample experience in the field of hospital logistics, providing automated, comprehensive and tailor-made solutions to facilitate resource management and improve the quality of patient healthcare.

Given the expense of healthcare, the constant focus on patient safety and the daily pressure on healthcare professionals, systems offering **safe and traceable logistical processes for high rotation healthcare products are more essential now than ever before.**

**Dyane SmartKanban®** is a smart solution for the management of medical materials and medication at the point of consumption, which optimises replenishment with the combination of RFID technology and information technology. This solution can be used by **independent hospitals** or hospital groups supplied by **logistics operators**, and its main areas of application are hospital ward storerooms and primary health care centres, where logistics and order management tasks are carried out manually and overstocking and stock-outs are frequent.

The BK200 Plus mailbox in combination with our software, **DYANE**, makes up the logistics management solution for more complete hospital ward storerooms when integrated with the hospital HIS.



Thanks to our R&D&I in the field of RFID, we have implemented the most innovative, robust and reliable smart solutions available on the market, making us one of Europe's leading manufacturers.



## RFID MAILBOXES

### FOR THE MANAGEMENT OF HIGH ROTATION MATERIAL

The **Dyane SmartKanban®** system is based on the use of RFID cards located in the baskets of the modular shelves of the hospital ward storerooms managed under the Kanban principle. It uses a double compartment system to indicate the need for material replenishment and its replacement urgency according to their location in the first (white card/normal order) or second (orange card/urgent order) compartments, respectively.



**White RFID card**  
Standard order



**Orange RFID card**  
Urgent order

The implementation of this management process at the points of consumption of care units, allows the hospital to optimise its storage capacities, apply the FIFO principle to eradicate obsolete stocks, and achieve the objective of "order equal to consumption".



#### Safety system

with automatic opening to avoid insertion of non-functioning cards.



#### Holding capacity

up to 250 cards.



#### Signals

LED status indicators which indicate proper connection with the server or warns of stuck cards. Interior view of the mailbox through a window.



#### Contingency features

In the event of an electrical power loss, the mailbox stores the pending data from cards.



#### Access to information

Automatic replenishment order and periodic order reports for effective decision making.



#### Access control

Manual lock to remove the inserted cards for replacement.



**BK200 PLUS**



**No errors**



**Remote readings**

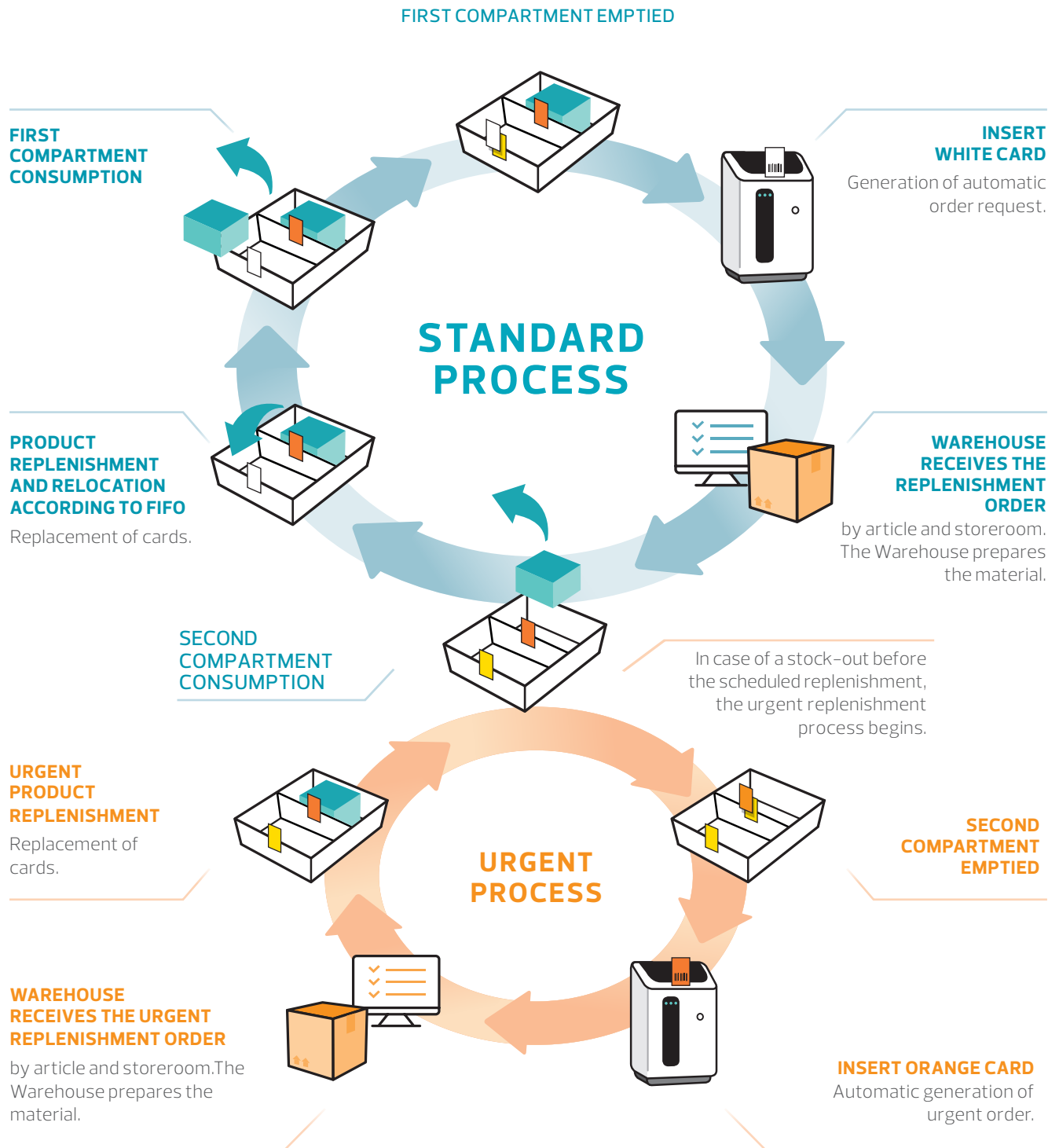


**No barcode scanning required**



**No paperwork required**

## MATERIAL REPLENISHMENT PROCESS



Objective: to minimise storeroom stock and eliminate stock-outs

## BENEFITS

Why implement RFID in your hospital and leave traditional management systems behind?



### Automation of replenishment orders.

Consumables are available when needed.

- Centralised management of multiple hospitals and storerooms.
- Allows stock management in more than one storeroom with the same RFID mailbox.
- Catalogue of items integrated with the hospital HIS.
- Supply calendars for automatic order generation.
- Allows a quick response to possible stock-outs thanks to its alert system.



### Reduces the administrative workload of healthcare and logistics personnel for improved quality of care.

- Automated process. Reduces possible human errors from manual inventory management.
- Simple and easy to use solution. No need to press buttons or manually scan barcodes.
- Increases production and satisfaction of the personnel in the nursing, administration and management areas.



### Cost savings

- Stock levels are adapted to actual consumption, reducing fixed assets in the ward.
- Cost reduction due to increased stock turnover and the elimination of obsolete material.
- Information updated and reliable for effective decision-making in real time.

**Error-free order requests** thanks to RFID card reading.





## DYANE SOFTWARE

DYANE is the management software of the **Dyane SmartKanban®** system. It reads the RFID cards and automatically sends the storerooms' replenishment needs.

It also provides reports of consumption data and rotation of material for analysis and strategic decision making.

### System functions

- ✓ Data mining through reports:
  - Storeroom status.
  - Stock-outs.
  - Out-of-service cards.
  - Misplaced cards (location of cards that have been inserted in the mailbox of another storeroom by mistake).
  - Product rotation (the analysis of this information enables adjusting of stock levels).
- ✓ Access to the information from any hospital interface with registered credentials.
- ✓ Urgent and non-urgent replenishment needs in real time.
- ✓ Parametrisation of items.
- ✓ Stock levels associated with each storeroom.
- ✓ Management of users and definition of roles.
- ✓ Printing of RFID card labels.



Application fully designed  
and implemented  
by **Palex Medical**

that guarantees  
complete control over its features and  
constituent modules without relying on  
third parties.

## COMPLETE THE SYSTEM WITH DSK MODUL

Modular shelving for the implementation of the Kanban double compartment system.

The DSK Modul structures optimise storeroom space and improve stock organisation.

Baskets and trays with ISO dimensions (600x400 mm), as well as identification elements for attaching the RFID card labels.

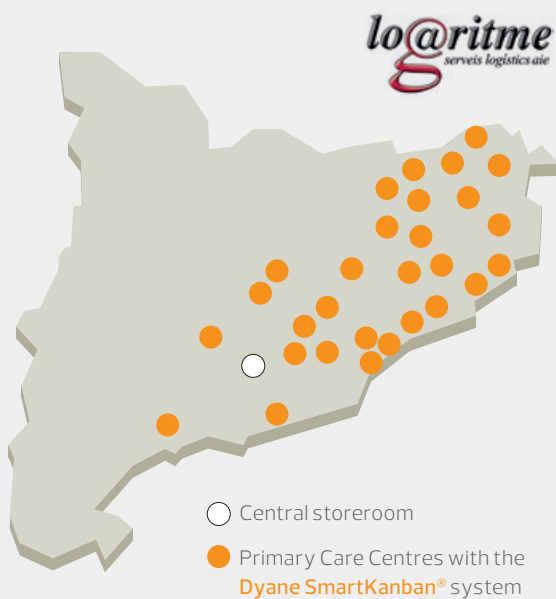


## SUCCESS STORIES

### Logistics operator

**Logaritme** is a regional logistics operator that provides service to all the Primary Care Centres (PAC) of Catalonia from a single point of supply.

The implementation of RFID mailboxes in the Primary Care Centres has made it possible to replace barcode reading, reporting the following benefits:



✓ Increased number of replenished primary care centres per operator. **From 4 to 7 centres per day.**

✓ Elimination of the time used for manual reading and respective travel.

✓ Reduced fuel consumption and carbon footprint.

### Hospital

**Reference hospital in Barcelona** implements the **Dyane SmartKanban®** system in the storerooms for hospitalisation, surgery and emergency departments that are managed from a single point of supply. The benefits of automation of order requests are:

✓ A **22.88%** reduction in monthly order lines.

✓ Reduction of monthly logistics costs by **22.80%**.

✓ Reduction of inventory value by **20.96%**.

Solutions for a **new era of management**



## DYANE SMARTKANBAN

Smart RFID mailbox for stock management in  
hospital ward storerooms

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