



KNΔPP

D³ DAILY DOSE DISPENSER SYSTEM

A new dimension in medication management

The world's first fully automatic patient-specific blister packaging solution.

D³ DAILY DOSE DISPENSER SYSTEM.
OUR TECHNOLOGY UNDERSTANDS
THAT BEHIND EVERY PILL
IS A PERSON.

Welcome to the world of patient-specific medication dispensing

The D³ Daily Dose Dispenser, developed by **KNAPP und IMSTec**, combines automated storage and retrieval technology with patient-specific blister packaging to create one comprehensive system. It's the first ever to transfer medications directly from the manufacturer's original blister pack into patient-specific blister cards or ready-to-take blister cups – without requiring a separate deblistering process or temporary storage of open medicine containers.

All processing is done under carefully controlled conditions to ensure that no medicines are contaminated. Thanks to the blister packing solution's innovative design, the system does not need to be operated in a separate clean room. The process is continuously monitored and documented – from lot numbers and expiry dates down to the level of each blister cup. Furthermore, the system is designed with modules that give it the flexibility to fit different requirements and company sizes. Even the smallest D³ Daily Dose Dispenser can process up to 1,500 weekly blister cards with a minimum of personnel. Plus, changes to a patient's medication can be taken into account at any time. The combination of automation, traceability and integrated quality assurance creates an environment that prioritizes safety, efficiency and precision.



FROM CHALLENGES TO CHANCES

A system that benefits everyone in healthcare

The shortage of healthcare workers and the aging population represent major challenges to healthcare systems as the requirements for safe and effective medication management continue to increase. This is where the D³ Daily Dose Dispenser comes in: Creating patient-specific blister packaging for medicines – organized by day of the week and time of administration – improves medication safety while reducing the workload for healthcare personnel. Pharmacies can focus on providing thorough consultation and clinical services – and even start offering new ones.



25 %

of the population (and growing)
takes 3–4 medicines per day

77 %

of all prescriptions are maintenance medications ¹

50 %

increase in medication adherence



Our D³ Daily Dose Dispenser
is setting new standards in
patient-specific blister packaging,
allowing pharma wholesalers,
pharmacies and blister packaging
centers to benefit.

Matthias Dalkner
Vice President Healthcare Solutions
KNAPP AG

How blister centers and pharmacies benefit

Increased efficiency

No time-consuming deblistering, no manual sealing, no temporary storage – letting you save resources and reduce sources of error.

Focus on consulting

Automating the deblistering process gives pharmacy personnel time to focus on tasks that create value.

Top quality assurance

Reduce dust and cross-contamination while ensuring medications are seamlessly traceable.

New business opportunities

The time saved can be used to focus on new, attractive business models.



BENEFITS



Patient-specific filling:

Each blister pack is specific to each patient and contains exactly the medicine they need – increasing trust and safety.



Higher quality of life:

The easy-to-use blister cups reduce medication errors and improve everyday medication safety.

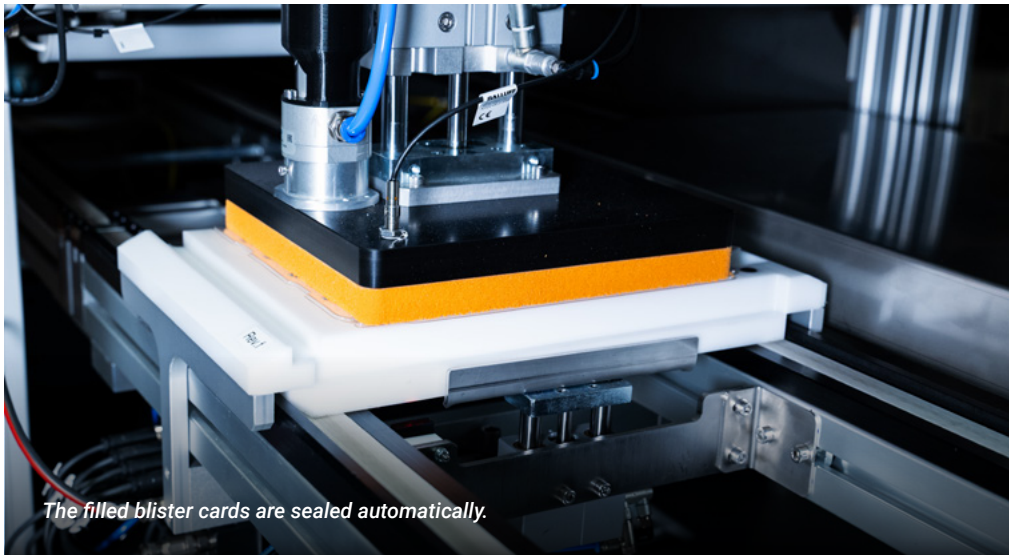


Higher adherence:

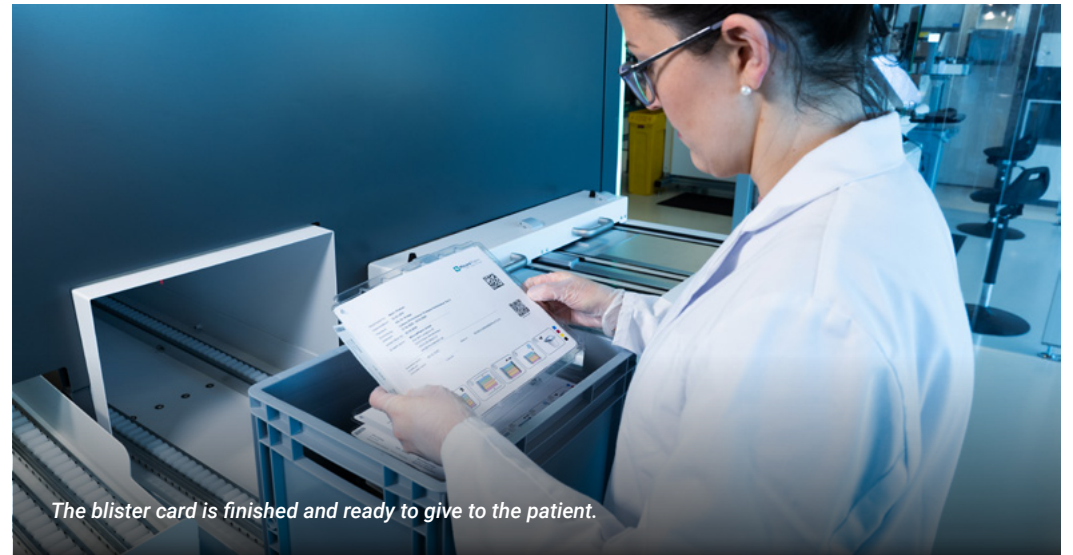
Studies have shown that patients take their medicine up to 50 % more regularly with the help of ready-to-take blister packs.^{2,3}



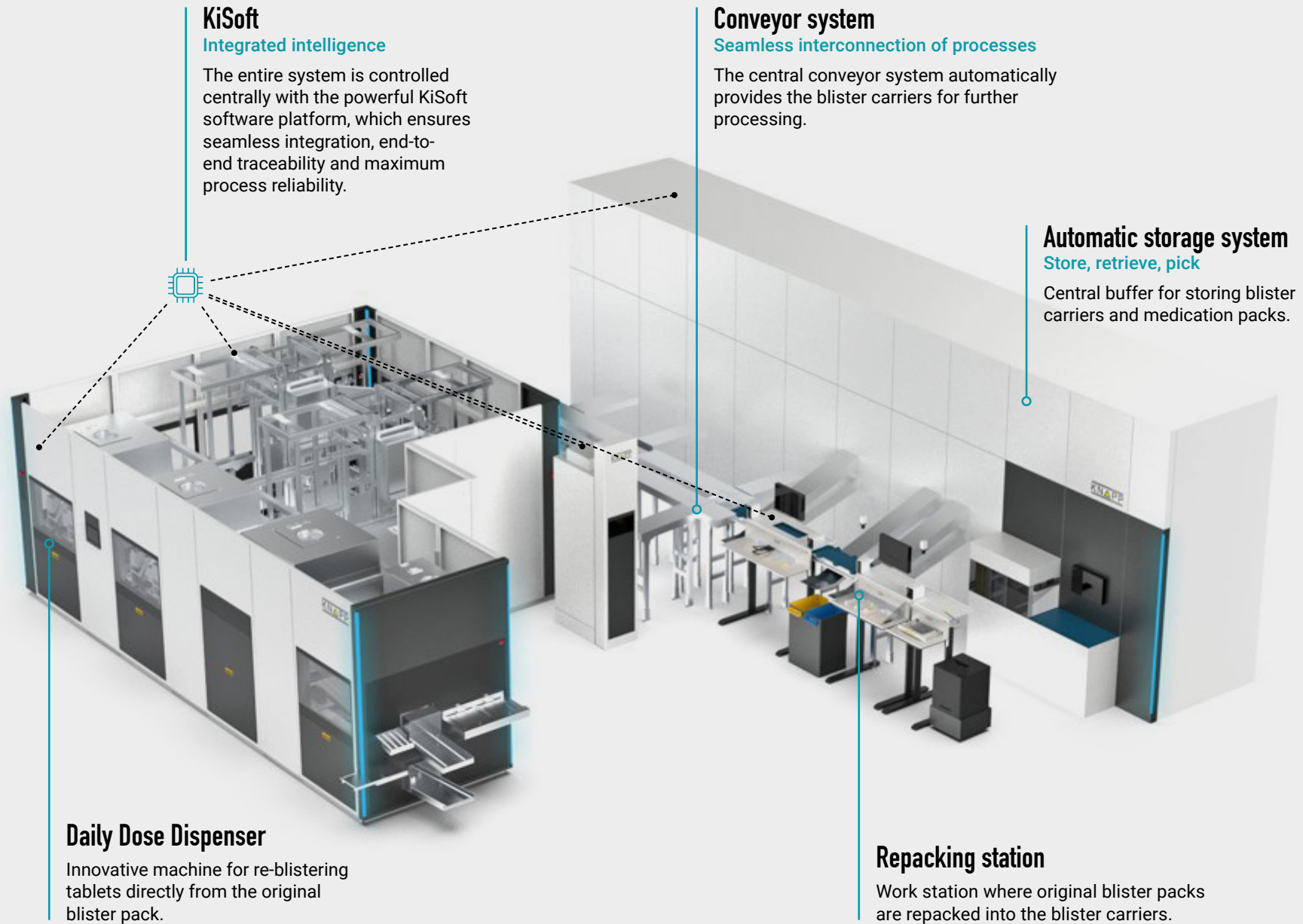
Medication packs are put away into the automated storage and retrieval system quickly and easily.



The filled blister cards are sealed automatically.



The blister card is finished and ready to give to the patient.



Technologies that are redefining daily routines for **blister centers**, **pharmacies** and **patients**

For MicuraPharm in Klein-Winternheim, Germany, the D³ Daily Dose Dispenser System has taken the future of medication dispensing to a whole new level. The scalable, secure system helps MicuraPharm supply people with the medicine prescribed just for them.

It also makes processes more efficient and economical thanks to intelligent stock management and fully automatic blistering. For pharmacies and blister packaging centers with high volumes or multiple locations, the D³ Daily Dose Dispenser System provides a clear competitive advantage thanks to optimized processes, reduced error rates and a new dimension of customer care.

D³ Daily Dose Dispenser System

KEY DATA OF MICURAPHARM'S 2-LINE SYSTEM

- Space required for 2 production lines:
160 m² (1,700 ft²)
- Personnel needed to operate the entire system:
2 people

KNAPP-STORE

- Maximum storage speed:
500 packs/h
- OBTs* available in the system:
>25,000
- Number of items that can be stored in the KNAPP-Store:
>50,000 SKUs

D³ DAILY DOSE DISPENSER SYSTEM

- 2-line system with **80 weekly blister cards per hour**
- 2 employees prepare medication **for 3,000 patients per shift**
- OBTs* available in the system:
1,640
- Weekly blister cards: **individual cups that can be snapped off separately**
- Dosage and administration instructions are documented on every weekly blister card**

**Original Blister Tray*



Automated storage and picking system.



Automatically punches tablets out of the blister pack.



Prepares blister carriers for automatic blister card production.

Spotlight on efficiency and safety: The D³ Daily Dose Dispenser System blistering process

Patient-specific blister packaging is a central part of modern pharmaceutical infrastructure – especially in nursing homes, clinics and high-volume pharmacies. While other systems currently on the market tend to require multiple manual steps, the D³ Daily Dose Dispenser is setting new standards in automation, safety and user-friendliness.



CONVENTIONAL SYSTEMS: **Labor-intensive and error-prone**

Conventional blistering solutions require a lot of manual intervention, from feeding the medication into the system and filling the blister packs to checking and documentation. Each of these steps is a potential source for error, not to mention a drain on your personnel's valuable time.



D³ DAILY DOSE DISPENSER SYSTEM: **Just one manual step**

The D³ Daily Dose Dispenser System reduces manual processes to a minimum – only the original blister packaging has to be placed in the system manually. All other steps – from identifying the medicine to assembling the prescription for each patient and pressing pills out of their original blister packs to sealing and printing the patient blister card – are performed fully automatically. The result is a highly reliable process that requires significantly less personnel.



THE BLISTER CARD: **More than just packaging**

The blister card specially developed for the D³ System consists of individually removable, ready-to-take containers or cups. Each container/cup is clearly labeled and has clear instructions on how to take the medications specific to the patient. This design promotes both medication adherence and safety, especially in care settings and for patients with multimorbidity.

More than just a package

The D³ System creates blister cards **that offer more**

The D³ Daily Dose Dispenser's innovative blister cards with ready-to-take containers/cups and patient-specific instructions make life easier for patients, pharmacists and caregivers alike. But that's not all they offer:

Hygienic and safe:
All medicines are deblistered and reblistered under clean room conditions, significantly reducing the risk of contamination.

Seamless traceability:
Lot numbers and expiry dates are documented down to the individual cups of the weekly blister card.

Efficient storage:
Fewer medicines need to be stockpiled, reducing expiration rates and excess stock.

Focus on sustainability:
The blister cards are made of 100 % PET and are completely recyclable.

Empowering carers:
Caregivers remain responsible for organizing when patients take their medicine.

Flexibility:
Changes to medications can be taken into account at any time and implemented quickly.



From pallet to pill, we are your technology partner.

We are an integrated technology partner for the entire pharmaceutical value chain – from pallet to pill. Our tailored system solutions offer technological help in every step from manufacturing to the patient. Logistics solutions for pharma distribution have been a central part of our portfolio from day one.

We do our part to help create strong, secure and reliable supply chains across the globe that our customers – and their patients – can rely on.

At over 800 customer locations in pharma distribution, we offer comprehensive support across our systems' entire life cycles, creating the foundation for long-term partnerships with healthcare facilities.

The mission behind our intelligent D³ Daily Dose Dispenser System is clear: to serve patients and their family members while optimizing efficiency for blister centers and pharmacies. That's why our D³ System is not just a dispenser, but an all-in-one solution encompassing software, service and continuous support.

IMPRINT:

Marketing KNAPP AG | Austria
marketing@knapp.com
knapp.com

Issue: 01/2025

Credits:

¹<https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-76>

²Non-Adherence: A Direct Influence on Clinical Trial

³Spencer Home Page 05/2019



**making
complexity
simple**