LifeMark®-300 Automated Re-Striping System

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The LifeMark-300 Automated Re-Striping System

- THE LifeMark®-300 AUTOMATED RE-STRIPING SYSTEM is designed to control the restriping of pavement markings without a rear operator.
- 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.

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How Does it Work?

- Cameras are used in conjunction with patent-pending real-time artificial intelligence machine learning techniques and computer algorithms to accurately define re-striping actions.

LM-300 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.

LM-300 KEY COMPONENTS INCLUDE:

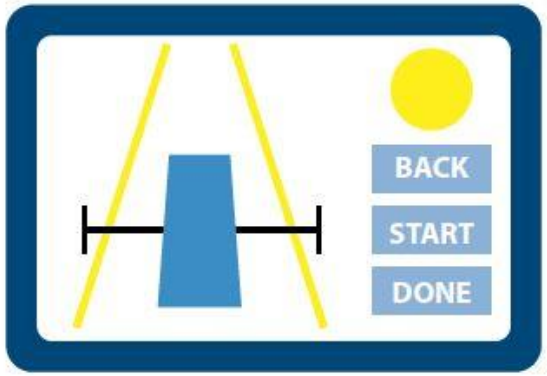
- Touchscreen Control Box in Driver’s Cab
- Smart Cylinders Mounted into Carriages
- Valve Body to Control Smart Cylinders
- Computer Control Cabinet on Deck
- Overview Cameras, Carriage Cameras and Towers

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.



COMPUTER CONTROL CABINET ON DECK

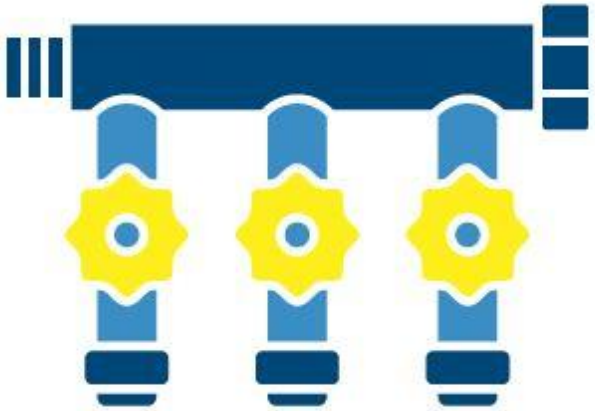
- The LifeMark®-300 computer control hardware is mounted in a waterproof enclosure for protection. The cables from each component route to this enclosure which bolts securely to the deck floor.

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.

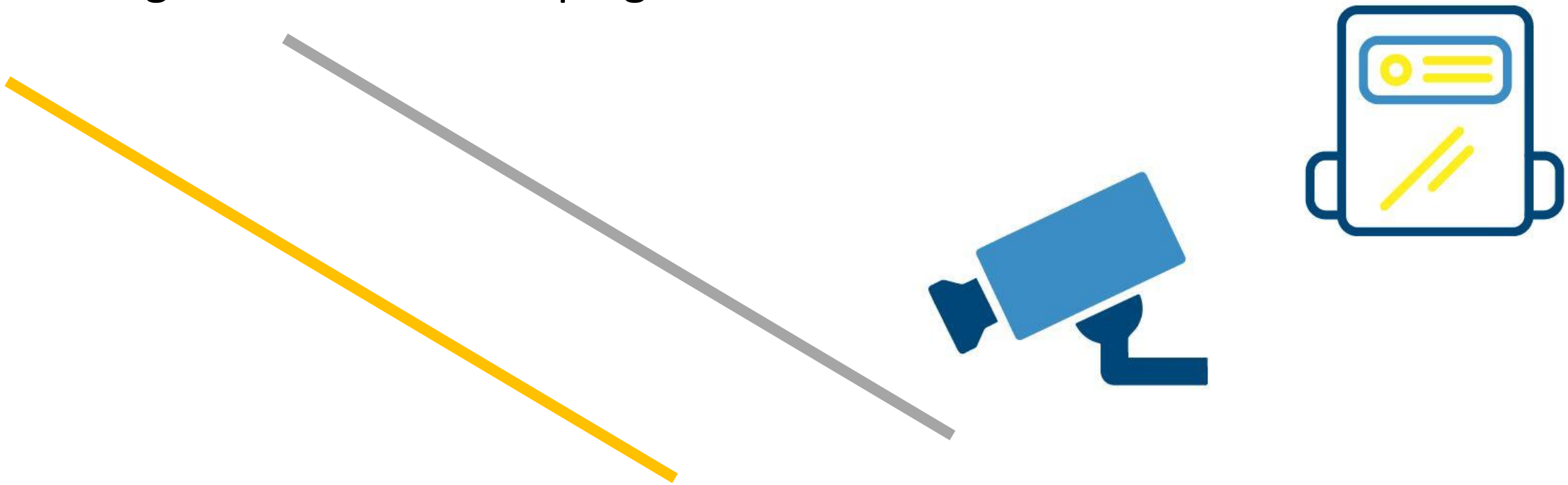
VALVE BODY TO CONTROL SMART CYLINDERS

- 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.



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.



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.

Why invest in the LM-300? ------Safety

- Striping trucks do not have TMA units, as they would be too long.
- TMA follow trucks are required to be so at least 125 feet behind the striping truck, so that they DO NOT protect the striping truck very well. Wild following driver reactions can result in striping trucks getting rear ended by vehicles traveling at high rates of speed as they maneuver around the TMA at high speed.
- You now have the option of removing the operators from the rear driving positions.

Efficiency of Resources

- The LM-300 system allows you to maximize your investment in expensive road striping technology. Now you only need one skilled driver/operator per striping crew, instead of three.
- Striping truck rear operators will be available for other tasks in the re-striping operation.
- Human operation of the rear re-stripe driving position requires experience, skills and constant attention

ROI

- A typical long line re-striping operation requires 3 operators on the truck, PER SHIFT.
- Many operations run two shifts per day
- A LM-300 system will free up two operators PER SHIFT.
- In a 24 hour per day operation, that can translate into saving 4 man-days per truck.

Experience and Training

- Our sister company Guidemark has over 900 years of total employee striping experience that guides development of LimnTech Scientific products. Our LM-300 has been trained to recognize over a million images to date, and this training increases every week. This training of striping experience has been programmed into the LM-300 to recognize a worn pavement marking. This experience is available to you immediately upon purchase and implementation of the LM-300 system in your fleet.