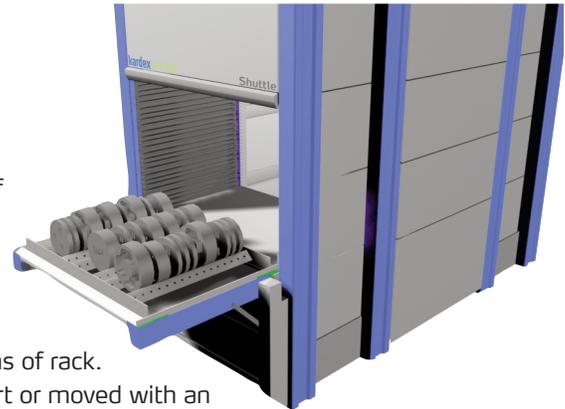


APPLICATION BRIEFINGS

Aluminum Extrusion Solids, Hollows & Backers Storage & Retrieval

Automating the storage and retrieval process of dies (solids, hollows and backers) for the aluminum extrusion market can provide tremendous benefits in productivity and floor space savings. The Return On Investment (ROI) for automating this process is dramatic. A facility can save on labor and reduce down time by managing the dies usage, maintenance and physical location. The increased ergonomics of Kardex Remstar's automated solution can often result in reducing workers injuries and potential litigation.



Manual Process:

Dies are stored in an upright position on cradles held on 7' high sections of rack. Most dies are manually pulled from these cradles, placed on a pushcart or moved with an overhead crane (depending upon weight) and then transported across the plant floor to the extrusion machine.

Automated Solution:

A Shuttle® Vertical Lift Module (VLM) automatically delivers a tray of dies to an ergonomically positioned pick window. A maximum of 30 dies can be stored in each tray.

An operator either scans a work order or enters a tray or die number into the Shuttle VLM's control system. The VLM delivers the tray to the automatic tray extractor which then positions the tray outside the pick window for easy ergonomic picking. When heavy lifting is required, the operator simply extracts the required die from the tray.

Each tray includes a storage cradle able to hold approximately 15 to 30 dies. Up to 31 trays will fit in a 16' high Shuttle VLM for a maximum capacity of 930 dies per unit.*

FastPic® software controls the VLM, providing maximum inventory efficiency. The software tracks each dies' location, the operator(s) who last used it, and the dies' usage history. For increased security, access to individual trays can be restricted to authorized operators.

Benefits:

Die Inventory Control:

- The automated system manages the dies' location eliminating operator walk and search time.
- Maintenance intervals are accurately tracked and scheduled for proactive servicing, reducing last minute schedule changes and down extruder time.
- Operator tracking promotes accountability for die damage and misplacement.

Space Utilization:

- Eliminates wasted floor space by maximizing space between shelves and above a standard 7' rack.

Productivity:

- Eliminates walking up and down aisles and searching shelves for dies.
- The right die is ready and available at the right time for production.

Ergonomics:

- Eliminates bending, reaching and stretching which can injure operators translating into lost man-hours, unseasoned temporary help, increased training costs and potential litigation.