DATA SHEET

LifeMark[®] - 300 Automated Re-striping System



THE LifeMark®-300 AUTOMATED RE-STRIPING SYSTEM

is designed to control the re-striping of pavement markings without a rear operator. Cameras are used in conjunction with patent-pending real-time artificial intelligence machine learning techniques and computer algorithms to accurately define restriping actions. The LifeMark®-300 recognizes all colors and types of lines, new and worn, over new and old concrete or asphalt, and will turn paint guns on and off as needed. The equipment is available to retrofit any long line paint, thermo, epoxy or polyurea striping truck.

The LifeMark®-300 monitors the paint and glass bead installation via an in-cab video view. The system can control both sides of the striping truck.

DURING RE-STRIPE, a Smart Cylinder guided by the LifeMark[®]-300 ensures the paint guns are accurately positioned over the worn lines. The existing paint truck paint gun controller system can still be used to control the on/off function of the paint guns, alongside the LifeMark[®]-300 system.

PRODUCT FEATURES

- Automatically control both carriages and all paint and glass bead guns to allow re-stripe of worn single, double or skip lines.
- Specify stripe width, skip and cycle length, or re-stripe as existing.
- Measure stripe width and automatically paint wider lines over old narrow markings.
- Automatically record footage painted and restripe in areas that are worn. All control algorithms are processed on the truck in real time.
- No offline computer calculation is required to control the carriages.
- No GPS, RTK or cellphone connection is required.
- Paint carriage location data is calculated in real time.

KEY COMPONENTS INCLUDED:

- Touchscreen Control Box in Drivers' Cab
- Smart Cylinders Mounted into Carriages
- Valve Body to Control Smart Cylinders
- Computer Control Cabinet on Deck
- Overview Cameras, Carriage Cameras & Towers

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TOUCHSCREEN CONTROL BOX IN DRIVERS' CAB

The touchscreen control box is typically floor-mounted via a RAM mount providing an adjustable sturdy fixture. The RAM mount system provides virtually unlimited flexibility.

IN-CAB GUIDANCE SYSTEM

A pointer system helps guide the driver during restripe. Cameras on each side of the truck display the carriage position over the existing pavement marking. The driver simply needs to stay in his lane.





VALVE BODY TO CONTROL SMART CYLINDERS

The system will typically utilize the existing striping truck hydraulic power. A valve body system is wired to the computer to control the flow of hydraulic fluid to each Smart Cylinder.



SMART CYLINDERS MOUNTED INTO CARRIAGES

The system uses Smart Cylinders to replace the existing carriage movement cylinders. These cylinders have electronic sensors that communicate carriage position to the computer control system.

OVERVIEW CAMERAS, CARRIAGE CAMERAS AND TOWERS

The overview cameras are typically mounted at a location high enough to work and in a safe area on the truck. Carriage cameras are mounted to view the carriages. The camera mounts are custom designed to suit the striping truck.





COMPUTER CONTROL CABINET ON DECK

The LifeMark®-300 computer control hardware is mounted in a waterproof enclosure for protection. The cables from each component route to this enclosure which bolts securely to the deck floor.

LifeMark®-300 Installation Procedures for an Existing Paint Truck

- A visit is typically required to survey the truck and to propose location choices for each component. Once options are finalized, drawings are completed and shared for final approval. Custom parts are ordered based on the truck requirements.
- The assembly time required for the mechanical, hydraulic, and electrical components is dependent on truck and customer requirements.

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