Storage Solutions for Sustainable High Performance Facilities
Kardex Remstar Automated Storage & Retrieval Systems Help Comply With Executive Order 13423 To Become Sustainable!

Executive Order 13423

Executive Order 13423 - Strengthening Federal Environmental, Energy and Transportation Management calling on all Federal agencies to reduce energy and water consumption, utilize sustainable building design and construction and reduce fleet vehicle petroleum use.

www.KardexRemstar.com/ExecutiveOrder

As the leading consumer of energy, the executive order requires all agencies to reduce energy intensity (energy consumption per square foot of building space) by 3% annually through the year 2015. That's a total reduction of 30% in energy consumption by the year 2015. The Executive Order also calls for a 2% annual reduction in water intensity through 2015, an overall 16% reduction by the year 2015.

The Executive Order states that, all new construction and major renovations of agency buildings must utilize sustainable design as detailed in the Guiding Principles for High Performance and Sustainable Buildings. Furthermore, 15% of existing Federal buildings must incorporate sustainable practices by the year 2015.

Green Building Design

The Triple Bottom Line

How does the government continue to manage facilities while reducing their impact on the environment? By reducing the carbon footprint in any and every opportunity.

The business case for building green using sustainable design and construction is supported by the three cornerstones, known as the triple bottom line: environmental stewardship, social responsibility and economic prosperity.

Kardex Remstar can help in your mission to build sustainable green buildings or redesign existing buildings to meet green standards.

Defining the Triple Bottom Line

1. Performance
   Environmental Stewardship: protecting air, water, land and ecosystems, as well as conserving resources, including fossil fuels, thus preserving the earth's resources for future generations.

2. Ergonomics
   Social Responsibility: improving the quality of life and equity for individuals, communities and society as a whole.

3. Productivity
   Economic Prosperity: reducing costs, adding value and creating economic opportunity for individuals, organizations, communities and nations.

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High Performance Facilities Use Remstar Storage Solutions.

"An entire additional production line was added to the facility and by using the VLMs we required no additional floor space for spare parts."
— BMW, SC

"We used the 87% floor space savings in parts consolidation to avoid a building expansion while increasing worker productivity by 50%.
— MultiShifter Inc, NC

"We initially turned to Kardex Remstar to prevent a building expansion and we saved 68% of our floor space, but we were even more delighted with the 40% labor reduction."
— ATEL Bus & Truck, MD

"The plant is turning out more product, manufacturing costs have fallen and we have eliminated the need for a bricks-and-mortar expansion since implementing the Shuttle VLMs.
— Roga n Corp., IL

"By taking advantage of unused overhead space at point-of-use locations throughout the plant, we eliminated the need for a facilities expansion."
— Parker Hannifin, NC
Performance + Ergonomics + Productivity = SUSTAINABILITY

1. **Performance is Environmental Stewardship**
   - Environmental stewardship means protecting the air, water and land while conserving resources, including fossil fuels. High performance Kardex Remstar equipment helps reduce the amount of physical space required. Allowing buildings to be constructed smaller and far more efficient. These High Performance Buildings reduce energy and water consumption which reduce their carbon footprint.

   “Floor to truss” space maximization is how Kardex Remstar can reclaim up to 85% of the space used by file cabinets, tool, drawer systems, shelving and rack.

   Kardex Remstar customers can reduce their total building construction footprint by up to 15% by using Kardex Remstar equipment throughout their facility. These savings provide a lifetime of “Performance and Environmental Stewardship” while saving building maintenance and energy costs.

2. **Ergonomics Is Social Responsibility**
   - Improving the quality of life and equity for individuals, communities and society as a whole is just a part of what Kardex Remstar equipment provides to an organization. Does your current storage equipment offer full accessibility to their contents for all groups of workers? The use of Kardex Remstar equipment provides full ergonomic access for all of your employees. Every Kardex Remstar Lektriever Electric Lateral File complies fully with the “Barrier Removal Act” to accommodate your entire workforce. All Kardex Remstar systems eliminate fatigue by automatically bringing items to the operator allowing more productivity from all of your work force regardless of ability.

3. **Productivity is Economic Prosperity**
   - Reducing costs, adding value and creating economic opportunity is a tangible result of organizations using Kardex Remstar automated storage and retrieval systems. Kardex Remstar systems can increase operator productivity up to 66%. The increased productivity levels translate quickly into reduced labor requirements which help reduce the facility’s energy consumption and carbon footprint.

   Automated systems deliver items to the operator eliminating all wasted walk and search time. Easy controls and inventory management software allow organizations to use batch picking and integrated pick-to-light technologies to increased picking accuracy and speeds.

   Many Kardex Remstar customers find that their systems provide a ROI (Return On Investment) in less than 18 months. By combining the benefits of decreasing labor costs, floor space requirements, facility maintenance and energy costs; sustainability provides great economic benefits.

   **Kardex Remstar Is The Sustainability Solution**
   - Following Executive Order 13423 and using the Triple Bottom Line as the framework will lead to a more efficient, positive and effective facility, and may provide a more sustainable solution... Kardex Remstar helps you get there quickly and more cost effectively.

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**SOUTHWEST SOLUTIONS GROUP**

**www.southwestsolutions.com**

Kardex Remstar automated storage and retrieval systems can help create a fully accessible work environment with 100% access to stored items.

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**Performance Is Environmental Stewardship**
- Saves 60% to 85% Floor Space
- Reduces The Size Of New Buildings
- Eliminates New Construction
- Consolidates Multiple Facilities
- Reduces Carbon Footprint

**Ergonomics Is Social Responsibility**
- 100% Accessible Ergonomic Storage
- OSHA Friendly Design
- Barrier Removal Act Compliant
- Reduces Workplace Injuries
- Benefits All Users And Community

**Productivity Is Economic Prosperity**
- Increases Throughput Up To 500%
- Reduces Labor By Up To 66%
- Improves Filling Productivity Up To 56%
- Can Provide Up To An 18 Month ROI

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Lektriever® Electric Lateral File (ELF)

The Lektriever ELF is a series of vertically arranged rotating shelves controlled by an electronic keypad to deliver files to the operator with the push of a button. Every ELF can be easily equipped with roll out drawers for top tab files and folders or shelves for side tab file folders.

With its more than 2,500 linear file inches of letter-sized filing space, the Lektriever ELF can store the equivalent of approximately 16 lateral file cabinets in only 70% of the floor space while increasing productivity up to 56%.

The Lektriever filing system can be equipped with an optional electrically adjustable work counter with multiple end user memory work counter heights. The Lektriever ELF is equipped with a lockable, bi-parting door that is fully operational from either the standing or seated position.

The ergonomic design and operation are fully compliant with the Barrier Removal Act.

Shuttle® Vertical Lift Module (VLM)

The Kardex Remstar Shuttle VLM is an enclosed system of vertically arranged trays, an extraction platform and a series of computerized controls that delivers items to an ergonomically positioned workstation... with a push of a button often increasing productivity up to 66%.

Every Shuttle VLM uses CUBOSTAR® technology to automatically scan the height requirement for each tray and store it automatically in one inch increments saving up to 85% of otherwise wasted floor space.

The modular design of the Shuttle VLM allows each unit to be easily configured either pre or post installation for: different heights, multiple pick windows, integrated pick-to-light technology and software. Shutter doors close when the VLMs extractor is in motion and remain closed after a tray is presented creating a safe and healthy work environment.

Users can set each tray's travel speed to accommodate sensitive items.
Megamat™ Vertical Carousel

The Kardex Remstar vertical carousel is a system of rotating shelves or drawers that rotate along a tracking guide, delivering stored items to an operator at an ergonomically positioned work counter.

The vertical carousel reclaims up to 75% of otherwise wasted floor space, and is available in 16,250 standard configurations with a variety of heights, widths and depths to meet any application.

Every carrier and shelf level can be individually configured with additional shelves, partitions and dividers, security doors or rollout drawers to store a variety of different sized parts in one unit.

Vertical carousels can be used as stand-alone workstations or driven with software for a fully integrated system.

Horizontal Carousel

The horizontal carousel consists of an oval track with rotating bins containing shelves that deliver items to the operator. Multiple carousels are often used in one integrated workstation called a “pod.” This allows an operator to pick from one active carousel while the others are pre-positioning to be picked the moment the operator is ready, dramatically increasing throughput by up to 500%.

Integrated pick-to-light technology directs the picker automatically to the right bin, shelf and indicates quantity to pick. Installing the carousels with extra spacing can allow for “rapid deployment” access to the entire system providing 100% accessibility to inventory.

Horizontal Carousels save up to 60% of the existing floor space, every shelf is adjustable and can be moved in seconds to maximize storage density and changing inventory. Integrated scissor lifts can be installed in front of a horizontal carousel for the operator to pick from an ergonomic height.
Controls and Software

A full line of easy to use standard and optional controls are available for every Kardex Remstar product. From a machine with a simple controller to more complex multiple machines with total connectivity, over 160,000 successful systems worldwide rely on Kardex Remstar controls every day.

A full suite of FastPic inventory management software helps provide even greater levels of storage density, labor savings, security, throughput and inventory accuracy. Decades of experience allows Kardex Remstar to provide seamless software integration with Kardex Remstar equipment and existing host warehouse (WMS) and enterprise software systems (ERP).

Applications

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<tr>
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<th>Shuttle VLM</th>
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<th>Lektriever ELF</th>
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Partitioned Roll Out Drawer System
Order Consolidation
Tool, Die & Fixture Storage
Order Fulfillment
Automated Drawer Storage
Benchstock
Kardex Remstar Service Advantage
Over 400 factory-trained, licensed technicians available with the parts you need when you need them... 24 hours per day, 7 days a week... this is the Kardex Remstar service commitment to provide the largest service group in the industry!

Kardex Remstar uses a combination of strategically located regional office based technicians, a central phone support staff, the extensive reach of our thoroughly invested dealer network combined with an immediate access to over three million dollars of spare parts to protect your operations from losing valuable down time.

Free Sustainability, Space & Productivity Analysis
Schedule a no cost/no obligation Sustainability, Space and Productivity Analysis at your facility by a local Kardex Remstar representative to learn how Kardex Remstar automated storage and retrieval systems can improve your overall efficiencies while complying with Executive Order 13423 to become sustainable.

10 Day Quick Ship Delivery
From purchase order to up and running in your facility in as little as 10 days, Remstar is ready for immediate shipping to meet your facility's needs today.

Customer Satisfaction
A customer for life is a Kardex Remstar tradition, not a goal. The best indication of how your system will be handled is how a company treats all its customers.

Ask our customers! We are happy to provide an extensive list of local, state and federal facilities that rely on Kardex Remstar to keep their material and inventory accessible and operations efficient.

Continuing Education Units (CES) Credits
Kardex Remstar is happy to come to your facility and provide “lunch and learn” sessions for one AIA/CES learning unit/HSW credit on:

Alternative Storage Methods Relative to Today’s Accessibility Standards & Requirements

Sustainable Storage and Storage Alternatives for High Performance Buildings

Thousands Of Carousels & VLMs Are Currently Used By The US Government Worldwide...

Medical Records
Lackland AFB, TX
Randolph AFB, TX
Camp Riley, WI
NAS, FL
Dyess AFB, TX
Good Fellows AFB, TX

Official Personnel Records
US Department of Agriculture, DC
Alabama Joint Forces HQ, AL
USDA, DC
Ft. Huachuca, AZ

Contracting
Mountain Home AFB, ID
Bureau of Indian Affairs, MT

Weapons Storage
Lackland AFB, TX

Depot Level Maintenance
Tinker AFB, OK
Annisont Army Depot, AL

Technical Binder Storage
Lackland AFB, TX
Randolph AFB, TX
Beal AFB, CA
Dyess AFB, TX
Travis AFB, CA
Marine Corp Albany, GA
Fort Hood, TX
Tinker AFB, OK

Hill AFB, UT
Fort Bragg, NC

Eglin AFB, FL
Laughlin AFB, TX

Volery Registration
Boessler Parish, LA
James City, VA
Terrebonne Parish, LA

Flight Records
USCG Mobile, AL
Kadena AFB, Japan

Military Entrance Processing Stations (MEPS)
Houston, TX
Bexar County, TX
Des Moines, IA
Dallas TX
Nashville, TN

Jail Records
Fort Bend County, TX
Dallas Sheriff's TX

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