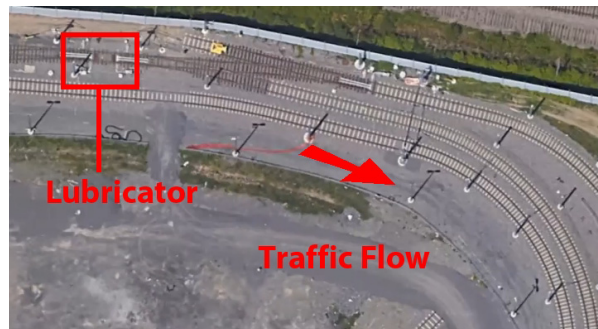




## CASE STUDY: LRT RAIL YARD

### APPLICATION: GAUGE FACE RAILSIDE LUBE

As cities and public transit systems continue to grow, authorities are having to modify existing infrastructure to accommodate that growth, using often very limited amounts of available real estate. The number of tracks within each rail yard are increasing, resulting in tighter rail corners. Yards authorities are finding the wheels on new cars may have a tendency to climb the rail and derail themselves on the tight curves, as they come in at slow speeds. Increasingly in the industry, there is a need for rail lubricators to apply grease between the wheel and the rail gauge face to stop the wheels from climbing.

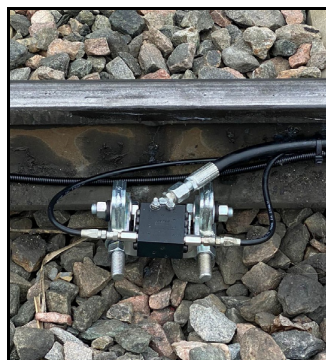


### THE FLO SOLUTION

FLO supplied this LRT yard a progressive-type, positive displacement design automatic wayside rail lubrication system, to apply lube with an applicator bar flanged to the rail profile. The lubricator greases only the gauge face on the rails. It is installed at the tangent (before the corners), with one applicator on each rail, before it splits off into several tracks. The lube is picked up by the train's wheel circumference and evenly distributed on the rail contact area, as each train heads into the corners.

A high-pressure pump and the positive displacement design of the divider valve ensure a constant, metered volume of grease is delivered to the contact surface on the gauge face regardless of back pressure or cold weather conditions. Wheel sensors detect and count approaching train axles and initiate a lube event. Event duration, which determines the lube supply, is adjustable and can be set to the applicable conditions.

The system is assembled in a stand-alone, double-wall steel enclosure, complete with controller, pump package and grease reservoir level indicator. This enclosure allows for remote installation, protects the system from outdoor environmental conditions and reduces possible contamination. At this installation, a solar panel power supply was also included, however a 120V connection is an option. The pump package is integrated into the enclosure, with the pump inlet located at the bottom of the 200lb, hopper-style, double-wall grease reservoir, eliminating the need for any special brackets or mounting connection requirements. High fluid pressure from the pump pushes grease to each piston in the Lincoln SSV divider valve to displace fluid to one port. Each port receives equal amounts of grease, so there is no pooling of grease at the ports with least resistance, no clogging of ports and no wasted grease. A high pressure, high volume SS element grease filter, installed at the pump outlet, protects the system and rails from contamination. It can be removed, cleaned and reinstalled without disconnecting any lube lines.



### FLO RESULTS

The wayside rail lubrication system from FLO Components has eliminated the issue of wheel climbing and derailment, lowered maintenance costs and keeps the yard operating smoothly.

**For Total Lube Solutions,  
GO WITH THE FLO!**

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