

PENETRANTS • FUEL TREATMENTS • DEGREASERS • INDUSTRIAL LUBRICANTS • RUST SOLUTIONS

CASE STUDY

HISTORIC TRAINS STAY ON TRACK WITH KROIL



The Western Maryland Scenic Railroad (WMSR) offers year-round journeys that allow passengers to experience the scenic Allegheny Mountains while being transported by historic steam and diesel locomotives representing the golden age of train travel. The most active train in the WMSR fleet is pulled by locomotive 1309, the largest steam engine of its type east of the Mississippi River. Built in 1949, the enormous 1309 underwent an 8-year, \$3.5M restoration managed by WMSR and supported by train aficionados throughout the region.

The Challenge

With a business focused on equal parts tourism and historic restoration, WMSR must keep their trains in peak running order at all times. This is no small task when dealing with vintage steam and diesel locomotives and passenger cars, which require constant, year-round maintenance. Working on this equipment is a specialized art, and WMSR employs highly skilled technicians who are continuously inspecting their trains, taking things apart and putting them back together again. Due to the age of the trains, daily use and ongoing weather elements, techs deal with rusted, corroded and seized metal parts almost hourly. Their most important job is ensuring that trains run on-time, as WMSR can lose \$30,000-\$35,000 any time a sold-out train goes down.

DID YOU KNOW?

160,000

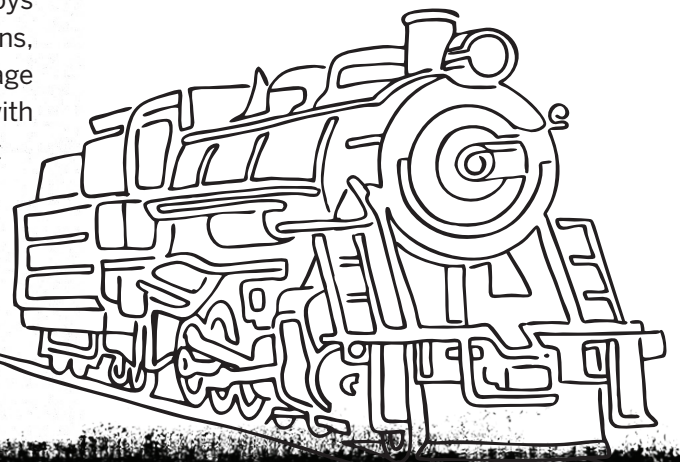
Miles of track in the US rail transport network

643,100LBS

Gross weight of Locomotive 1309,
restored by WMSR

16 TONS

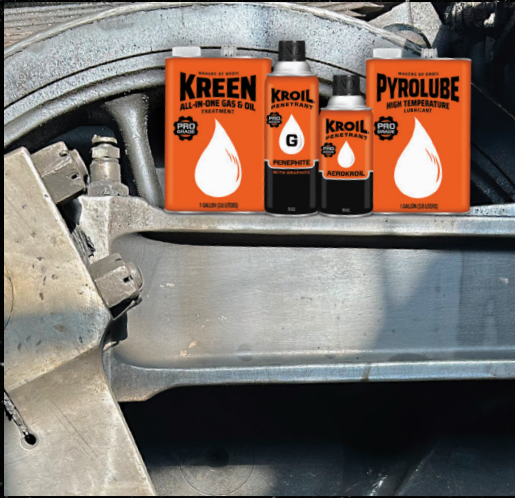
Amount of coal required to propel
Locomotive 1309



How Does Kroil Solve the Problem?

HEAR FROM INDUSTRY PROS





The Solution

KROIL PENETRANTS

WMSR maintenance technicians have trusted Kano products for decades to help their trains stay on track. Kroil penetrants are used daily to help restore and maintain engines and passenger cars that have been outside for decades. Kroil Original Penetrant is most commonly used on studs, nuts and bolts and is a massive time saver for the WMSR crew. Kroil's penetrating power also allows the techs to avoid using heat to loosen stuck parts, as heat can alter the original state of metal. Kroil's Penephite Penetrant with Graphite is used for lubricating passenger car spring-brake rigging, which must be routinely maintained to avoid dirt and oil buildup that can cause malfunctions and braking issues. Penephite is also used on locomotive 1309's spring-brake rigging, as failure to lubricate the brake system can cause permanent damage to the locomotive's frame. The WMSR team also uses Kreen Gas and Oil Treatment on various fuel systems, and Pyrolube High Temperature Lubricant on heat-sensitive steam appliances and boiler parts.

The Results

“Between both engines - the 1309 and the restoration of 734 - we're currently using an average of a can of Kroil a day. With multiple projects in our restoration facility going on at once, there's always a mad scramble to find the bright orange cans.”

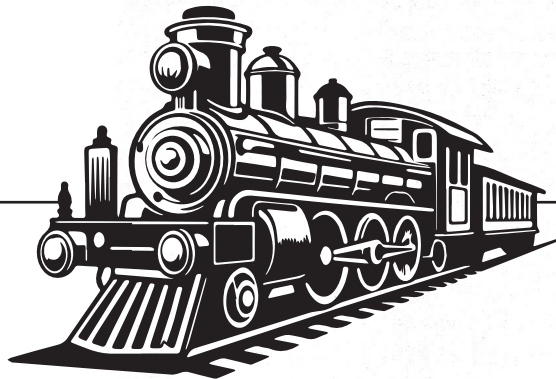
CAMERON S., CONDUCTOR & SHOP MECHANIC, WESTERN MARYLAND SCENIC RAILROAD

“Locomotive 1309 has wear and tear from years of common carrier service on the Chesapeake & Ohio Railroad in the 1950's. Penephite ensures that the spring-brake rigging and running gear components on this vintage train will last until the end of our careers, and for generations to come.”

CALVIN K., LOCOMOTIVE 1309 FIREMAN, WESTERN MARYLAND SCENIC RAILROAD

“Kroil saved the day on a planned 8-hour job of removing cylinder casting studs on the 1309. Having no luck with wrenches alone, we turned to Kroil and were able to remove the studs in just under an hour, significantly speeding repairs on our main attraction.”

BRETT B., MARKETING DIRECTOR, WESTERN MARYLAND SCENIC RAILROAD



For additional details, please contact sales@kanolabs.com

www.kroil.com

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KROIL