NORTHSTAR



BATTERY CHANGES IN ONE MINUTE OR LESS



Why Choose the NorthStar System?

The NorthStar offers users the ability to:

- ★ Change batteries in less than 1 minute
- * Ensure efficient battery rotation and optimize battery life
- ★ Store batteries safely and reduce storage floor space by allowing vertical storage to reach the maximum height of your building (up to 10 batteries high)



Since 1897 Sackett has been building high quality and reliable equipment for the material handling industry.

The NorthStar is Sackett's latest battery changing system. The NorthStar's fully automated technology will create a more efficient, safer, and more reliable battery changing operation.

★ FEATURES =

Sackett Systems has partnered with HK Systems® on our Northstar product line. Utilizing the HK Systems® designed and manufactured HK3000/RF, Northstar is able to safely, quickly and efficiently store and retrieve batteries up to 10 positions high.

The Northstar System offers the following benefits:

- · Efficiency: High speed battery changing utilizing a staging area
- Automation: Reduce personnel required for battery handling operations
- Safety: Laser sensors and controls for safe, fast, and deliberate positioning
- . Reliability: Field proven, industry leading Allen Bradley Controls
- Asset Management: Integrated Battery Management Software

* OPTIONS

The NorthStar offers the following options:

- Heights ranging from 15 to 60 feet
- · Single sided or double sided access
- Capacities ranging from 3,000 to 5,000 pounds



NorthStar ★ AUTOMATED BATTERY HANDLING SYSTEM



1.) The battery management system identifies the battery and lift truck as it enters the change out area. The Super-Xchanger extracts the battery from the lift truck.



2.) The Super-Xchanger deposits the discharged battery in the battery staging area.



The Super-Xchanger picks up a charged battery from the staging area.



4. The Super-Xchanger returns the charged battery to the lift truck.



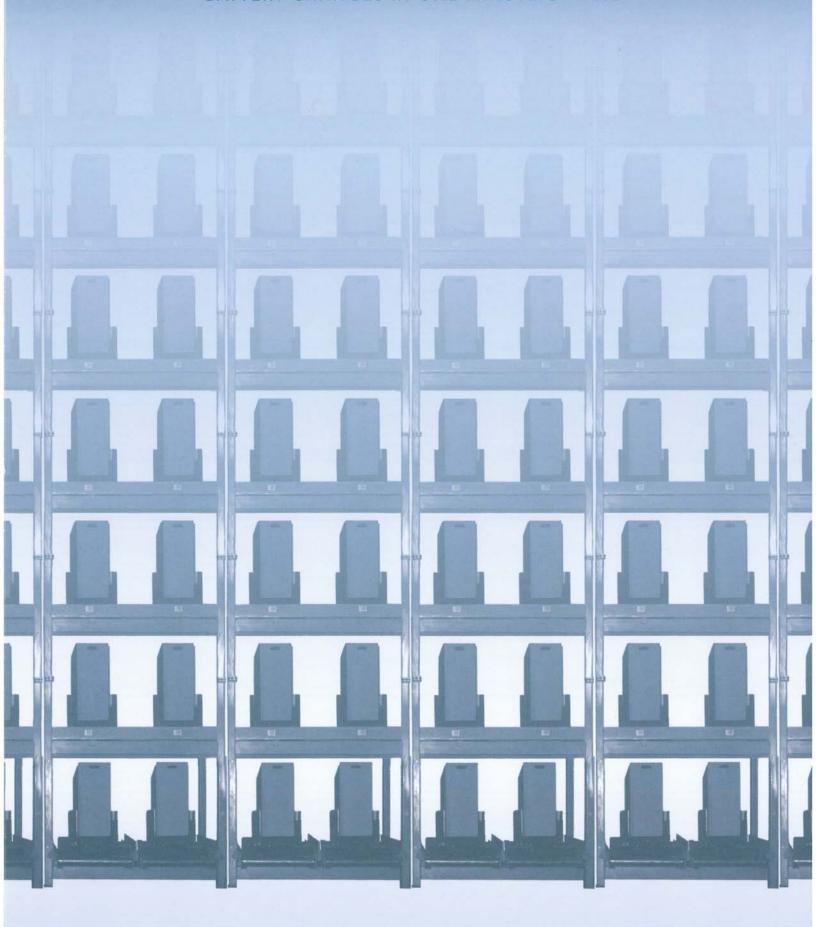
5. The battery management system instructs the ASRS system to take the discharged battery from the staging area to the proper charge location.



6.) The battery management system instructs the ASRS system which battery to return to the staging area.

NorthStar

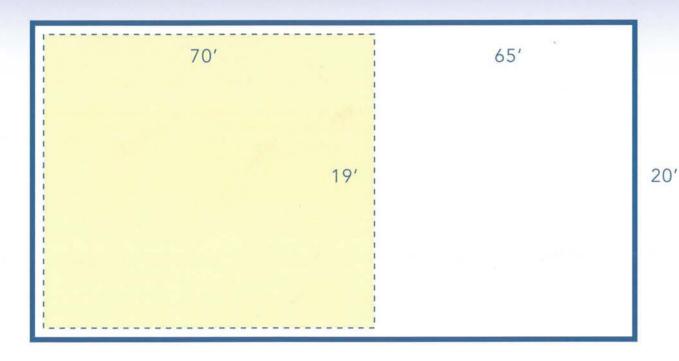
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SPACE = MONEY

Save at least 40% floor space over traditional battery changing solutions by utilizing the high battery storage bays of NorthStar



135'

300 Battery Storage Application Utilizing 10-tier High Battery Storage Racks

For the most up-to-date NorthStar video, visit our website at www.sackett-systems.com

