

STR-4200 Dok-Lok[®] Vehicle Restraint

An exclusive vehicle restraint category that provides a smooth transition along with Hazard Recognition and Control.

The STR-4200 reduces many of the problems associated with unexpected trailer separations, air-ride suspensions, detached trailers, and vertical and horizontal trailer movement.

So it helps you reduce injuries, increase productivity, minimize equipment damage and save money – across your loading docks. And, when used with a Rite-Hite[®] Smooth Transition



The original, always improving trailer restraint

Rite-Hite created the restraint industry in 1980. More installations worldwide than any other restraint.

Smooth transition

Hydraulic cylinders help stabilize the trailer to address trailer drop. Ensures smooth transition between loading dock and trailer. Reduces jolts to forklift operators, minimizes product damage and reduces repairs on dock levelers, seals, shelters, bumpers and forklifts.

Unique design helps address all trailer separations

Rotating hook design can help address aggressive early departure, trailer creep and dock walk, as well as trailer tipover from landing gear collapse or trailer up-ending.

Proven durability for long life

Stores above ground away from snow, ice, debris and standing water to ensure reliable performance. Resists damage by backing trailers. Corrosion resistant finish for all-weather performance.

Rite-Vu[™] hazard recognition and communication system

Interior/exterior LED light communication system, including Approach-Vu, Pedestrian-Vu, Corner-Vu and Leveler-Vu.

Enhanced hook design

Innovative hook design offers the most coverage over a rear impact guard. Anti-rotation design adds an additional layer of safety, securing trailers or intermodal container chassis with cover plates or obstructions.

Security System Interface

Dok-Lok vehicle restraints can physically enhance security at a facility when linked with an active building security system. If an engaged restraint is tampered with, the building security system is notified and facility protocol is followed.

Specifications

General description

The STR-4200 Dok-Lok® Vehicle Restraint is designed to secure a semi-trailer to a loading dock by engaging the trailer's rear impact guard (RIG) with a large rotating hook. In addition, the restraint supports the trailer, reducing the vertical motion of the trailer. A spring loaded, structural steel housing automatically positions the unit when contacted by a backing truck. The hook mechanism and support function are operated from a control panel mounted inside the building.

Operation

As the trailer backs into position, the RIG contacts the spring loaded structural steel housing. The housing rides down in its track, allowing the RIG to move over the top of the housing. The dock attendant pushes the lock button, which activates the hook and support cylinders to secure the trailer to the dock. The hook provides anti-rotation technology and a holding force in excess of 32,000 lbs (14,500 kg). The STR-4200 maintains constant contact with the RIG and supports the rear of the trailer to help address vertical trailer movement during loading/unloading operations. If the hook is pushed down, while in operation, auto-refire technology restores safe and secure engagement. After servicing is completed, the dock attendant pushes the unlock button at the control panel. In the event a trailer is missing, or has a damaged RIG, the Dok-Lok restraint will communicate a fault condition. An audible alarm alerts the operator that the trailer has not been properly secured by the Dok-Lok restraint. At this time, the operator may override the fault condition and secure the trailer by other means. At all times, the light communication system automatically adjusts to the proper operational mode.

Construction

The enclosed, welded structural steel housing is constructed of 5/16" (8 mm) and 1/4" (6 mm) steel and is designed to receive the impact of trailers backing into position and to support the trailer. The housing protects all components from damage by weather, dirt and debris. The following components have a corrosion resistant

e-coat finish: track, base plate, housing, hook mounting components and track anchors. The large rotating steel hook has a yellow dichromate finish. Standard vertical load rating 35,000 lbs (15,876 kg).

Installation

Low-profile Dok-Lok restraint is mounted to a steel plate that is embedded in the dock face or secured by 12 anchor bolts plus 22" (559 mm) of weld to the pit curb angle. Installation does not require modification to the dock leveler.

Hydraulics

The carriage is supported with (2) heavy duty 3-1/2" (89 mm) ID double acting hydraulic cylinders. The hook is positioned with a 1-1/4" (32 mm) ID double acting cylinder. The unit can be powered with its own hydraulic power unit or operate using the existing hydraulic leveler power unit. Hoses are guarded with hot dipped galvanized coil sleeves. All fittings are JIC or "O" Ring Flange. Hydraulic fluid is biodegradable.

Electrical/Controls

All operator controls are mounted in an interlock capable, NEMA 4X, gasketed control panel and enclosure assembly. The control panel is fully operational at all times and does not require key activation. Hook mechanism and limit switches are totally enclosed in structural steel housing. Electrical components and wiring are UL listed or recognized.

STR-4200 Dok-Lok restraint requires a power source of 110/115 volt, single phase, 60 Hz, with a 20 Amp service circuit. The Universal Restraint Controller on the STR-4200 also provides a self-diagnostic program, which greatly simplifies trouble-shooting by checking all inputs and outputs. *Please note: Unless specifically noted on quotation, all electrical, including hook-up, is the responsibility of others.*

Rite-Vu Hazard Recognition and Communication

» **Approach-Vu:** Detects motion in the drive approach and presents a clear visual and audible warning to

pedestrians.

- » **Pedestrian-Vu:** Detects and signals when there is activity inside of the trailer. An audible alarm sounds when an unsecured trailer is entered. Dok-Lok cannot be disengaged when activity is detected inside the trailer.
- » **Corner-Vu:** Provides a clear, immediate Dok-Lok status to the forklift driver before entering the trailer.
- » **Leveler-Vu:** Confirms Dok-Lok status to the forklift driver while inside the trailer.
- » **Outside Truck Driver Communication System:** Flashing red or green lights and signs indicate when it is safe to back in or pull out.
- » **Inside Dock Attendant Communication System:** Flashing red or green lights indicate when it is safe to perform loading/unloading operations.
- » **Audible Alarm:** An inside alarm provides a positive signal and red light when a RIG has not been properly engaged.
- » **Audible Alarm Override:** Push-button controls allow personnel to override the audible alarm, causing inside lights to flash red and green simultaneously.
- » **Self-diagnostic Trouble-shooting Program:** Input and output indicator monitors the system for instant, one person trouble-shooting, which allows fast, easy maintenance.

Warranty

Five-year parts and labor from date of shipment. All warranties are subject to standard limitations and liability.

Available Features

Combination power unit
Rite-Vu™ Light Communication System Options
Approach-Vu Corner-Vu
Pedestrian-Vu Leveler-Vu

Client Info

Company Name

Date



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