TRACKMOBILE®
MOBILE RAILCAR MOVERS

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Operational Safety Practices for Working On and Around Rails

Using rails in an industrial setting can help streamline and expedite everyday business practices; it also introduces an element of risk. The presence of large machines moving in uncertain and fluctuating conditions calls for dedicated vigilance and care from employers and employees alike. In an environment where small errors can lead to large-scale consequences, using strong safety practices and common sense can be the best preventative measures a company can take. Through a combination of robust internal safety protocols and excellent external resources, organizations can minimize the risks of working with rails and reap the full benefits of their optimized use.

Internal Safety Protocols

The establishment of internal safety procedures is of the utmost importance to an organization's continued function, as is the regular, consistent enforcement of those procedures. From the daily machine checklists technicians complete to the last brake application after the closing shift, clear policies on employee conduct should govern every action undertaken in a rail environment. Keeping clear records is the foundation of all internal safety procedures. The same way Material Safety Data Sheets (MSDS) are kept for any chemicals used on-site, good records can apprise you of the status of both machine and employee. For employees, this includes certificates of completed training that qualify them as operators or groundmen for your Trackmobile. For the machine itself, regular assessments and operator checklists ensure that it is in good working order, able to be used with the reasonable assumption of safety with proper use.

> By formalizing your training procedure, you can be assured that each employee that gets behind the wheel of the machine or is part of the ground crew has been thoroughly prepared and empowered to perform to the best of their ability.

Training Procedure

It is important to establish a training procedure. Internal training and certification is a necessary part of working in an industrial environment, especially when heavy machinery is involved. We value and stress the importance of training being conducted by a third party, but your organization must still have a system by which new employees are taught and officially deemed ready for work. Another company may carry out the actual instruction on how to operate certain machinery, but only you know what precise combination of in-house

education and practice is necessary for your employees.

Most companies that use Trackmobiles emphasize a set number of classroom hours along with mandatory hours in the machine, riding along with an experienced operator. By formalizing your training procedure, you can be assured that each employee that gets behind the wheel of the machine or is part of the ground crew has been thoroughly prepared and empowered to perform to the best of their ability. In addition to general industry best practices, also be mindful of the specific existing rules and procedures of your organization, which supersede other recommendations. Company rules take precedent and are the standard by which you should determine any new procedures for consistent company policy.

Appropriate Equipment

A major factor in protecting employees on a moment-to-moment basis is making sure you are using the best, most appropriate equipment for the job. First and foremost that means that you are using equipment that was designed for its intended purpose. When companies use machines that are not designed to perform the tasks for which they are being used, an attempt to save money often backfires and becomes a crippling liability issue. One common mistake companies make when moving railcars is trying to use repurposed vehicles to do the job of a railcar mover. Some examples we've seen include wheel loaders, tractors, forklifts, skid loaders, and even pickup trucks. None of these have guide wheels, positive coupling or train air brakes, all of which are vital to the safe movement of railcars. The same applies to other, non-vehicular forms of railcar movement, like car progressioners and cable or rope pullers. In addition to the risk of a breaking rope or chain, the key element they lack is the train air brakes to control multiple cars in a string, without which the potential hazard of moving railcars increases dramatically. Not only are the lives of operators and technicians being put at risk—rail beds, ties, and cars sustain damage when you use inappropriate machinery. Repurposing an existing machine might be tempting when faced with the upfront cost of buying new equipment, but the cost of repairing split rails and broken couplers—not to the mention the possibility of harm coming to an employee—adds up.

> The initial cost of appropriate machinery is an investment in your operational safety.

One notable example of the true cost of using equipment not designed for its intended use is in the case of OSHA Violation #109176719. A company used a front-end loader and chain to pull railcars rather than a dedicated railcar mover; an employee, in the process of hooking up a car, was hit by the loader and crushed against the railcar, sustaining multiple severe injuries. One method OSHA cited for potentially preventing the injury was to "utilize an equipment designed to safely pull rail box cars". The company was penalized $4,500, which does not include any amount paid to the injured employee or the lost productivity experienced due to the accident. In their attempt to use a repurposed machine, this company earned themselves an OSHA citation, financial losses in both fines and reparations, lost productivity, and an injured employee. Their experience only emphasizes how the initial cost of appropriate machinery is an investment in your operational safety.

Common-Sense Safety Practices

When proper machinery is being used in conjunction with thorough safety protocols, the last internal factor to provide for is the consistent use of common-sense safety practices. These practices may be less concretely quantifiable than other safety rules, but they should nevertheless be established and taught. For instance, all employees working on or near rails should wear proper safety attire at all times, including visibility vests, hard hats, protective glasses, gloves, steel-toed boots, or any combination thereof. Also necessary for site safety is a thorough knowledge and awareness of your surroundings. This includes any grade or curves in the tracks, as well as any known hazards, like poor visibility, close clearances, or a tendency to ice

over in cold weather. A base knowledge of the work site, combined with active, ongoing situational awareness is critical to avoiding the most common and preventable of workplace accidents.

Traditional rail safety should also always be practiced: never walk in between the rails or on the railheads and be mindful of blue flags, which indicate an inactive switch.

Trackmobile is constantly innovating our machines to achieve new heights of productivity and safe operation.

Risk Prevention

Where a Trackmobile is concerned, a significant amount of risk prevention can be performed simply in the way operators start and stop the machine. Prior to starting, an employee should complete the daily checklist to ensure that the machine is in good working condition for the day.

After boarding using the 3-point contact rule of mounting and dismounting, they should check that the parking brake is set and that no one is under or around the machine. The main display will show gauges of various pressures and temperatures, all of which should be verified as proper and correct, along with the train air pressure gauge. Finally, before moving the machine, the operator should confirm that the horn is working and blow the horn to alert all in the area that it is on and potentially in motion. When braking, always use the train air brakes, and brake well in advance, in accordance with your speed. When going through a curve, be sure to brake before the curve, rather than on it. Always use handbrakes and chocks to park or permanently stop the machine.

Safety Features

In conjunction with good internal safety practices on the individual and organizational level, the next step is using machinery that comes equipped with safety features specifically designed to reduce the kinds of risks present in a rail environment. Trackmobile is constantly innovating our machines to achieve new heights of productivity and safe operation. Features like our Ground Control System and remote control option reduce the manpower needed to operate a trackmobile while making it possible for the operator to stay clear of the machine itself and eliminating the risks of assuring the proper communication between operator and groundman.

Our Safe-T-Vue™ cameras make it easier to mount the rails, couple with cars, and keep the driver aware of any potential dangers or obstructions in the immediate vicinity. By providing a 360° view of the Trackmobile, it also helps to eliminate blind spots. Built-in diagnostics that can be monitored from inside the cabin ensure that all operators and technicians are continually kept aware of the machine's condition.

Speed Control and Vigilance
Control both determine the way the Trackmobile is driven, enforcing specific safety parameters. Speed Control (typically set manually by individual company managers) limits how fast the machine can move, which is especially helpful when braking is a concern. Vigilance Control requires input from the operator at regular intervals to ensure operator awareness and attention; if the operator fails to provide the input, the machine will release a warning sound, then initiate an emergency stop.

Braking Systems

Arguably the most critical safety-related feature of Trackmobile machines is the presence of three separate braking systems: machine brakes, train air brakes, and parking brakes. Machine brakes control the Trackmobile itself, while the train air brakes give the operator the ability to stop each car in the string. Train air brakes, however, should not be expected to hold a parked railcar in place; for this, Railcar handbrakes need to be applied for secured, unattended railcar placement. These features were all designed with the express purpose of making Trackmobile machines easier and safer to use; they make the difference between a machine that is designed appropriately to fulfill its intended purpose and one that proactively decreases risk to employees and property.

While all of these factors are vital to the health and success of your employees, there is one last external element that must be in place for your organization to have thoroughly addressed its safety concerns:

A well-trained operator is as beneficial to an organization as a poorly trained operator is dangerous.

Comprehensive Rail Safety Training

When it comes to operating a Trackmobile, so much depends on the person in the driver's seat, and much of your site safety is dependent upon their actions at the wheel. A well-trained operator is as beneficial to an organization as a poorly trained operator is dangerous. We place so much stock in thorough third-party rail safety training, we include a free seat in a course of rail safety training with every new machine we sell.

In those courses, future operators learn the fundamentals of working on a crew and in a railyard. They are then instructed in the actual operation of their machine by Trackmobile distributor representatives, from initiating on-track movement to using the air brake system.

They learn how to mount, dismount, and cross over rail equipment, as well as coupling and uncoupling with railcars. The benefit of this third party training extends well beyond the basic operation of the machine—it gives rail yard employees ownership of their own safety, as well as the safety of their coworkers and their entire facility.

Minimizing risk and making your organization as safe as possible is top priority for anyone working with, on, or around rails. Accomplishing these goals relies on fulfilling a number of internal requirements, ranging from the establishment of hard-and-fast safety protocols to ensuring that your equipment is designed for its intended function. Additionally, external factors like choosing machines that use innovative safety solutions and providing for the proper training of operators can ensure that your organization has done everything in its power to give employees a safe working environment. **TM**

> **"Safety isn't expensive, it's priceless."**