CS51

Automatic Vehicle Restraint System.

Technical Description.

The **CS51 Automatic Restraint System** is designed to immobilize vehicles during the loading and unloading of goods in a fully automatic manner, and is **compatible with most lorries.**

It features an **intelligent positioning system** that places the restraint carriage in the correct position to initiate the process properly.

Made with **high-quality materials** (HEB profile, 10/12 mm plates, and a 70 mm locking pin) and a **galvanized finish**, it ensures **strength** and **durability.**

Additionally, it integrates with the other components of the loading dock to **guarantee maximum safety**, preventing any operation until the vehicle is fully immobilized.

Technical Characteristics.

• **Total length:**	3475 mm
• **Operating range:**	2470 mm
• **Total width:**	915 mm
• **Locking height:**	370 mm
• **Power supply:**	1.1 kW ; 230 VAC
• **Operating temperature range:**	-20°C / +50°C
• **Max wheel Ø:**	Ø1080mm (385/65/R22.5 code or similar)
• **Locking force:**	>170 Kn
• **Installation:**	Bolted to concrete

Guaranteed Safety.

SMART

Smart Positioning System.

AUTO

Automatic Operation.

The **CS51 system** complies with the Machinery Directive 2006/42/EC and the following standards: **UNE-EN ISO 13857, EN ISO 12100, and EN 60204**. It also adheres to the **FEM 12.008 (European Federation of Material Handling)**.

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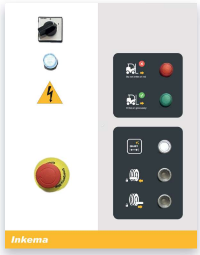
Operation.

The **CS51 Automatic Vehicle Restraint System** comes equipped as standard with a control panel featuring **LED indicators** to guide the loading/unloading process, as well as **LED push buttons** for intuitive and user-friendly operation.

The LED indicators, located both on the carriage and on the control panel itself, inform the driver and dock personnel of the current loading/unloading phase, as well as the status of the vehicle (locked or unlocked), respectively.



Control Panel CS51.

Initially, the operator verifies that the truck is properly positioned at the dock and activates the system via the control panel. The carriage positioning and locking pin deployment are performed fully automatically. Once the vehicle wheel is securely restrained by the locking pin, the remaining dock equipment (leveling platform and/or door) can be activated.

Upon completion of the loading/unloading operation and once the other dock equipment has returned to its initial state, the operator may deactivate the system using the control panel. The removal of the locking pin and return of the carriage to its starting position are carried out entirely automatically.

LED Indicator Reference.

GREEN

- The vehicle may approach the loading dock (external LED)
- The loading/unloading operation may be carried out (internal LED)
- The vehicle may leave the loading dock (external LED)

FLASHING RED

- The vehicle has been locked, and the dock equipment can be activated (internal LED)
- The vehicle unlocking process is in progress (external LED)

RED

- The vehicle is currently locked (external LED)
- The restraint system is deactivated (internal LED)

Compatibility.

We have designed the **Automatic Vehicle Restraint System** to be compatible with the majority of lorries operating worldwide.

Lorries, trailers, and other vehicles that meet the following dimensions:

*Working range of the restraint