

Top Tech Trends in Materials Handling

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Top Tech Trends in Materials Handling

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Does your heart sink every time you walk into the back room and see rows of full book carts waiting to get checked in or shelved?

Photo: University of Colorado Boulder
<http://ucblibraries.colorado.edu/circulation/return.htm>

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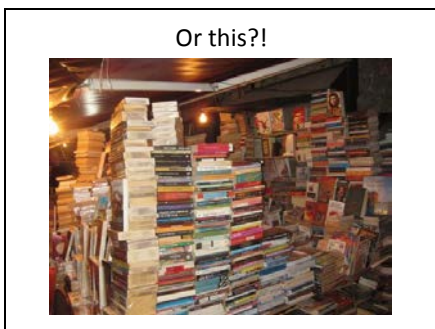
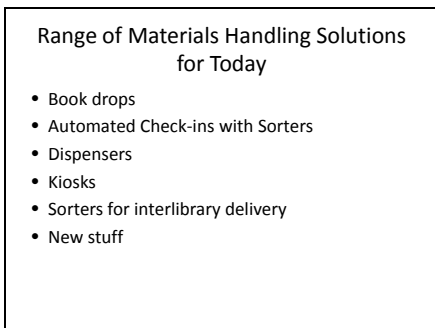


Photo:
<http://www.newyorker.com/online/blogs/books/tny14>

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Range of products we'll discuss today

- Book drops
- Automated Check-ins with Sorters
- Dispensers
- Kiosks
- Sorters for interlibrary delivery
- New stuff

Focus is on smaller library needs

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Trends

- Prices for all AMH products going down.
- Quality of AMH products going up.
- Vendor marketplace is settling.
- Kiosks filling a niche (but still evolving).
- Automated check-ins with at least 3-bin sorters becoming standard.

Trends

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The Basics
BOOKDROPS

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Need More Book Drops?



Book drops inside the library are limited – max capacity is 500 or so items, then what?

Adding book drops around town or in parking lot can be a good low-cost solution for


- Handling high accumulation periods (holidays, long weekends)
- Libraries that get all the returns)

Place them around town and have delivery service include in pick-ups)

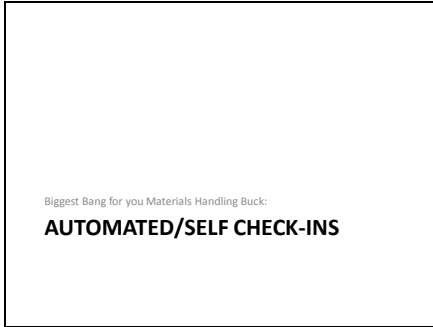
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Let people know

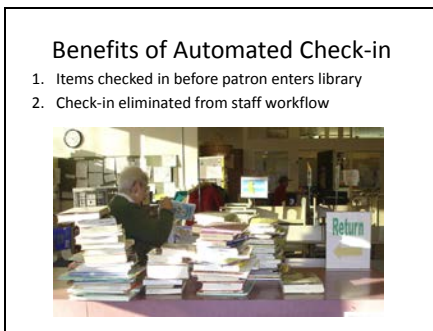
- where your book drops are located
- when items are picked up
- when they are open



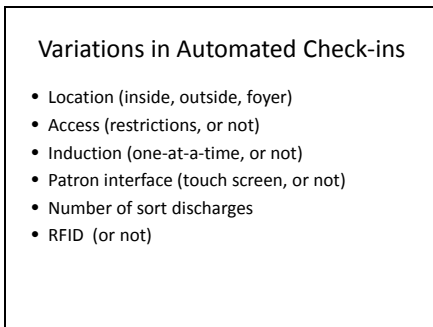
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Location

- outside wall (in place of or supplementing book drops)
- entry way for 24/7 access
- inside near service desks

Access

- no access door (dump)
- button to start process
- require library card to open door or scan library item

Feeding

- one-at-a-time (read each bar code or RFID tag) and decide to accept or reject, verify check-in
- dump 'em in (RFID only), may end up getting more than you bargained for, faster

Interface

- touch screen with instructions, verify success along the way
- lights (dump now, wait)

RFID or bar code or both

- can have bar code reader on top and bottom

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How its done in Europe... and starting to happen here

- Check-in and sorters become a feature
- Patrons watch the material get inducted and sorted



TREND! USA is just catching up with Europe....

- SFPL set up much like what is picture here.
- See my YouTube link at the end of the slides

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Other internal options

- Red light, green light or screen?
- RFID required or not?
- Ease of use



LibraryMate® 500 (LM500)

- entry-level
- wall-mounted
- internal
- 1,000 library items per hour
- does not reject items
- no receipt functionality
- multiple languages
- barcode and RFID

Check-In station, LibraryMate® 1100

- wall mounted
- internal
- graphic interface
- rejects non-library material
- issues receipts
- multiple languages

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External Check-ins

What to look for:

- Can you see the screen?
- Access door (UL listed?)
- Ease of use
- Touch screen
- Clear instructions



Library Mate 2000

- exterior use
- lighted!
- touch screen
- rejects items
- access door

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Don't forget the shelf!



Automated Check-in vendors:

- Lyngsoe
- 3M
- Envisionware
- Bibliotheca
- Tech-Logic

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SMALL SELF-CHECK-IN & SORTERS

- Automated check-in or self-check-in isn't enough on its own.
- You need a sorter on the back side.
- Ideally sorter is in work room
- But they can live in closets / small rooms

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Pricing for Self-Check-in with 3-bin Sorter

- \$30,000 to over \$100,000
- What affects pricing...
 - touch screen
 - access
 - induction method
 - indoor/outdoor
 - expandability
- RFID not a significant cost factor

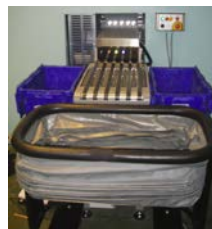
Pricing

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3-bin Sorters

- Under \$100,000
- Equivalent to 1.5 FTE in work performed



Lyngsoe 3-bin

- Space required: 8x10
- Lots of discharge options: trolleys, totes (bins), book carts, your own book bins
- One pictured here (Lyngsoe) is "convertible."
- The totes are on a shelf which can be dropped to make space for more trolleys (for high-volume return days)

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Benefits of Self-Check-in with 3-bin Sort

1. Items checked in before patron enters library
2. Check-in eliminated from staff workflow
3. Separate ready-to-shelve returns
4. Separate media (protect them from damage)
5. Separate items needing staff (e.g. holds, exceptions)

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Choosing Your 3-bin Sorter

- Does it fit into the space?
- Does it make paper receipts optional (library setting) and/or offer email receipts?
- Is it quiet enough?
- Is it UL-rated?
- Does it require all material to be RFID-tagged?
- Does it handle EM security?
- Is it expandable? Versatile?
- What are the maintenance requirements?
- Purchase and annual cost?


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3M Intelligent Return Plus

- Barcode or RFID
- No touch screen



UL Certified
2000V class equipment
No. 33104000000000000000


Entry Level 3-bin sorters:

- 3M Intelligent Return (not expandable)**
- Cost: \$40,000 including installation and one year warranty, indoor, push button activation (no touch screen)
 - EM Re-sensitizing +\$6K
 - Outdoor + \$3K
 - Touch screen \$14-\$18K (indoor-outdoor)

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Bibliotheca SmartSort 200

- No touch screen
- No receipt
- No reject option
- Inside and outside models
- Pricing: \$30K range with 3-bin sorter



Entry level 3-bin from Bibliotheca SmartSort 200

- No touch screen
- No receipt
- No reject option
- Inside and outside models
- Pricing: \$30K range with 3-bin sorter

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2-Bins...I wouldn't bother



Libramation 2-Way



Bibliotheca SmartSort 100



mk Sorting bookdrop & Mini Sorter

Not Worthwhile 2bin

Pictured: BibliothecaITG, Libramation, and mk Sorting products

- \$25,000 - \$30,000

Mk Sorting unit

- San Mateo County, CA
- Palm Springs getting a 7-9 bin from mk Sorting

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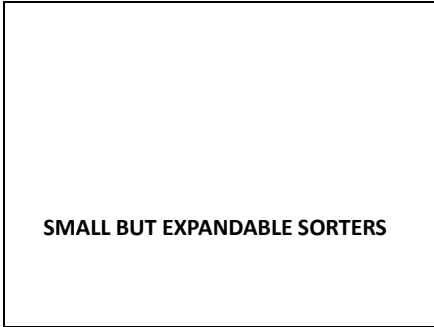
mk Bookdrop & Mini Sorter

- Requires RFID
- Not expandable
- Quiet



skip

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Envisionware WhisperSort

- Quiet (< 55 db)
- Barcode or RFID
- Minimum workroom space required: 7'x7'
- Expandable up to 250 bins!



\$50,000 with holds handling included (and printer)

Ideally 10x10 available in backroom

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Bibliotheca (old and new)



Dropping the “blue” line and moving toward a product line resulting from their Trion acquisition.

This is good news.

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3M Intelligent Sorter System FX



3M FX Model - Expandable

- 3M FX 5 Bin Base Model is \$77k
- 3M FX 7 Bin Base Model is \$100k
- staff induction - add \$31k
- Includes installation and a one year warranty.

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Lyngsoe

- Versatile
- Custom solutions
- High quality engineering




Used to be you had to pay more to get the quality of Lyngsoe (formerly FKI Logistex).

But now competitive price-wise. Great products.

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AMH Doesn't Require RFID



NOTE! AMH is affordable because it doesn't require RFID...

- 150 sort destinations with room for 50 more
- Sort 54,000 items a day

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Biggest library sorter in USA is in King County – bar code based

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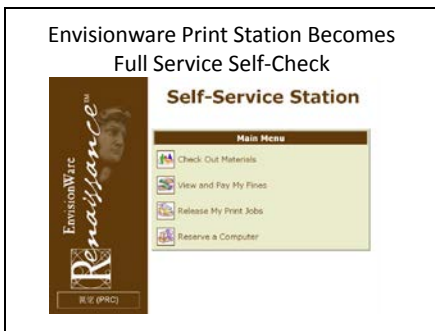
SELF CHECK-OUT

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R-Series is for RFID, no V.
Now can convert V-series to RFID

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OneStop. Screen shot is from the first showing of the OneStop at Midwinter ALA 2006.

Envisionware print/reservation station can be upgraded to OneStop at a very modest cost.

- print and reservation
- check out
- check-in
- integrate with payment systems

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CircIT Combo Station® Self Check-Out System

- Two screen self check out stations
- patrons help themselves
- staff can easily resolve blocks without leaving the circulation desk
- touch screen monitor
- fully customizable screens

<http://www.tech-logic.com/solutions/self-service.asp>

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New line from new Bibliotheca RFID or Barcode

SmartServe 400

With RFID, put it in the box and it will read it.

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Bibliotheca SmartServe 400 Payment

- Attached to their new self check-out machine
- Accepts credit cards, debit cards, and cash



Add-on for the SmartServe 400

- Attaches seamlessly
- offers convenient and secure way to accept multiple payment types
- Payment options include, chip & pin, debit and credit cards, coin and bills
- also offers coin return

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Tech Logic MyMobileLibrary



- Mobile self-check-out application
- Uses Boopsie
- Check-out with smartphone
- Requires security kiosk to turn off security

Tech Logic MyMobileLibrary: App, Powered by Boopsie (Debuted in New Orleans)

- mobile self check-out application
- scan an item's barcode using their smartphone's camera to check out an item from anywhere within a library
- manage their library account
- powered by Boopsie
- patrons privately and securely check out items from anywhere within a library using a smartphone.
- MyMobileLibrary: Security Kiosk - Patrons place on kiosk shelf and the items' RFID theft bits are automatically deactivated if the items have been properly checked out
- Compatible with Android, BlackBerry, iPhone, and Windows Mobile.

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\$5000 and up
MEDIA DISPENSERS

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Bibliotheca SmartDispenser 200

- Formerly ITG DiscXpress
- 500 discs per tower



Formerly ITG DiscXpress

- 500 discs per tower
- inside are five carousels containing 125 items each
- Handles multipart sets nicely (up to 5 discs at a time)

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Expandable!



Kiosk + one tower \$13,500
 Each tower another \$5,000

\$13,500 500 discs \$27/disc
 \$18,500 1000 discs \$18/disc
 \$23,500 1500 discs \$16/disc
 \$28,500 2000 discs \$14/disc
 San Bernardino has one.

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Bibliotheca SmartDispenser 100

- For staff use
- Stack of four dispensers holds 600 discs

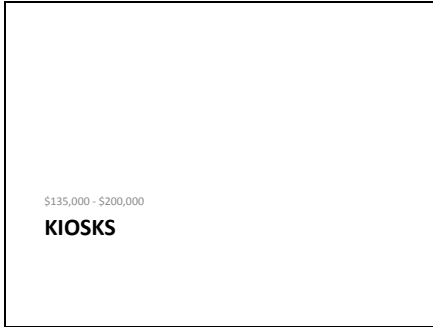


aka LAT-Stena for Staff Use

- Dispensers contain 150 disks
- Stack 4 dispensers for total of 600
- Daisy chain three stacks (1800 discs max)

\$5000 Base unit (600 discs)
 plus \$1300 per “dispenser” (150 discs) -
 \$8/disc?

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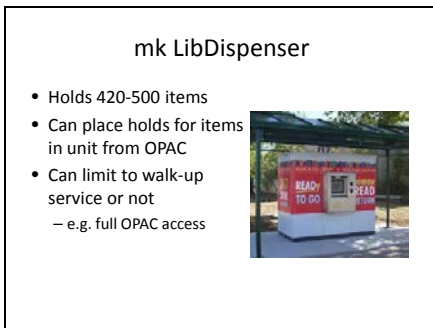
Mk LibDispenser (Milbrae) \$160,000 plus install which can be significant

Capacity: 500 books

Two models: one or two screens

- Two screens allow a person to browse while another person returns or picks-up items
- Can be more confusing...
- OPAC access (optional)

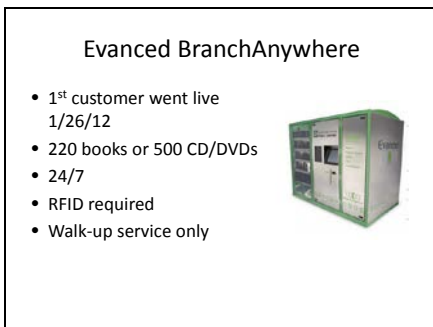
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Alameda Free Library (Red Box style)

- Configured for “walk up” use only
- No browsing the catalog, just items inside

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\$140,000

- 1st customer went live 1/26/12 (and they're happy!)
- 220 books or 500 CD/DVDs
- 24/7
- RFID required
- Walk-up service only

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Bokomaten

- Holds 400 items
- Contra Costa's Library-a-Go-Go



\$140,000

1st install: Pittsburg Point BART

Library-A-Go-Go

- Targeting > 20 miles from a library outlet and commuters
- Very popular
- Hasn't been easy going: lots of fiddling required (thanks Contra Costa!)
- Signing up lots of new patrons

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Brodart Lending Library

- Doesn't accept returns
- Staff must handle check-in and restocking



\$20,000

Connect to ILS (or not)

- If not, batch updates to ILS required

Don't accept returns so labor intensive But they're a hit!

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NEW STUFF

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Bibliotheca SmartStock 500

- Read up to 50 tags at once
- Bulk receive items
- "RFID Tunnel"
- Ballpark pricing: \$11K



If you took the RFID survey, you heard about an "RFID Tunnel"

- Used in UK, but not here (yet).
- Put your box of stuff from B&T in the tunnel and everything inside gets checked in. (up to 50 items)
- \$11K

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Bibliotheca SmartStock 600

- Detects items on the shelf in real-time
- Can search for items and find out where they actually are
- Utilizes cover-flow display to assist in searching



Another new thing from Bibliotheca – SmartStock 600

- Fits onto existing library shelves
- Includes antenna every foot plus reader at the end of the section
- Connected to ILS via LAN
- Powered by Ethernet
- Pricing may change but now approximately \$250 per 3' section

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RFID Standards

- What's New
 - ISO 28560 established
 - US likely to go with ISO 28560-2
- Why it matters
 - Do more with RFID tags
 - RFID Interoperability!
- More info in Open Source and RFID Update
 - Available from <http://bit.ly/wh7193>



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<http://galecia.com/presentations/>

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Tech Logic Media Surfer



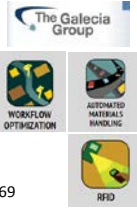
- For lending iPads pre-configured with content
- System resets each iPad to library settings upon return so customers can use them as they wish

Brand new product from Tech Logic: MediaSurfer

- released at Midwinter ALA
- libraries manage content and configuration
- patrons can also download whatever they wish during their use of the device
- Upon return, system wipes all activity and downloads and restores the device to the default (library) configuration
- Credit card swipe is optional

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QUESTIONS?



Feel free to contact me:

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Check out some related videos at

<http://www.youtube.com/user/loriayre/featured>