

Bogey mainentance upside down

By Denise Louder

leaning and maintenance, particularly of a rail truck's underside, has always been awkward and labor intensive for the rail industry. The truck has to be rolled onto a repair hoist, which then raises the vehicle from the floor leaving shop personnel to always look upward as they work underneath. Despite the best efforts of the shop crew, this is a time consuming but necessary task given the rigorous periodic inspections and maintenance required for passenger-carrying rail vehicles and locomotives.

The process, though unwieldy and awkward, has long been accepted in the rail industry for lack of anything better. If the shop crew could work on the underside at eye level, however, there would be a reduction of time, effort and most of all, labor costs.



Macton's rotator system turns the vehicle on its central axis at a convenient working height to facilitate disassembly, inspection and maintenance. It is also able to be mounted on rails and moved around the shop

Simplifying the process

Macton Corp. developed a rotator system that actually turns the truck on its central axis at a convenient working height to facilitate disassembly,

inspection and maintenance. It eliminates the necessity of shop personnel having to work with the truck hoisted overhead. The rotator is efficient and safer for maintenance and improves the process of truck

inspections as required by the safety guidelines of the **American Association of Railroads**.

Unlike a portable jack rotator assembly that cannot be moved once the truck is loaded onto it, this rotator can be either fixed to the shop floor or mounted on rails so that it can be moved within the shop even with the truck loaded on the rotator. Platform mobility is especially conducive for easy cleaning on all sides in wash bays.

To ensure the rotator can securely handle multiple truck configurations, the rotator design may include customized grippers. There is also technical support available to include such essentials as data for structural analysis; foundational, electrical and control requirements; and spare parts.

The rotators normally require only routine maintenance – which can be scheduled for less busy periods, and minimal servicing – which should not result in any operational disruptions or expensive downtime.

In action

Amtrak operates a rotator system at its Wilmington, Del., locomotive shop – the primary shop for electric locomotive fleet in its Northeast Corridor. Assistant Superintendent **Dan Ruppert** said safety and timesavings are the rotator's biggest benefits.

"We were always concerned about slippage from the overhead hoist, but the rotator has completely eliminated that problem," Ruppert said. "And as for saving time, this process used to take a half an hour to an hour, but now it only takes a few minutes." Ruppert cited another timesaving benefit: Amtrak can rotate a fully-loaded truck instead of having to remove wheel sets and traction motor as required when using an overhead crane. "We can also use the rotator for different trucks and can run test traction motors at 60 mph," he added.

The key to the success of a truck rotator system is its ability to meet performance and cost-saving goals. Rail organizations, which operate on extremely tight budgets, have to look for innovations that can cut costs while improving maintenance crews' performance and safety. The rotator is designed to do just that.

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