DOSIS® systems
by MANCHAC

automating
the pharmacy

Integrated workflow software and
autonomous hardware
for blister-card pharmacies

BUILT USING ARTIFICIAL INTELLIGENCE · AI

★ *Workflow software*
★ *Custom label printing*
★ *Fully automated filling*
★ *Manual zone printing*

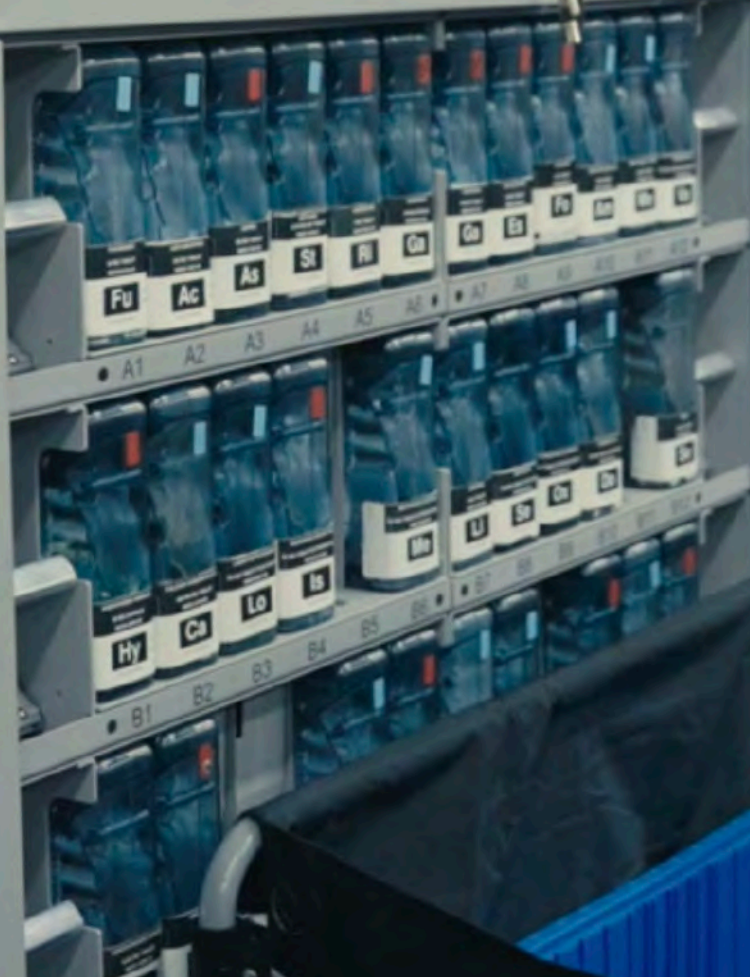1115 2nd St Alexandria, LA 71301 • (877) 626-2422

Read more online

why automate?

Improved Patient Safety
- ★ Improved accuracy
- ★ Reduced chances for mistakes
- ★ Reduced handling

Improved Consistency
- ★ Processes become standardized, even beyond the automation
- ★ Custom rules are stored and applied
- ★ Predictable productivity and capacity

Staff multiplier
- ★ Freeing up staff from repetitive tasks allows them to focus on more critical functions such as customer care
- ★ Your good people are able to get more done

Scalability
- ★ Adjust capacity without adding or reducing staff
- ★ Add components to extend functionality and capacity

Improved Efficiency
- ★ More capacity in less space compared to manual processes
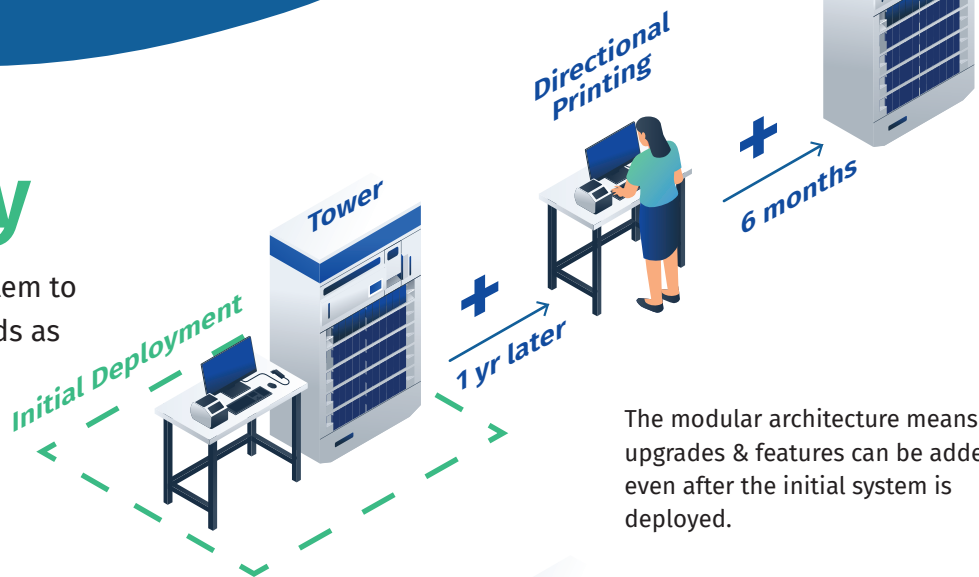- ★ More cost effective: less cost per prescription

contents

Scalability

Incrementally scale your system to match your productivity needs as they change over time.

Tower

Directional Printing

Initial Deployment

1 yr later

6 months

The modular architecture means upgrades & features can be added even after the initial system is deployed.

Flexibility

The individual dispensing towers within your system can be located all together, separately, or in work groups to best match physical workflow within your operation.

Customizing the DOSIS System starts with software. We match the software to your pharmacy workflow requirements.

Flexibility in Hardware

Customizable Software
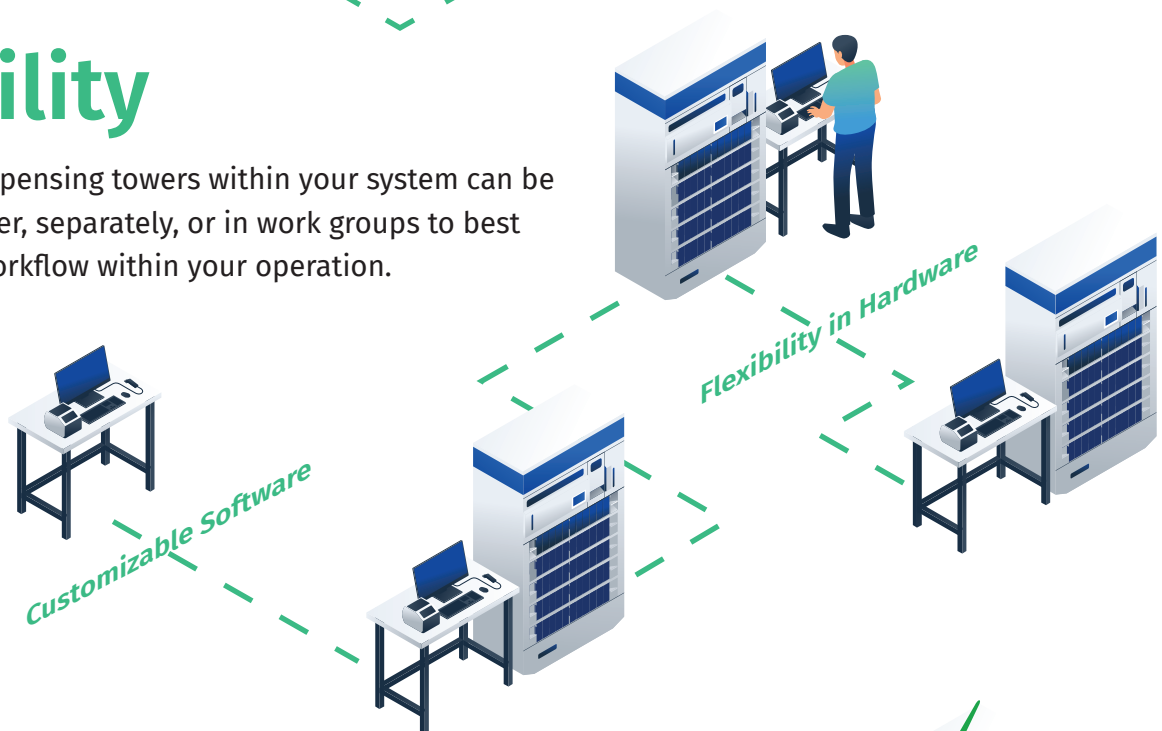
Redundancy

A network of towers mitigates a single point of failure for the complete system. If a tower happens to go offline, the current work can be re-prioritize and load balance across the remaining system.

Product Support is dispatched to repair the point of failure.
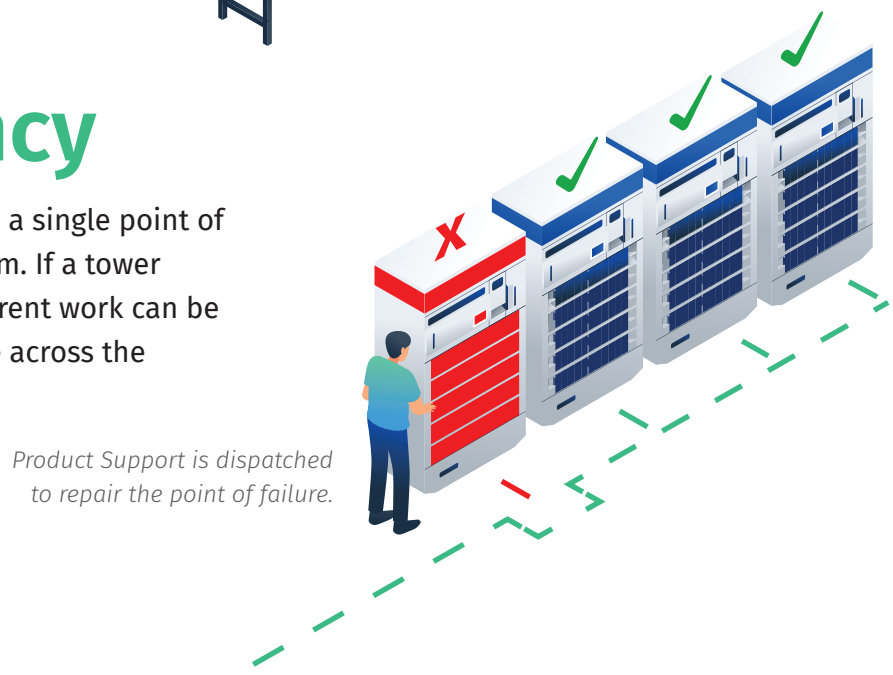
Dependability

DOSIS Systems is developed by pharmacy automation professionals. We have broad experience in the long-term care, corrections, and mental health pharmacy markets.

Manchac Technologies, LLC has been installing and supporting pharmacy automation systems since 2009.

More than 300 pharmacies rely on DOSIS Systems every day.

More than 600 automation towers deployed across the US

EST2009

325+

600+

DOSIS Systems fills more than 4,000,000 blister cards every month.

Our most productive system automates 225,000 blister cards every month.

We serve pharmacies that serve over 500,000 patients across the US.

4mm PER MONTH

225k PER MONTH

500k PER MONTH

Component

Workflow software

DOSIS Systems starts with the understanding that software drives the prescription filling process. The DOSIS workflow software is backed with over 30 years of industry experience in pharmacies. We know what challenges pharmacies face.

Software Features

1. Highly customizable

We can configure the software to match your pharmacy's workflow requirements for filling and printing.

2. User-friendly, browser-based

- ★ No software installation required
- ★ Runs using any PC on your network
- ★ Introducing our software to your pharmacy is seamless.

3. Install and train in less than a week

We hear from customers all the time how simple it is to use the DOSIS Systems software. Your staff will have everything they need from processing an order to refilling label rolls.

We also give you ongoing resources to continue training current and new staff members. See some examples by visiting *www.manchac.com/best-practices*

4. Priority prescription filling

By default, DOSIS Systems prioritizes filling on-demand cards ahead of cycles, and pre-pack cards are filled as the lowest priority. This can be adapted to fit your specific workflow needs, including prioritizing each prescription by facility or delivery time.

5. Reporting

- ★ Intuitive data presentation makes optimization easy
- ★ Built on 10+ years of customer feedback
- ★ View from any PC on the pharmacy network
- ★ Can export to PDF or Excel

Software interface

Connect with virtually any pharmacy management software
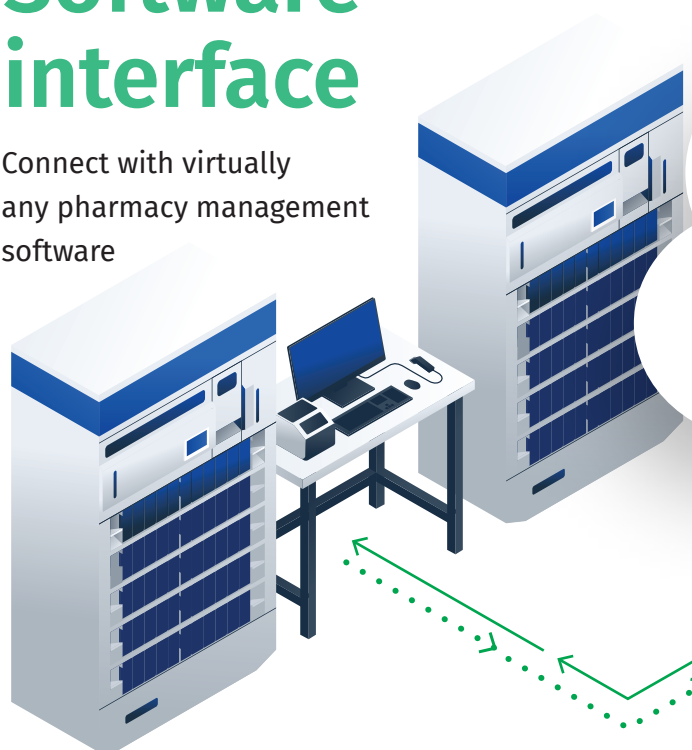
QS/1

FrameworkLTC
A SoftWriters Solution

kalos inc.

+ more

DOSIS Systems is powered by the most flexible interface in the industry. We can receive prescription data in a variety of industry formats. More importantly, we can develop a new interface in a matter of weeks to match your specific requirements.

Decisions for fill patterns, prioritization, label formats, etc., are all configured using the interface data.

We can adapt to your pharmacy management software via two-way interface communication to update your workflow requirements.
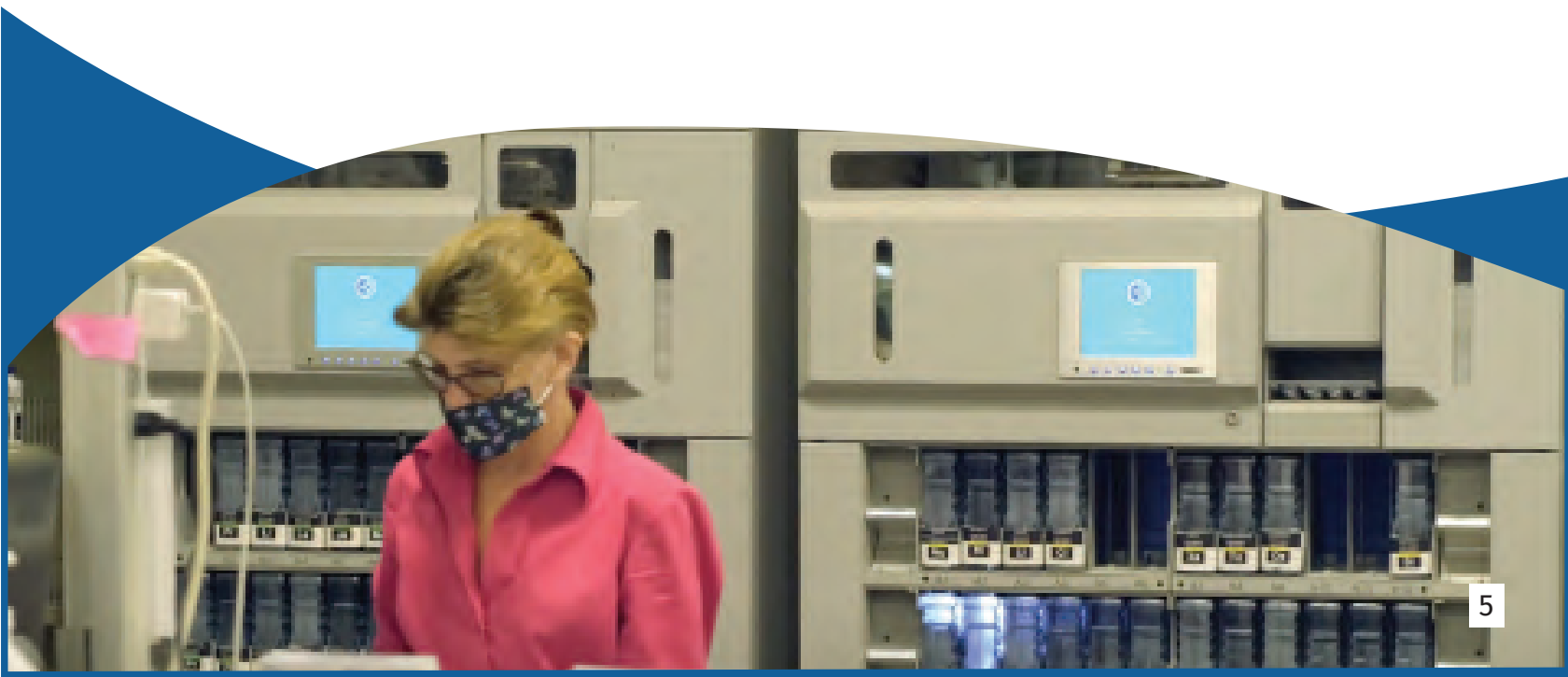
Fully automated towers

DOSIS Systems builds autonomous blister card filling towers. Unlike partially automated options, DOSIS Systems is fully autonomous and runs for hours with minimal tech intervention.

Hardware Features

1. Fills, seals and patient-labels without user interaction.

Hands-free! Lights-out!

The tower takes the place of filling cycle, daily, and pre-pack blister cards traditionally packed by pharmacy techs.

2. Scale capacity to match your production needs.
Each tower has capacity to fill 15,000 to 20,000 cards per month based on card volume, hours worked, and pharmacy workload.

See how DOSIS Systems automates your workflow and saves you money each month.

Total Cards/month

■ DOSIS Systems Automated cards/Month ■ Manual fill cards/month

200k
150k
100k
50k
25k

10k

32,500

85,000

127,000

170,000

# of Towers	1	2	5	8	10
avg. monthly savings	**$10,000**	**$37,500**	**$99,000**	**$146,500**	**$198,000**

6
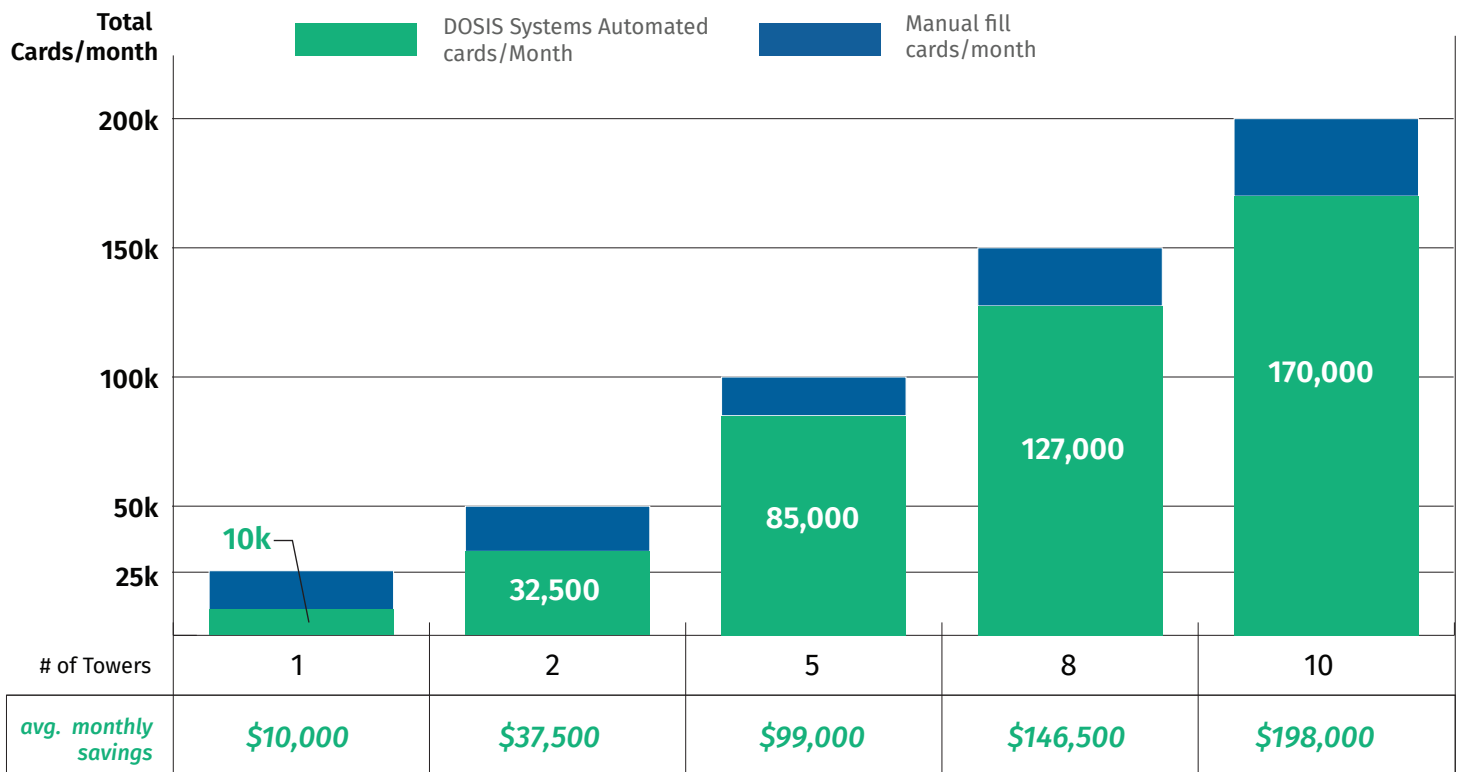
3. Flexible workflow layouts

Because our towers are modular, your DOSIS Systems layout is customizable to your workflow needs. Towers can be set to different room layouts as you can see below.

6 Tower
U Shape

4 Tower
L Shape
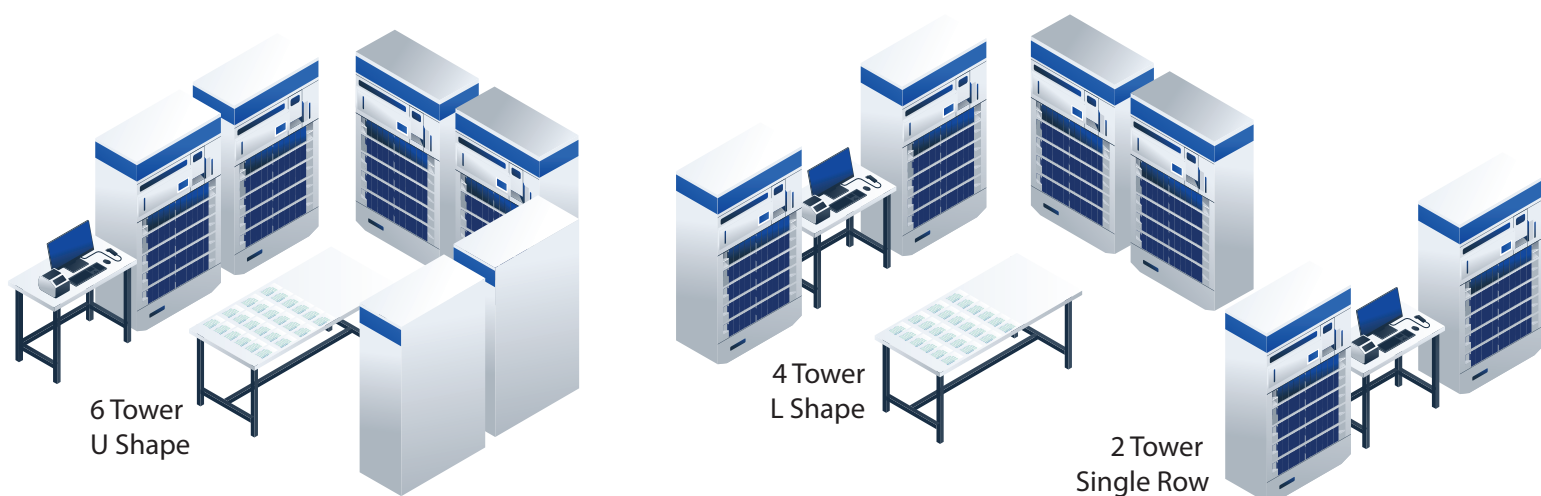
2 Tower
Single Row

Our team can help consult you in the best workflows that works for your particular pharmacy needs.

4. Small installation footprint

Each dispensing tower is 43"W x 27"D x 79"H which fits through any standard size doorway. The footprint is no different than a refrigerator.

43"

27"

79"

Each tower holds 60 canisters

5. Each tower holds 60 canisters at a time.

Utilize as many canisters as you would like and swap canisters in towers without stopping production.

See page #9 for detailed information about canisters.
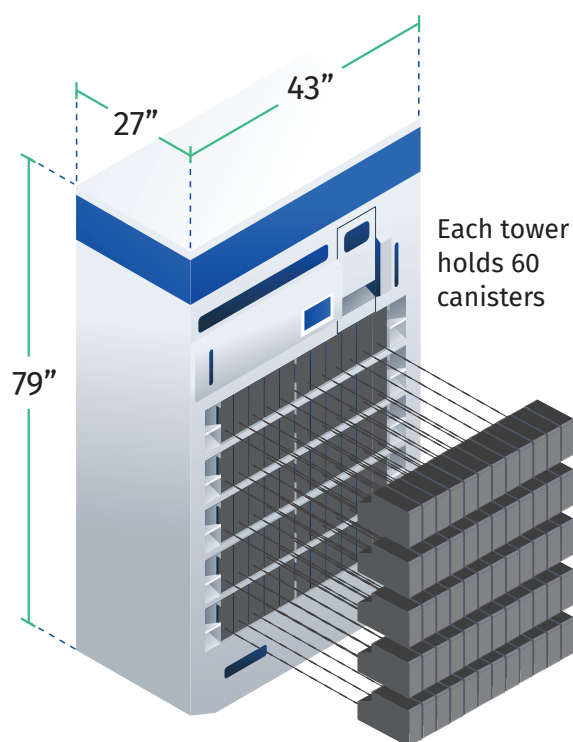
6. Label placement per tower

Each tower can be set to place labels using 3 different alignment settings; left, center or right.

Left

Center

Right

Each tower can be preset to apply labels left, center or right

Blister cards

DOSIS Systems utilyzes a cold-seal blister card that can be customized to your particular needs.

Card Features

1. 28/30/31 Blisters

Depending on the month and need of the patient, our system is designed to fill blister cards with patient needs in mind.

Calendar Start Date
12 Day Prescription
May 17–28

2. Match prescription quantity

Regardless of whether you are needing a true 31 day cycle fill, a 4 day short/partial fill or a multiple card prescription, our blister cards will handle the varieties of orders you are required to fill.

Additionally, our software supports calendar start dates so the card is filled specifically with the number of the date required.

3. Smart blister card filling

DOSIS Systems takes care of the logic that comes with the multitude of variables that you may face including:

★ Med-pass shift based on delivery cutoff times
★ Skip dose
★ Split prescriptions for Work-pack/day pack

Ask a representative about specific needs you may have and how DOSIS Systems can automate those processes.

4. Unit-dose printing

We also offer the option of printing unit-dose information on the back of each blister.

Compatible blister cards include...

RXSystems
Omnicell
NEW! DOSIS Systems

Canisters & dispensing technology

DOSIS Systems' core dispensing technology has revolutionized pharmacy automation. Our proprietary machine vision technology frees up the pharmacy staff from having to exchange cumbersome, outdated cassettes hard-calibrated to each pill.

7"

4.25"

(soda can for reference)

10"

2.3"
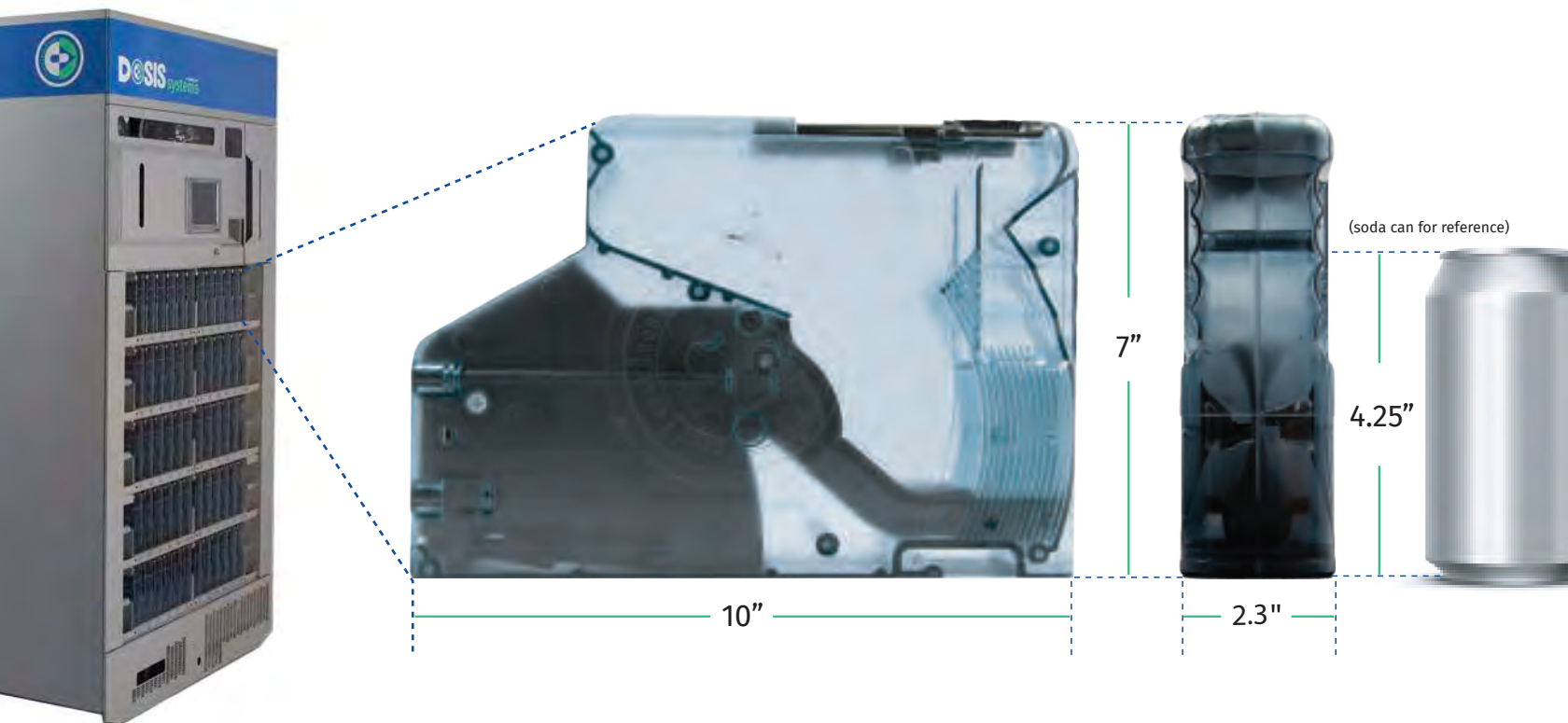
Canister Features

★ DOSIS medication canisters are virtually "one size fits all". (Gel-caps, extremely dark, very dusty, and fragile pills are not recommended for use in DOSIS.)

★ No hardware exchanges required to dispense a new NDC – swap generics without hassle.

★ Each canister has 1000cc drug capacity – more capacity means less time spent refilling medications.

★ Canisters are not tied to any particular location. Canisters can be removed or added while dispensing continues.

★ Best settings for each NDC are automatically learned from across the entire DOSIS fleet. Newly-released medications are taught remotely in minutes.

★ Easy to add or empty pills from the canisters.

★ Stay compliant - each time your staff refills a canister, lot number & expiration date are tracked.

★ Perpetual inventory is maintained for each canister

DOSIS Systems boasts the highest medication storage density of any automation on the market.

Label printing & formating

DOSIS Systems labels can be customized for many different uses both in full automation and manual filling with the ability to print to virtually any DOSIS printer with any label.

Label Features

1. Format based on any data fields

Custom print any information from PMS interface to make it easy for the facility to administer or make it easier for the pharmacy to process, sort or finish

Example Information

Design your label formats to meet your needs

FROM PMS

DOSIS Systems

PATIENT NAME
FACILITY
DATE ORDERED
DRUG ORDERED
QUANTITY
FILL TYPE
INSTRUCTIONS
DELIVERY ROUTE

YOUR RX 1234 Your Place City, ST 12345   1800-123-4567

RX 123456
RF: 4 of 8   **123456 (123)**
filled: 11/11/2030
order: 11/10/2030
PATIENT NAME
ASPIRIN 81 MG CHEW TAB
NDC - 12345-1234-12
(STF) ASPIRIN 81 MG CHEW TAB
TAKE ONE(1) TABLET BY MOUTH ONCE DAILY

MAJOR
*DOSIS*7 PH034
ORANGE ROUND

Qty 30
DS 30
Exp: 11/11/2030
Lot: p12345
1 of 1
2030-11-11 14:00   123

Dr. OTC SALES - REDI-RX   Tech JIM
SHEPHERD OF THE VAL-HOWLNI

RPH UNV
2-3A
CYCLE

Rx123456
ASPIRIT 81 MG CHEWY TAB
PATIENT NAME SFG (01D)
CAUTION: FEDERAL LAW PROIBTS A BUNCH OF THINGS THAT WILL BE PRINTED ON THIS PART OF THE LABEL. DON'T DO BAD THINGS.

2. Custom information on labels

Every pharmacy has customized needs, from the type of prescriptions being filled to the actual delivery routes. We've got you covered - any information that is necessary for workflow to move smoothly and clearly can be printed on our labels.

Examples of custom info

Cycles/Dailies   Delivery Times
Sorting Indicators   Delivery Stops
Delivery Routes   Facility Wings
New/Refill

3. Print to virtually any printer with any label

Label designs and layouts can be chosen for different facilities, package types or drugs. DOSIS Systems can print to practically any network printer and format for manual filling.

5"x3.75" label roll

2.5"x.75" ointments/unit of use

8.5"x11" narc admin record

PATIENT, GREAT   5126898
STRONGMED 300 MG   QTY: 90
TAKE ONE CAPSULE BY MOUTHTHREE TIMES DAILY
Dr. Phil Goode   01/01/2022
RPh:PH   SafeScripts Pharmacy, Mytown US 123.123.1234

PATIENT, GREAT   5126898
STRONGMED 300 MG   QTY: 90
TAKE ONE CAPSULE BY MOUTHTHREE TIMES DAILY
Dr. Phil Goode   01/01/2022
RPh:PH   SafeScripts Pharmacy, Mytown US 123.123.1234

PATIENT, GREAT   01/01/2022   Golden Meadow A-23
123 Easy Street, Anytown US 12345   Dr. Phil Goode   Wrt: 10/25/21   Rt: GRN-1
Substituted for: Brandmed 300MG   RPh:PH   Exp: 6/30/22
Mfr: Goodmeds Inc. Refills:4

STRONGMED 300 MG   Qty: 30 of 90   Rx 5126898
TAKE ONE CAPSULE BY MOUTHTHREE TIMES DAILY

SafeScripts Pharmacy
Mytown US 123.123.1234   CYC - Refill

TAKE WITH FOOD.   WARNING: DO NOT HANDLE IF PREGNANT.

OO NOT CRUSH.   Patient Note:

PATIENT, GREAT   5126898
STRONGMED 300 MG   QTY: 90
TAKE ONE CAPSULE BY MOUTHTHREE TIMES DAILY
Dr. Phil Goode   01/01/2022
RPh:PH   SafeScripts Pharmacy, Mytown US 123.123.1234

INDIVIDUAL RESIDENT'S CONTROLLED SUBSTANCE RECORD

PATIENT, GREAT   01/01/2022   Golden Meadow A-23
123 Easy Street, Anytown US 12345   Dr. Phil Goode   Wrt: 10/25/21   Rt: GRN-1
Substituted for: Brandmed 300MG   RPh:PH   Exp: 6/30/22
Mfr: Goodmeds Inc. Refills:4

STRONGMED 300 MG   Qty: 30 of 90   Rx 5126898
TAKE ONE CAPSULE BY MOUTHTHREE TIMES DAILY

SafeScripts Pharmacy
Mytown US 123.123.1234   CYC - Refill

NAME OF PERSON GIVING	DATE	TIME	AMT ON HAND	AMT RECEIVED	AMT GIVEN

4. Label options

We offer a variety of label options that will match your customer's needs. Labels printed within the tower will be 4"x2" with or without reorder tab. Externally printed labels can be custom sized.

Blank Label

PATIENT NAME

MM/RM
RX# 123456

TAKE 2 TABLETS (650MG) BY MOUTH EVERY 4 HOURS AS NEEDED FOR MILD PAIN * **NOT TO EXCEED**3GM ACET/24HOURS*;TAKE 2 TABLETS (650MG) BY MOUTH EVERY 4 HOURS AS NEEDED FOR FEVER OVER 101*

REFILLS LEFT: 0
FILL DATE: 01/01/40
NDC: 0005-0004-03
EXP: 12/12/40
LOT: ABC1234

Morning
DR. JON DOE
30   FUROSEMIDE 20 MG TABLET
REPLACES: LASIX 20 MG TABLET

CAUTION: FEDERAL LA W PROBITS A BUNCH OF THINGS THAT WILL BE PRINTED ON THIS PART OF THE LABEL. DON'T DO BAD THINGS.

PHARMACY RX 1234-A WIMBLEDON DR., CITY, ST PH: 800-123-4567

Reorder Tab

THIS IS A TAG LINE
Exp 01/01/2040

PATIENT NAME
RX# 123456   DR. JON DOE
FUROSEMIDE 20 MG TABLET
SUB FOR: LASIX 20 MG TABLET
FILLED, SEALED AND PATIENT LABELED BY DOSIS SYSTEMS
sales@manchac.com
www.dosis.com

0005-00004-0002   **TEVA**
FRONT   BACK
WHITE   ROUND
            MM

01/01/2040
RX# 123456
FUROSEMIDE 20 MG TABLET
PATIENT NAME

PHARMACY RX
1234-A WIMBLEDON DR., CITY, ST
PH: 800-123-4567

RANDALL MURPHY RPH RF00 09/09/40

Custom Logo Label

Nurvene 12345 POINT WEST BLVD, CITY, ST 12345 **1-800-123-4557**

Add logo, highlights or color block sections to create time pass labels

Nurvene 12345 POINT WEST BLVD, CITY, ST 12345 **1-800-123-4557**

8675309 PATIENT NAME
AL KASELTZER   06/15/30   MM
TAKE 2 TABLETS (650MG) BY MOUTH EVERY 4 HOURS AS NEEDED FOR MILD PAIN * **NOT TO EXCEED**3GM ACET/24HOURS*;TAKE 2 TABLETS (650MG) BY MOUTH EVERY 4 HOURS AS NEEDED FOR FEVER OVER 101*

0005-0004-03
Lot: AMC1234
Exp.Date:08/08/40

30 FUROSEMIDE 20 MG TABLET
Mfg: TEVA   Use By 08/08/40
Generic For: Lasix 20 MG Tablet
THE BEST REST HOME

12345678
08/08/40
PATIENT NAME
FUROSEMIDE 20 MG TABLET
30

5. Time pass/Med pass

Visual aide that makes it easy for nursing staff to administer based on time of date. No more colored stickers, have the automation print blocks to indicate time of day.

Time pass Label

NOON

PATIENT NAME
NS: TNS HARRIS
08/05/40
0005000403
FUROSEMIDE TABLET 20 TAB
FOR: LASIX 20 MG TABLET
TAKE 2 TABLETS (650MG) BY MOUTH EVERY 4 HOURS AS NEEDED FOR MILD PAIN * **NOT TO EXCEED**3GM ACET/24HOURS*;TAKE 2 TABLETS (650MG) BY MOUTH EVERY 4 HOURS AS NEEDED FOR FEVER OVER 101*

RX# 123456 PATIENT NAME
FUROSEMIDE TABLET 20 TAB

CAUTION: FEDERAL LAW PROBITS A BUNCH OF THINGS THAT WILL BE PRINTED ON THIS PART OF THE LABEL. DON'T DO BAD THINGS.

DR. JON DOET   ROUND   Qty: 30 of 30
RX# 123456   WHITE FRONT   Refills: 0
PHARMACY RX   (bn94738)
1234-A WIMBLEDON DR CITY, ST12345   800-123-4567

Exp: 08/08/40

Pre-Pack Manager™

Pre-Pack Manager (PPM) automates the use, tracking, and refilling of your pre-pack cards.

Pre-pack Filling process

1. Process Prescription
2. Card is on pre-pack wall
3. Print patient label
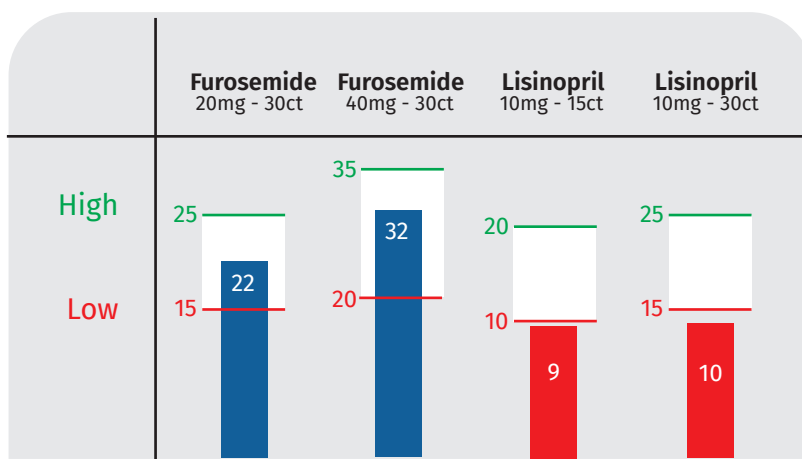4. Pull card & place label
5. Deliver to patient

Pre-pack manager process

6. Adds pre-pack cards to filling queue
7. Pre-pack cards are filled and labeled once patient-specific cards are completed
8. Restock pre-pack storage

Without PPM, you must manually track your on hand inventories and manually fill pre-packs. With PPM, any pre-packed drug on the list will be managed by our software.

If a script comes to DOSIS for a matching pre-pack card, DOSIS systems will produce a label instead of a card.

The pre-pack card is pulled from the wall, the patient-specific label is affixed, and the pre-pack wall's inventory is adjusted in DOSIS. Once a card's inventory drops below the customer set "Low" level, the DOSIS will produce pre-pack cards until the inventory is replenished back to the "Par" level. This pre-pack card filling to restock is completed by the DOSIS after all higher priority scripts have been produced.

	Furosemide 20mg - 30ct	Furosemide 40mg - 30ct	Lisinopril 10mg - 15ct	Lisinopril 10mg - 30ct
High	25	35	20	25
	22	32		
Low	15	20	10	15
			9	10

Set custom inventory levels for each medication and quantity combination.

DOSIS Systems is able to reduce pre-packs to 3-day inventory levels.

Directional printing

Directional Printing (aka workzone printing) automatically routes labels to their proper workzone based on highly-configurable rules, including unit-of-use and specialty label formats.

Once the patient order has been reviewed by a pharmacist, directional printing sends the label to the appropriate workzone.

Workzones

NARC

PRE-PACK

DRUGS A-H

DRUGS I-L

DRUGS M-T

DRUGS U-Z

Pharmacist Review

Patient Order
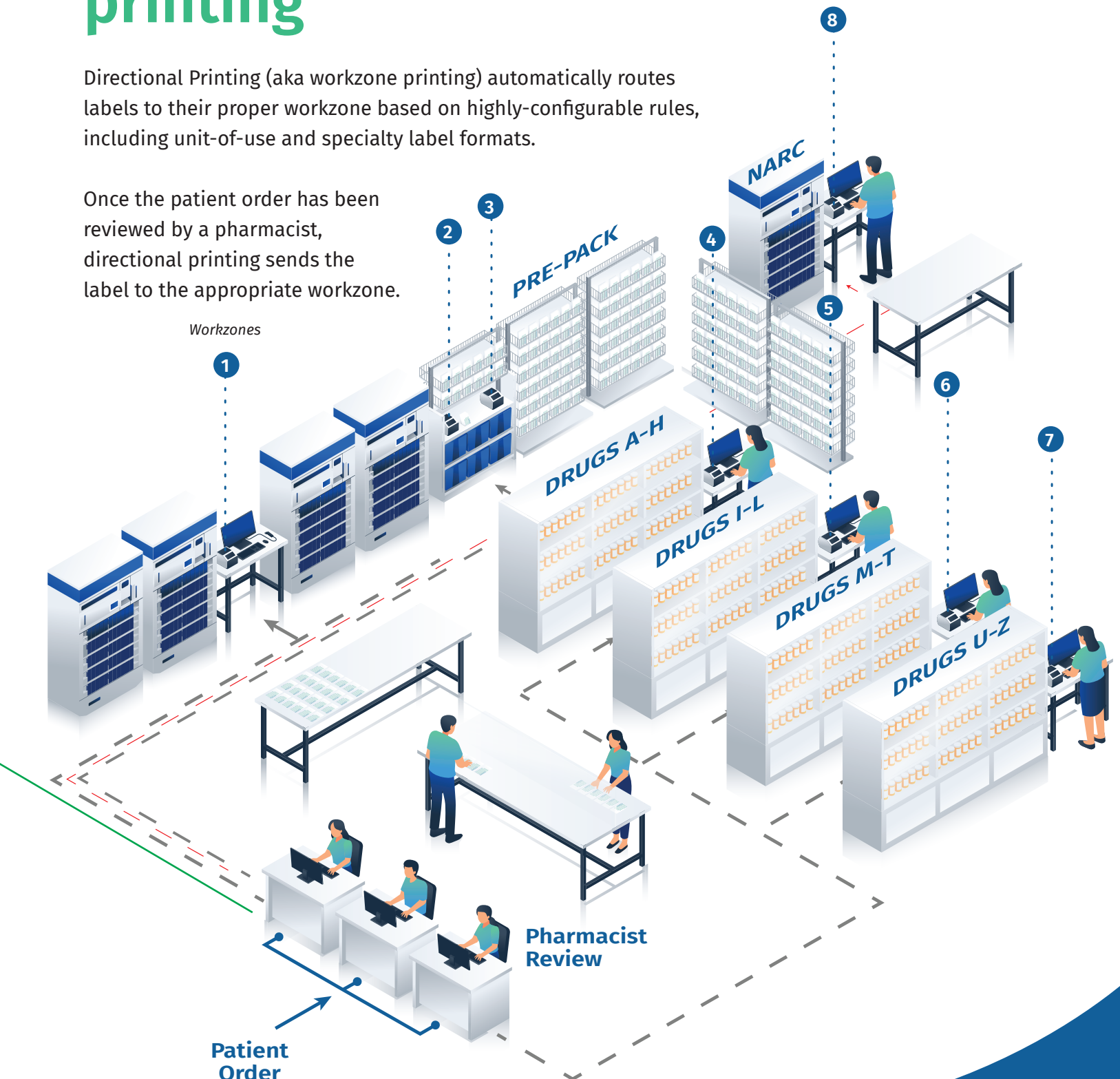
*Directional Printing may require additional printers.

Service & Support

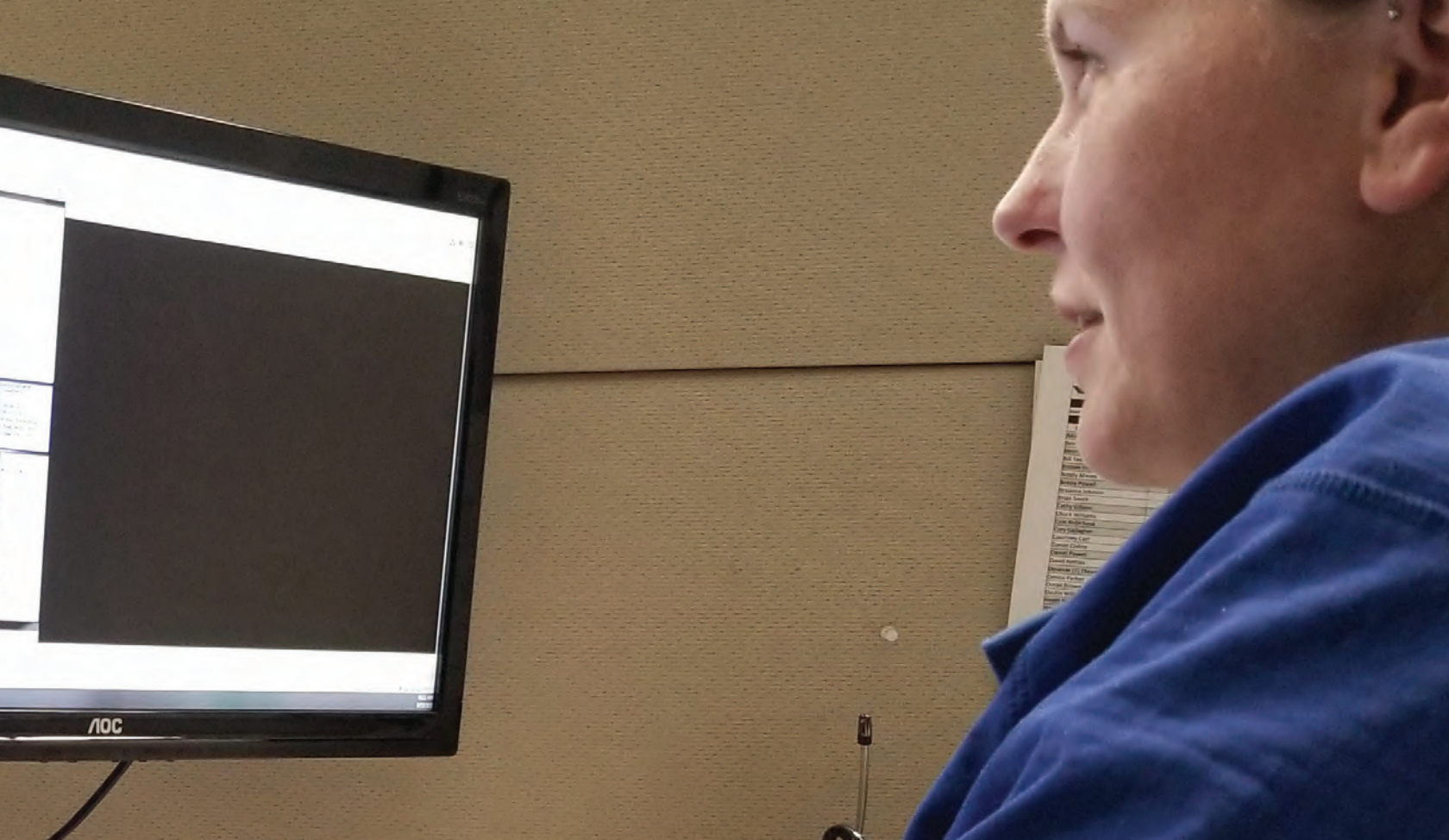DOSIS Systems is designed to maximize productivity and minimize downtime. Our infrastructure is built around this same maxim.

Connectivity
Each deployed DOSIS tower continuously reports status, productivity, and alerts to internal support servers. Our internal and remote teams use support dashboards and proprietary tools to make adjustments, run diagnostics, and load software updates.

All-in Service
The service agreement provides support services, including telephone, email, and online support; technical analysis and consultation related to operation and optimization of DOSIS System; adjustments to custom software configuration of DOSIS System including label templates, work flow rules, and existing interfaces; updates to hardware and software; and repair work and replacement components as determined necessary for proper performance of DOSIS System. Upgrades to the system that allow additional functionality may be included or may be available for additional cost.

Dedicated Teams

Our customer care department is organized such that technical and account management team members are completely responsible for the success of their assigned group of customers. You always receive priority care from someone familiar with your specific needs.

Around the Clock Access

While our normal office hours are 7am to 7pm central Monday through Friday and 8am to 5pm on Saturday, we have technicians on call all day every day for immediate response to critical issues. All issues are scored for urgency such that priority is always given to more critical issues and escalates accordingly.

Nationwide Coverage

We have DOSIS product specialists located throughout the continental US for service, installation, and training. Our footprint of operations covers 42 states.

Our assembly, support, and development are based in our Alexandria, Louisiana headquarters.

Partnering With DOSIS

At DOSIS Systems, we're dedicated to transforming pharmacy operations through cutting-edge automation solutions. Our comprehensive partnership program is designed to guide you through every stage of the process, ensuring seamless integration and long-term success.

Phase 1: Discover the Impact

In this initial phase, we work closely with your team to understand the unique needs and challenges of your pharmacy. Through thorough analysis, we quantify the potential impact that DOSIS Systems can have on your workflow, from improving efficiency to enhancing patient care. Our expert consultants customize a solution tailored to your specific requirements, ensuring a perfect fit for your operations.

Phase 2: Decide and Launch

Once you've decided to partner with DOSIS, we embark on a collaborative journey to bring your automated pharmacy vision to life. Our team coordinates project milestones, streamlining the onboarding process for a smooth transition. From installing and verifying the system to providing hands-on training for your staff, we ensure that your pharmacy is fully prepared to launch into a new era of efficiency and productivity.

Phase 3: Ongoing Partnership

Our commitment to your success doesn't end at launch. Through our ongoing partnership, we continue to track the overall impact of the automation solution, providing regular optimization reviews to fine-tune performance and maximize results. As your goals evolve, we're here to make necessary adjustments and offer advanced training sessions to keep your team at the forefront of pharmacy innovation.
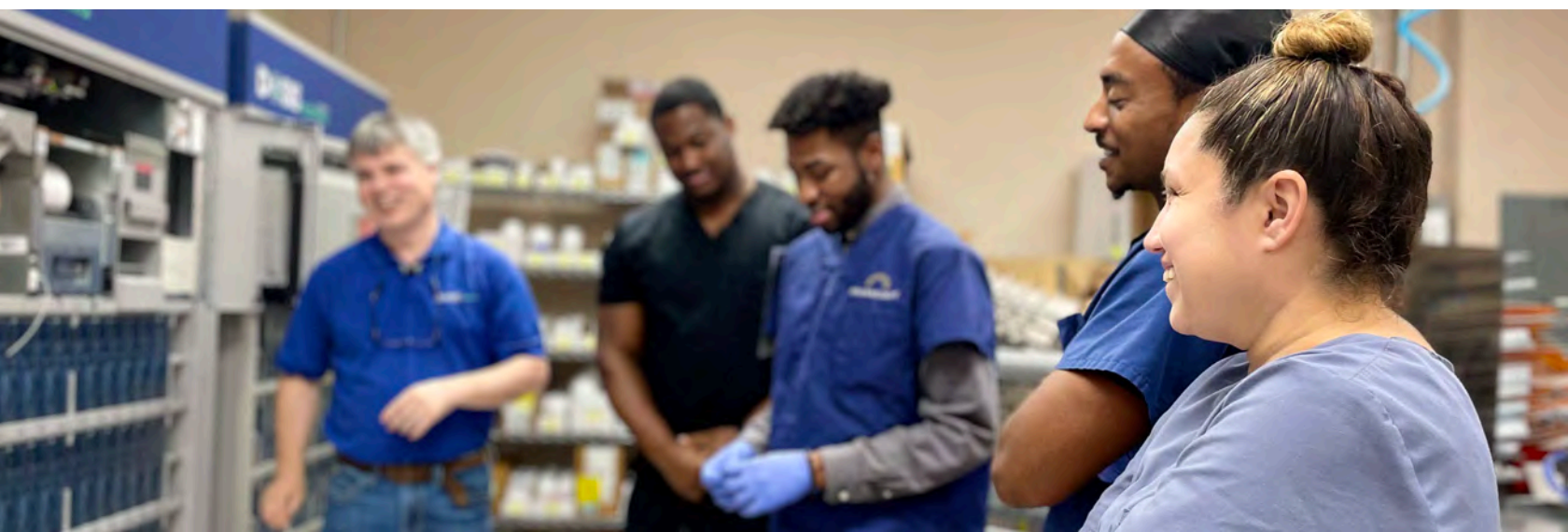
FAQ's

How long does it take to integrate?
DOSIS integration totals approximately 24 hours of your time. We have narrowed the installation process into 4 steps. 1. Overview Discussions, 2. Site Server Delivered, 3. Analyze workflow & test interface and 4. Installation and Training. We then check in every week for 6 weeks to make sure everything is functioning as it should.

What types of prescriptions does DOSIS automate?
DOSIS Systems fully automates the filling of single medication blister cards (bingo cards) with the option of printing unit-dose information on each blister. DOSIS Systems can also be configured to process as much or as little of the label printing throughout the pharmacy to expedite the manual filling of non-automated cards and the labeling of bulk items, pre-pack, and other prescriptions.

Does DOSIS use NDC-11?
Yes. DOSIS Systems can be configured to operate on NDC-9 or -11 for the entire site or for individual medications.

Does DOSIS Systems process pre-packs?
Yes. DOSIS Systems is typically configured to fill on-demand scripts first (prioritized by delivery times), then cycle fills, and then pre-packs when the system would otherwise be idle.

What consumables are compatible?
Our team certifies specific part numbers for blister cards, lidding, and labels for use within DOSIS towers from DOSIS Systems, RxSystems and Omnicell. Pricing for consumables is negotiated directly between the pharmacy group and the consumables vendor. Compatible consumables include 31-, 30-, and 28-day cards; 1/2" deep and 5/8" deep blisters; count-up and count-down numbering; and clear and amber blisters.
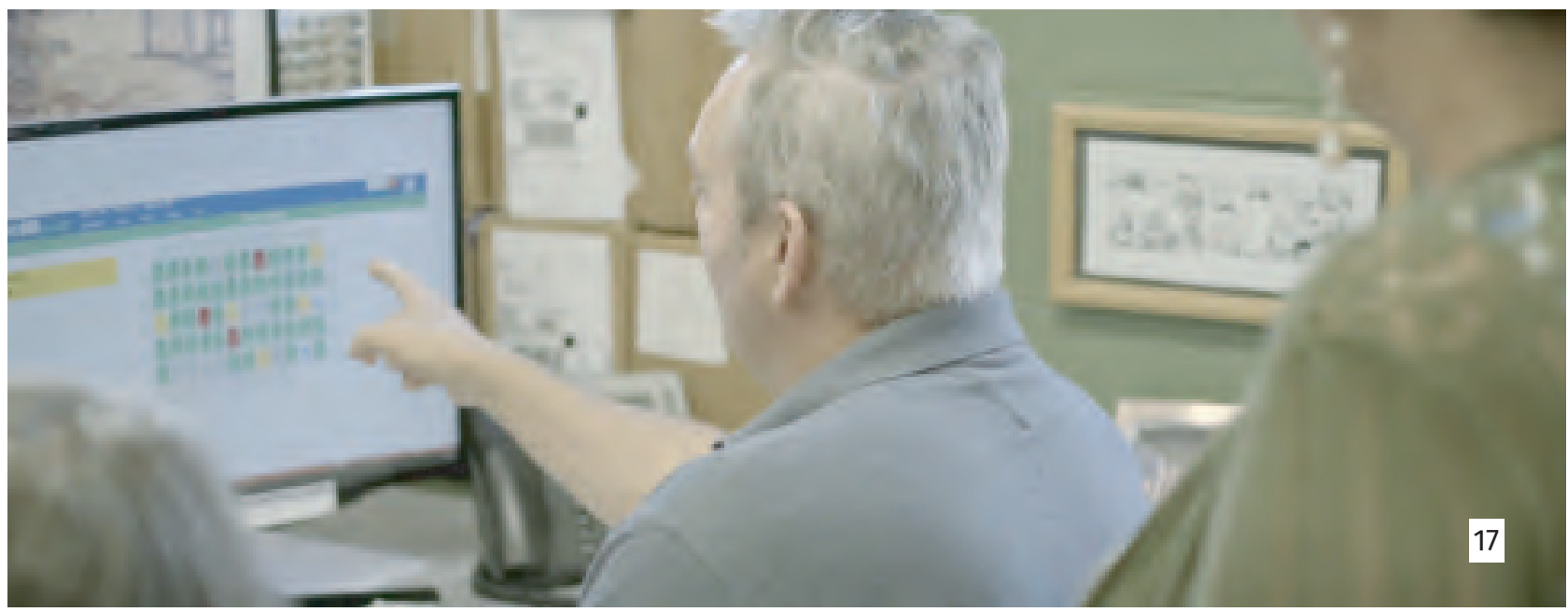
Discover DOSIS!

Our goal is to ensure you understand the impact that DOSIS Systems can have on your pharmacy. We look to understand your unique challenges and quantify the potential efficiencies that DOSIS Systems can bring.

www.manchac.com/demo

Schedule a Demo

Schedule a Demo

In this quick demonstration of DOSIS Systems, you'll get…

★ **An introduction to the DOSIS Systems team**
★ **A first look at the DOSIS Systems platform**
★ **A clear picture of how DOSIS Systems can help optimize your workflow.**

DOSIS systems *by MANCHAC*

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