



# Hydraulic Wayside Lubrication System

## Portec-M&S 761 Hydraulube®

Portec's unique comprehensive three-method **H.O.W.**™ (Hi-rail, On-board, Wayside) approach for controlling wheel/rail interface wear conditions is anchored by the wayside lubrication delivery system. Since the early 1940s Portec has steadily built a solid reputation through the evolutionary development of wayside lubrication technology. Today, even with the advancements achieved in hi-rail and on-board lubrication delivery methods, wayside lubrication is still the most popular way to "guarantee" wear control at specific sections of track in high-wear environments.



**PORTEC**  
RAIL PRODUCTS, INC.



**United, the best of the best...superior performance!**

Portec recognized the superior performance potential of uniting the industry's two leading competitive hydraulic wayside lubrication systems into one exceptional unit. To achieve this Portec acquired the Moore & Steele lubrication product line. The result — Portec-MGS 761 Hydraulube™, a system that is second to none in wayside wheel/rail interface wear control.

**Four key components... one superior system!**

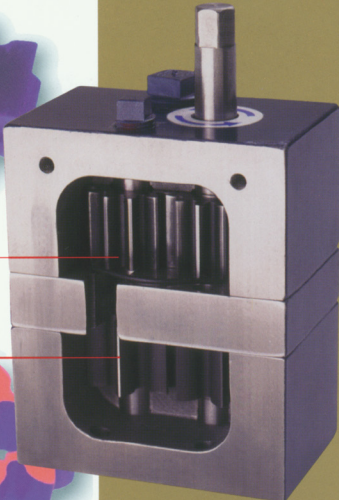
The Portec-MGS 761 Hydraulube™ is ideal for any track condition and all train speeds. We've combined and refined the key components that rail freight and rail transit operators have asked for. However, the system is designed to provide flexibility according to each customer's need and preference for maximum performance.

**The MotorPump™... heart of the system**

The patented MotorPump™ is an efficient, hydraulically powered rotary motor driving a meshed gear grease pump. The low-pressure system requires very little maintenance and is easy to prime and troubleshoot because of an exposed auxiliary shaft. Its rotary motion is what makes it reliable and efficient, its simplicity is what makes it superior.

Hydraulic stage

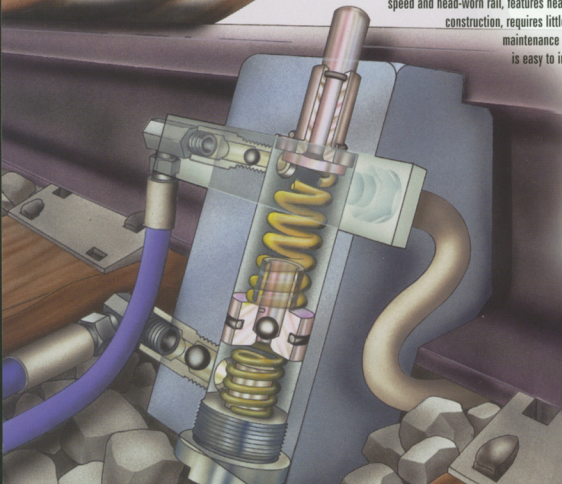
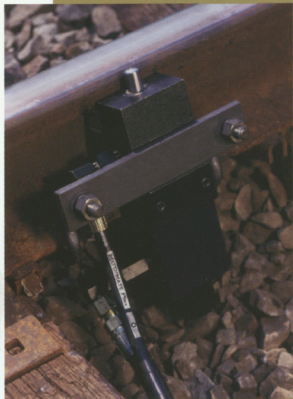
Grease stage



Cutaway view of MotorPump™

**Powerblock® ...a patented power source**

The Powerblock® actuator converts the passing train wheel energy into impulses of hydraulic power for the MotorPump™ through a closed loop hydraulic system that delivers consistent pressure (a relatively low 600 psi). The impulse is controlled by utilizing a spring to drive the piston's power stroke rather than directly by the passing wheels which vary in speed affecting the impulse. The Powerblock® actuator is adjustable to compensate for train speed and head-worn rail, features heavy-duty construction, requires little maintenance and is easy to install.



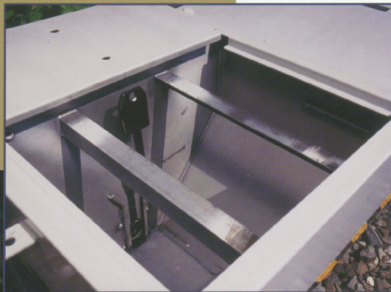
**"Clean Hands"  
Grease Tank™ -  
easy component access**

Portec offers the 761 Hydraulube™ with a number of different grease tank designs in a variety of sizes. All tanks feature a "clean hands" compartment that houses the MotorPump™, hydraulic fluid reservoir and grease bypass control regulator in a grease-free environment that provides easy access. Select the economy tank, our basic design, or a heavy-duty model with thicker gauge steel, grease slope plate, lifting handles and moisture-proof sealed lid.

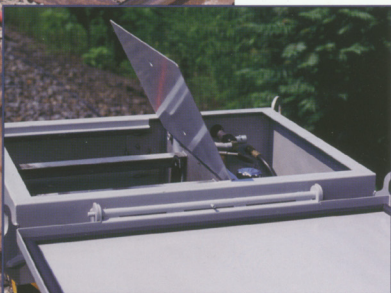
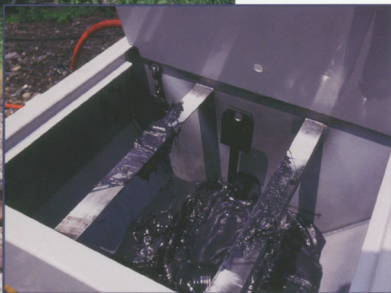
Because the 761 Hydraulube™ is a closed-loop hydraulic system, the grease tanks can be positioned above, below or at the same level as the track structure (normally 25 feet away and in some applications as far as 40 feet away.)

The economy tank is available in 300- and 650-pound grease capacities. The heavy-duty tank is available in 400- and 800-pound capacities. The 800-pound tank comes in single and multi-track configurations.

Some special tank sizes are available for unique applications. Call Portec for details.



*Grease slope plate.*



*The clean hands compartment can be locked separately from the grease tank ensuring tamper free operation*



**Trackside lubricant applicators...  
where everything  
comes together!**

No matter how effective an actuator converts wheel power or a pump advances grease, when it all comes together, it's up to the trackside lubricant applicator to finish the job of protecting the rail and wheels!

The interaction between wheel and rail on freight and rail transit is affected by many factors - train speed, tonnage, track condition and terrain, among others. That's why Portec offers a range of different trackside lubricant applicators to fit your particular needs and conditions.

The unique, innovative design features of our trackside lubricant applicators set them apart in the industry. Year after year they easily handle the punishment of heavy axle loads, bad wheels, high volume traffic and extreme climates, all the while efficiently and almost effortlessly reducing railwear by reliably applying the precise amount of lubricant exactly where it's needed. Worldwide field proven performance!



**Retrofit kits  
and  
accessories**

The Portec-MGS 761 Hydraulube® is available in retrofit kits for all Portec and competitive electric, mechanical and hydraulic wayside lubricators. Portec also offers these wayside lubrication site products

- **Bulk Grease Transfer Systems**  
Customized, mobile systems for rail curve grease replenishment of wayside lubricators and on-site stationary systems for bulk rail curve grease storage and transfer. Bulk transfer reduces personnel injury potential and improves lubrication effectiveness by helping to ensure lubricators are properly supplied.
- **Specialized Lubricants for Use With Wayside Lubricators**  
Graphite and moly based as well as biodegradable and environmentally safe rail curve greases formulated to provide excellent coverage, enhanced carry and reduced sling-off.
- **CATCH-ALL™ Track Mats**  
A high-tech geocomposite material that is effective in protecting soil or ballast at track lubrication sites, bulk handling facilities and equipment storage areas. CATCH-ALL™ has excellent durability and requires little or no maintenance.

The Portec-MGS 761 Hydraulube® Wayside Lubrication System is part of the Portec Lube Crew™ family of hi-rail, on-board and wayside lubrication systems and contract services programs — H.O.W.™

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