

SCHAEFER ORBITER SYSTEM™

Safe - Fast - Intelligent



The innovative Orbiter System™ from SSI SCHAEFER consists of an automated shuttle vehicle and a docking station. The system is used to increase the efficiency, performance and safety of a deep channel pallet storage system.

OVERVIEW

The Orbiter docking station and the Orbiter shuttle vehicle form a single unit that can be moved throughout the warehouse. The docking station is equipped with a centering bracket allowing automatic alignment and positioning of the pallet.

The forklift picks up the docking station with the shuttle vehicle and inserts the unit into the centering console of the desired rack location. The forklifts then pick up pallets and position them onto the channel rails.



While the forklift driver picks up the next pallet to be stored, the shuttle system conveys the pallet quickly and safely into the desired storage location. The driving commands are communicated to the shuttle vehicle via wireless remote control. Using Radio Frequency (RF), Orbiters provide a more efficient and cost effective solution than traditional racking systems.

The Orbiter System™ is designed for an environment with medium to low SKU counts and a high throughput volume in either FILO (First In Last Out) or FIFO (First In First Out) mode.

INVENTORY CONTROLS (FILO & FIFO)

- Pick face access—single (FILO only)
- Front and back pick face access (FIFO only)
- Channel depths of up to 150 feet (FILO only)
- 2 orbiters per channel (FIFO only)
- Several Orbiters per forklift possible
- Compatible with all conventional forklifts

OPERATING MODES

- Storage and retrieval of individual pallets
- Continuous storage/retrieval
- Inventory check feature
- Shuffle mode for reorganization of the storage lanes

FEATURES



A Orbiter – A unique pallet shuttle vehicle. Safe, fast and intelligent for flexible use of loads up to 3,300 lbs.

B Electrification – The rack is designed with a robust, secure, fully insulated electric contact block that transfers power to the docking station.



C Rack Construction Technology – Contrasting color brackets for secure docking station centering.

D Fence – Prevents unauthorized access.



E Docking Station – Central safety element with hazard warning light and status display. Prevents unauthorized entry into the aisle. Provides safe transportation of Orbiters.



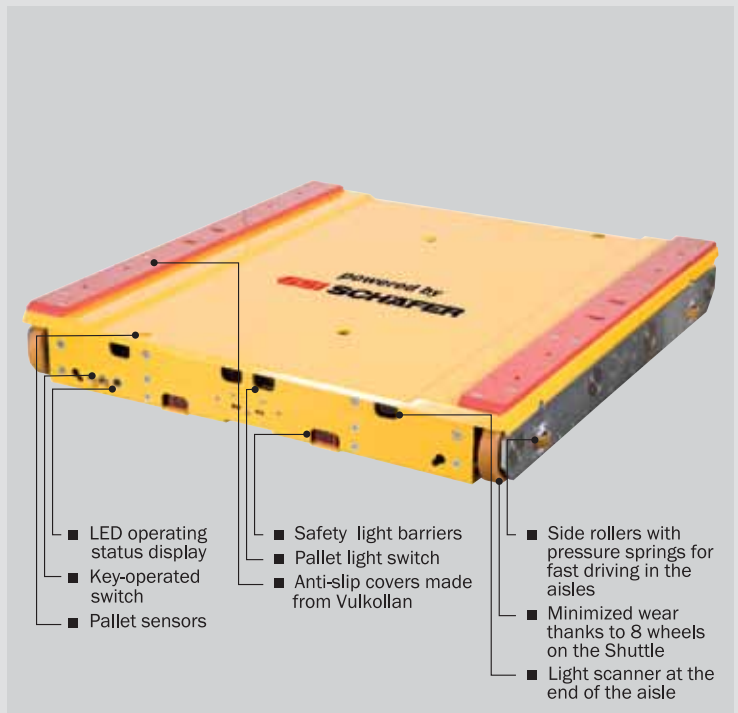
F Protective Floor Rail – Protects the rack from collision with the forklift.

ADVANTAGES

- Power Caps eliminate the cost and downtime associated with battery-operated systems
- Problem and maintenance-free operation in cold storage environments
- Innovative hyper electro-mechanism in lieu of hydraulics
- Intelligent charging technology for more efficient, continuous operation
- Damage to the shuttle vehicle is prevented due to the docking station concept
- User-friendly design and easy operation through instruction images on the remote control
- Optimum use of space and maximum flexibility
- Comprehensive functions (storage, retrieval, inventory cycle, shuffle mode, etc.)
- Highly efficient pallet throughput with a relatively low degree of automation & minimal investment costs
- Operates with any existing conventional forklift

DOCKING STATION: CENTRAL SAFETY ELEMENT

SHUTTLE: ELECTRONICS AND MECHANICS



SAFETY FEATURES:

- Docking station prevents unauthorized or accidental access by operators into a working channel
- Protective floor rail prevents unauthorized or accidental access by a forklift into a working channel
- Stroboscopic warning light identifies what channel is operating a shuttle and warns operators
- Emergency stop at the docking station provides easy means to shut down system during an emergency situation
- Remote control system has safety features to prevent accidental start commands in emergency stop mode
- Safety sensor redundancy program utilizes back-up safety sensors
- Shuttle vehicle & docking station communication system stops the shuttle if there is movement in the channel
- Lift truck fork enclosure safely moves the shuttle vehicle & docking station from one channel to another

SCHAEFER SYSTEMS INTERNATIONAL, INC.

10021 Westlake Drive
Charlotte, N.C. 28273
Phone (704) 944 -4500
Fax (704) 588 -9094
info@ssi-schaefer.us
www.ssi-schaefer.us

SCHAEFER SYSTEMS INTERNATIONAL, Ltd.

140 Nuggett Court,
Brampton, Ontario - L6T 5H4
Phone (905) 458 -5399
Fax (905) 458 -7951
info@ssi-schaefer.ca
www.ssi-schaefer.ca