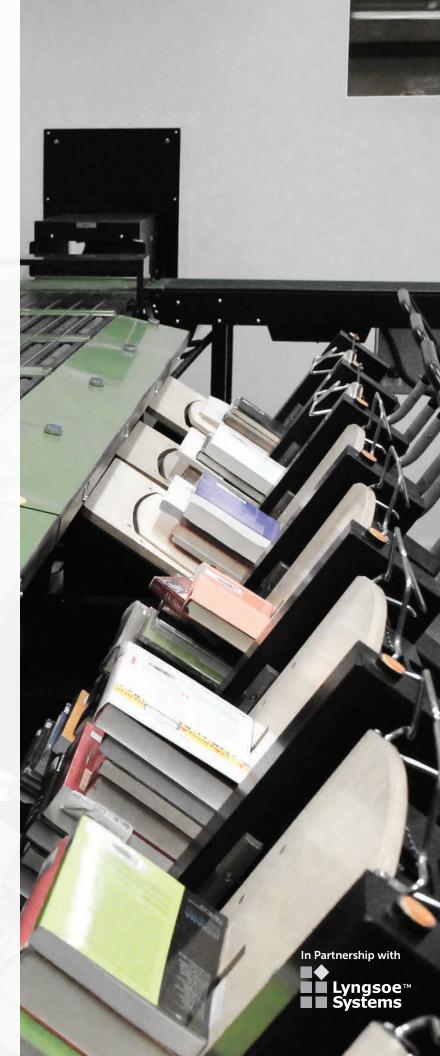
Automated Material Handling (AMH)

The Lyngsoe Sort Mate[™] 2000 AMH system is a complete line of Automated Material Handling products designed specifically for the requirements of today's libraries.



Enriching Public Library Service Inside and Out

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Automated Material Handling

Offered through EnvisionWare in partnership with Lyngsoe Systems.

LYNGSOE SORT MATE™ 2000 AMH SYSTEM

The Lyngsoe Sort Mate™ system comprises a range of products that can be built in a number of different combinations:

- Sorting modules and conveyors
- Different types of bins for individual needs
- Indoor and outdoor check-in stations
- Check-in stations dedicated for staff

The design of the Sort Mate 2000 focuses on ergonomics, usability and performance highlighting a key focus on material handling efficiency, improving work environment and the patron experience.



Modularity for Individual Usage

The complete modular design of the Sort Mate 2000 makes it possible to build automated material handling systems to meet any requirement in regards to capacity and available space.

No Library Too Large or Too Small

The Sort Mate 2000 is designed to fit into any library environment as the sorting system's small footprint makes it possible to locate a system in very compact spaces. It can be configured in a wide variety of layouts – allowing for sorting systems as small as 3-bins, to systems as large as needed. Horizontal and vertical conveyance systems, specially designed for library materials, can also be incorporated into the system to offer distribution across multiple floors and to fit virtually all building requirements.

Flexible and Expandable

The modularity makes it easy to extend or move a system at a later date while different types of chutes and bins enhance the flexibility of the Sort Mate 2000. This means that different types of bins can be assigned, for example, during opening hours or when closed.

DESIGNED FOR THE MODERN LIBRARY

Modern Design

As well as offering exceptional functionality, the modular AMH systems can be tailored to fit seamlessly into virtually any interior space. Delivering to high quality Danish design principles, the Sort Mate 2000 has an open design with clean lines making it ideal for the architectural library environment where glass walls between the public area and the sorter room are often a feature.

The architectural design integrity of the library vision for new builds and refurbishments is further assured with customizable units. Shelves and tabletops are available as custom designed options in a variety of materials, colors and sizes. This means that complete AMH systems can be delivered to match the library and its ambience, whether it is a completely new building with unique design concepts or the refurbishment of an old shipyard into a modern library.

Work Environment

The Sort Mate 2000 products and functionalities are focused on overcoming multiple handling and repetitive, heavy lifting of library materials. Eliminating time consuming manual processes enables library staff to be available for more knowledge-based patron services.

Ther focus on delivering unique and ergonomic AMH solutions provides support for staff welfare, and guards against the onset and recurrence of physical injuries from excessive bending and lifting. For example, as well as optimizing process flow, the Lyngsoe Ergo Cart™ offers multiple benefits directly related to its ergonomic design. With a Lyngsoe Turn Mate™ module, the full Ergo Cart - with materials already stacked spine out - is taken directly from the sorter to the library shelves for re-shelving. Here, the push of a button raises the materials to waist height, meaning no bending or awkward lifting is required during the single manual handling process.



Lyngsoe Library Mate[™] 1200 Self-return Interior Kiosk



Lyngsoe Library Mate[™] 2100 Self-return Exterior Kiosk



Lyngsoe Ergo Cart™

LYNGSOE SORT MATE™ 2000 MODULE

Modular, Expandable Sorting Solution

Lyngsoe Sort Mate™ 2000 is the latest generation in the successful series of dedicated library sorters installed in hundreds of locations across the world.

High speed and precise sorting is enabled by robust and stable software and hardware. Accurate sorting minimizes the need for staff to handle items

Compact and modular modules allow for flexible adaption to any small or large footprint – even in challenging premises. The low noise operation ensures a comfortable working area around the sorter.

Low power consumption and minimal maintenance add further to the benefits from the Sort Mate 2000.

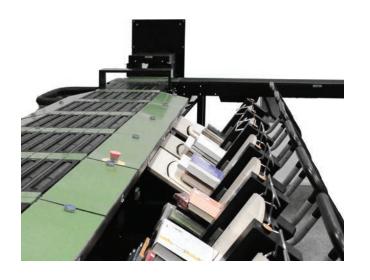
LYNGSOE ERGO BOX™

Ergonomic High-Volume Sorting Bin

The Lyngsoe Ergo Box™ has been designed and tested to prevent unnecessary bending when retrieving books from the high capacity sorting bin. The automated floor of the Ergo Box can be put into auto-emptying mode, which automatically rises it as you empty the Ergo Box for materials conveniently following your pace.

Perfectly integrated with the Sort Mate sorter, the Ergo Box ensures that materials are always gently delivered into the bin using the available capacity to the fullest. With the autofilling mode, the floor of the Ergo Box automatically lowers as materials fall into the container minimizing damages to materials.

Clear signals with lights provide fast user feedback on whether the Ergo Box is ready to receive more materials or if it is full.



FEATURES AND BENEFITS

- Flexible layouts to fit your library
- Compact fits any footprint
- Low noise operation
- High capacity
- Quick material return for circulation



- High capacity and protection combined
- The ergonomic design prevents awkward lifts and reaches
- Smart controls and feedback for easy use
- Works seamlessly with Sort Mate sorters

LYNGSOE ERGO CART™

Stacking Cart for Ergonomic Material Transport

In the Lyngsoe Ergo Chute^{\mathbb{T}} of the Lyngsoe Sort Mate sorters, materials are stacked in the Lyngsoe Ergo Cart^{\mathbb{T}} ready to be transported directly to the shelf.

By push of a button the Ergo Cart raises to horizontal making reshelving easy and ergonomic – no more awkward angles for your back.

Charging directly in the Ergo Chute and interchangeable with the Ergo Volume, makes it easy to return materials fast back to circulation.

LYNGSOE ERGO VOLUME™

Ergonomic Trolley for Bulk Collection and Transport of Materials

The compact, narrow design holds a large capacity ideal for use with the Sort Mate sorter system. The Lyngsoe Ergo Volume $^{\text{TM}}$ steers easily across library surfaces with the ergonomic handle bar and large wheels.

The floor of the Ergo Volume raises as items are restocked on the shelves, thereby ergonomically reducing the need for staff to bend to reach items. The same function also minimizes drop-distance from the sorter chute to protect the sorted items.

Interchangeable with the Ergo Cart in the smart Ergo Chute, makes it easy to return materials fast back to circulation, and provides flexibility to diverse capacity demands, for example outside manned hours.



FEATURES AND BENEFITS

- Ergonomically correct posture at reshelving
- From Ergo Cart to shelf
- Materials are only handled once



- Flexible interchange with Ergo Cart
- Indicator lights at Ergo Chute cues replacement
- Protects employees and books
- Suitable for all library materials

LYNGSOE LIBRARY MATE™ 1200 SELF-RETURN KIOSK

Compact and Cost Effective Indoor Self-return Kiosk

Integrating into the Sort Mate sorting system the Lyngoe Library Mate™ 1200 allows patrons to return materials quickly by themselves, relieving staff from repetitive work. The Library Mate software communicates with the ILS/LMS to change status of the materials immediately.

The touch screen opens up for choice of languages and leads the patron comfortably through the return process. Barrier free patron access is available in the newest Library Mate software offering specially designed easy-to-read fonts and voice guidance.

The front of the induction can be placed at different heights and multiple inductions can serve the same sorter.

LYNGSOE LIBRARY MATE™ 2100 EXTERIOR KIOSK

Robust and Stylish Exterior Self-return Kiosk

Designed with style and functionality, Lyngsoe Library Mate™ 2100 is built to endure outdoor weather conditions. Robustness is ensured by the steel and aluminum front and high quality touch screen.

The door hatch protects the induction interior and the library from the weather and unauthorized objects – both in manned and unmanned service hours. Library Mate 2100 checks materials with the LMS/ILS, provides immediate feedback to patrons and feeds materials into the Sort Mate sorter.

The touch screen offers multi language functionality, guiding the patrons confidently through the return process. Barrier free patron access is available in the newest Library Mate software offering specially designed easy-to-read fonts and voice guidance.



FEATURES AND BENEFITS

- Allows unattended and automatic return of library materials
- Reduces repetitive tasks for library staff
- Compact, can be customized to fit library design
- · Flexibility in height placement
- RFID/barcode options



- Allows for 24 hours of unattended and automatic return of library materials
- Robust design for all climates
- Eliminates repetitive staff tasks
- RFID/barcode options

LYNGSOE ERGO STAFF™ 1200

Ergonomic Staff Induction for Sort Mate 2000 Sorters

The Lyngsoe Ergo Staff™ 1200 is a material induction dedicated for staff use. It feeds materials directly into the Sort Mate sorter at a very high capacity.

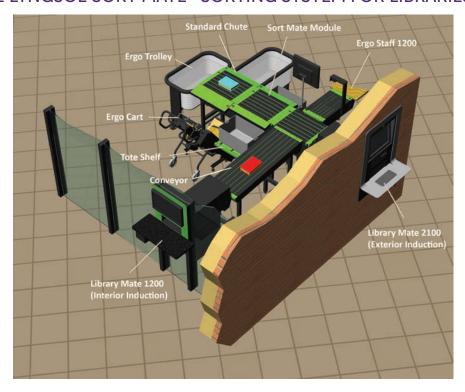
The ergonomics are in control, as the induction is easily height adjusted by push of a button, and the optional shelf offers further comfort.

A clear red/green light in the button guides through the fast and simple check-in process, and can be supported by a touch screen.



- Ergonomically height adjustable
- Easy and user-friendly operation
- RFID and/or barcode capability







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