

WHEEL RESTRAINTS



DAMAGED REAR UNDERRIDE GUARDS. STRAIGHT TRUCKS. LOW BOYS. STEP VANS. LIFT GATES. SERCO HAS A SOLUTION FOR THEM ALL.

Conventional vehicle restraints rely on engaging a trailer’s rear underride guard to safely secure them to the dock. Unfortunately, many trucks have missing or damaged rear underride guards or are equipped with hydraulic lift gates or special bumper configurations and cannot be engaged by conventional restraints. Traditionally, the only option available was to use rubber wheel chocks. But these have proven to be ineffective, especially in wet and icy conditions.



IT’S ALL ABOUT SAFETY.

Investing in trailer restraints is critical to the safety of your dock workers. Traditional vehicle restraints address common accidents at loading docks, including Premature Departure, Trailer Creep, Trailer Walk and Landing Gear Collapse:



PREMATURE DEPARTURE. Truck drivers think loading is complete, or simply connect the wrong trailer and pull away while the dock attendant is still loading or unloading.



TRAILER CREEP. The constant impact of a fully-loaded, moving forklift can cause the trailer to creep forward inch by inch, beyond the reach of the leveler lip, causing the leveler to slip off the back of the trailer and drop suddenly.



TRAILER WALK. During loading or unloading, the displacement of weight by the forklift can cause air-ride suspension trailers to move in an elliptical fashion, causing it to “walk” away from the dock in a more prominent motion.

LANDING GEAR COLLAPSE: With some older trailers, pressure exerted by a fully-loaded, moving forklift can cause the trailer’s landing gear to shift or rock, and ultimately collapse, sending the front of the trailer to the ground and the back of the trailer up in the air.

HOWEVER, many conventional vehicle restraints may not engage the wide range of trailer styles or configurations that appear at your loading docks, such as:



LIFT GATE TRAILERS. Many trailers equipped with lift gates impede a vehicle restraint, either by blocking access to the Rear Impact Guard, or having a lift gate system that does not include a Rear Impact Guard.



DAMAGED REAR IMPACT GUARDS. Some Rear Impact Guards have been bent or damaged over the years, rendering them impossible to restrain with a traditional vehicle restraint.



UNCONVENTIONAL TRAILER CONFIGURATIONS. Some trailers have configurations that can affect the ability to engage a traditional vehicle restraint. From multiple axle configurations to obstructing trailer parts near the Rear Impact Guard, traditional vehicle restraints are not equipped to effectively handle all types of trailer situations.

UNIVERSAL TRUCK-CHOCK™
THE IN-GROUND SOLUTION FOR
THE TOUGHEST CONDITIONS.

The Serco UTC Series Universal Truck Chock in-ground restraint is a permanently installed solution for your wheel restraint needs, featuring an automatic wheel chocking system that restrains trailers with a hydraulically operated moving wheel chock. The functionality means you'll have continuous restraining force for even greater security, reducing the probability of landing gear collapse, vehicle creep or vehicle walk. And since the chock is mounted in-ground, you'll experience no interference for snowplows or drive cleanup.

FEATURES

- No "lift gate" interference
- No pup trailer interference
- Push-button activation
- Flush-mounted, in-ground design
- Self-contained, remote-mounted power pack
- Electrical components and controls remote-mounted inside dock
- Double-acting hydraulic cylinder
- Internal/external light control package
- Virtually no maintenance required
- Constant restraining force to help prevent "trailer creep"
- Only two moving parts
- Heat tracer cables prevent ice build-up
- Audible motion alarm



SLSC SERIES SURFACE-MOUNTED
THE ABOVE-GROUND SOLUTION FOR
THE TOUGHEST CONDITIONS.

For security even under the most extreme weather conditions, the Serco SLSC Series surface-mounted wheel restraint is the most rugged wheel restraint solution. Its above-ground mount means operations won't halt no matter what Mother Nature brings, while a hydraulic-operated wheel chocking system allows for simple push-button control that doesn't impede lift gate operation or interfere with landing gear. And with self-lubricated guide bearings and no mechanical drive components to wear out, maintenance has never been simpler.

FEATURES

- Push-button activation
- Acts as a guide rail to help trucks back in straight, preventing shelter damage
- Sealed roller bearings
- Remote-mounted hydraulic power pack
- Hot-dipped galvanized finish
- Sealed, waterproof 24-volt proximity switches
- No "lift gate" interference
No pup trailer interference
- No mechanical drive components
- Virtually no maintenance required
- Two-speed hydraulics
- Integral positioning guide rail
- Low-voltage electrical requirements
- Internal/external light control package
- Constant restraining force to help prevent "trailer creep"



ANY TRUCK, ANYWHERE, ANYTIME.

The Serco SLSC Series secures trucks with a simple, effective, automatic wheel chock mounted above-grade, allowing it to operate under the most extreme weather conditions. Because of its revolutionary design, the Serco SLSC Series doesn't impede lift gate operation or interfere with the landing gear on pup trailers. The SLSC Series also acts as a guide rail for the reversing trailer, thus limiting damage to the seal or shelter.

PUSH-BUTTON OPERATION.

The Universal Truck-Chock is operated by a simple, push-button control panel The operator pushes the engage button to begin the chocking sequence. While the chock is in motion, an audible alarm will sound. When loading/unloading is complete, the operator pushes the release button and the chock returns to its stored position.

MECHANICAL AND MAINTENANCE SIMPLICITY.

Self-bleeding hydraulics, self-lubrication and only two moving parts make the chock virtually maintenance free.



PUSH-BUTTON OPERATION.

The Safety-Chock is operated by a solid-state, programmable dedicated controller with real-time diagnostic capability. The operator simply pushes the button to begin the chocking operation. In the event it fails to restrain the truck, the Safety-Chock stores itself and the operator is alerted through the control panel lights.

MECHANICAL AND MAINTENANCE SIMPLICITY.

The Safety-Chock is easy to operate; it is activated as soon as the sensing roller contacts the rear truck wheels. The Safety-Chock is simple to maintain, too. Self-lubricated guide bearings require no maintenance, there are no mechanical drive components to wear out and the hydraulic cylinder has no moving hoses. The hydraulic power pack is installed inside the building, away from inclement weather, and allows easy access for routine maintenance.



THE SERCO MANUAL SAFETY-CHOCK™

SIMPLE, SAFE & EFFECTIVE.

Serco’s Manual Safety-Chock provides loading docks with a cost-effective, versatile wheel restraint solution, capable of engaging and restraining the wide range of trailers that come to the dock. Easy installation, simple operation and minimal maintenance provide a lower lifetime cost of ownership than other wheel restraint systems, and its design enables easy maneuvering for accurate and safe operation.



1. **IMPACT-RESISTANT END CAP.** Rugged construction is able to withstand trailer weight, and acts as a guide for backing trailers.
2. **GUIDE RAIL.** Hot dip galvanized ¾” (19 mm) rail is easily installed with ¾” (19 mm) concrete wedge anchors. Standard guide rail 10’ (3 m). Optional 13’ (4 m) and 16’ (5 m) lengths.
3. **RESTRAINING ARM.** 15” (381 mm) long, 4” (102 mm) high and ½” (13 mm) thick steel arm enables full contact with at least one wheel, even if trailer is not flush with restraint. Design avoids potential of “chock pinch.”
4. **FOOT PEDAL.** Easily identifiable zinc-plated foot pedal allows for quick chock release.
5. **ELECTRIC COIL CORD.** Allows electrical feed and sensor connection throughout entire working range. Coil is fed along aircraft-quality steel rope.

USER-FRIENDLY OPERATION



The operator slides the restraint carriage on the guide rail, positions it in front of the wheel, and pivots the restraining arm to lock it in place and secure the wheel.



Once loading/unloading is complete, dock worker presses release button inside, alerting outside operator that it is safe to disengage wheel restraint. A simple press of the foot pedal disengages the restraining arm, rotating it back and away from the wheel.



TRAILER SENSOR: IP67-rated photo cell sensor confirms presence of wheel in safe engagement range, and alerts both dock worker and restraint operator of premature disengagement.

THE SERCO VERSACHOCK™

Serco VERSACHOCK provides a simple, cost-effective means of securing trailers while effectively communicating operation status with drivers and dock workers to ensure a safe and productive dock operation.

The Serco VERSACHOCK is a versatile vehicle restraint system that accommodates a wide variety of trailers and vehicles regardless of the condition or presence of an ICC bar. VERSACHOCK includes a patent pending, wireless engagement design that provides wheel detection at all engagement ranges and requires no chock cabling or permanent structure installed on the drive to secure the vehicle. In addition, Serco VERSACHOCK fulfills the requirements of OSHA Regulation 29 CFR – 1910.26(b)(2).



- Wireless Engagement Detection: patent pending engagement design provides wireless wheel detection at all engagement ranges. No chock cabling or wiring is required
- Anodized Aluminum Chock: 6063 aluminum extrusion with clear hard anodize finish for superior corrosion protection
- Pivoting Chock Sensor Arm: built in sensor reflector provides superior engagement detection and reduced storage profile
- Heavy duty Wheel Trigger: pivoting ¾ inch steel wheel trigger
- Heavy Duty Storage Cradle: ¼ inch galvanized steel cradle design provides both secure storage for the chock as well as engagement detection lighting and sensor arm adjustability. All exterior power is 24V DC
- Stainless Steel Sawtooth Anchor: prevents movement of the chock under wheel engagement
- Industrial Sensor Unit: extended range retroreflective all-weather beam sensor with full adjustability at installation
- Wheel Engagement Light: high intensity all weather white LED light communicates to the operator



Control Panel



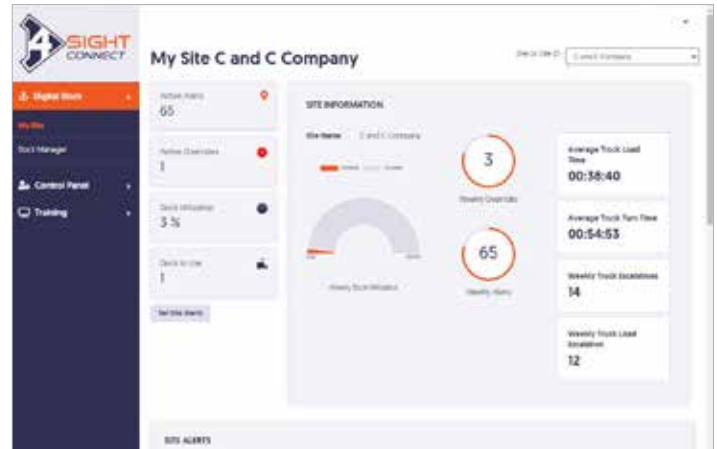
Exterior Lights

INTEGRATE YOUR SERCO EQUIPMENT FOR SAFER, MORE EFFICIENT AND PRODUCTIVE DOCKS.



Streamline your loading dock equipment with the simple push of a button by adding the Serco Digital Master Control Panel with HMI. As workloads increase, busy loading docks only get more complicated, making automating your dock equipment necessary in order to meet the demands. Managing your loading dock operation as an integrated system is key to ongoing dock safety. The digital master control panel requires dock workers to operate equipment through a guided sequence, minimizing operator error, training time for seasonal staff and turnover rates.

Merges real-time data collection and on-demand communication with personnel activity, via the world wide web, allowing for better operational decisions. 4SIGHT Connect products provide data to help facilities adjust for better cost management. It observes and calls attention to lags in production and work inefficiencies to eliminate waste, unnecessary work, and resources for cost efficiency and operational growth.



1612 Hutton Dr., Suite 140
Carrollton, TX 75006
800.933.4834
www.sercodockproducts.com

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