

**LORAM**

# CONTROLLED EXCAVATION WITH UNMATCHED VACUUM POWER.

## LRV SPECIALTY EXCAVATOR

**Loram's LRV** is a powerful, rail-mounted specialty excavating machine that removes up to 50 cubic yards of material per hour using mechanical agitation and airflow. The most productive, vacuum-based maintenance of way excavation machine on the market, the LRV combines a diesel engine-powered manipulator arm and powerful, twin-engine vacuum pumps, making it capable of excavating a host of material challenges including compacted or ice-crusted ballast, mud, water, sand and soil.

The LRV is rail mounted and designed to travel at track speeds while towing up to four fully loaded ballast cars. It offers precision control, unmatched power and a compact footprint, applying an industry-leading 5,000 pounds of force to break up tough material in a way that a rotating nozzle alone cannot. It also offers unmatched flexibility to accommodate hard to reach track structures. The nozzle can tilt 45° from vertical in any direction to reach ballast under hard to reach track structures, such as third rail. The nozzle can also work at distances up to 15 feet from track centerline, maximizing the work area.

Compact power and control make the versatile LRV ideal for excavating specialty trackwork, trackside equipment and yard applications, with the ability to traverse and operate within restricted clearances, including tunnels, passenger platforms and bridges.

### FEATURES AT A GLANCE

- **Twin 320 hp (240 kW) vacuum pumps** delivers 5,000 lb (2,268 kg) of force to excavate the most challenging materials
- **20 yd<sup>3</sup> (16 m<sup>3</sup>)** of material storage capacity
- **Removes up to 50 yd<sup>3</sup> per hour (38 m<sup>3</sup>/hr)** combining powerful mechanical agitation and airflow
- **Powered manipulator arm** with nozzle can tilt 45° from vertical and reach 15 ft (4.6 m) from centerline
- **Compact, targeted and versatile** for dozens of discrete excavation applications

For more information on this machine, or on developing a tailored maintenance program for your railroad, contact Loram at **1-800-328-1466** or visit **LORAM.COM**

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# SPECIFICATIONS

## LORAM LRV SPECIALTY EXCAVATOR

	LRV SPECIALTY EXCAVATOR
Length <sup>1</sup>	105 ft (32 m)
Width <sup>1</sup>	10 ft (3 m)
Height <sup>1</sup>	14.5 ft (4.4 m)
Weight <sup>1</sup>	220,000 lb (99,800 kg)
Production Rate <sup>2</sup>	<ul style="list-style-type: none"> <li>– Loose, granular material—50 yd<sup>3</sup>/hr (38 m<sup>3</sup>/hr)</li> <li>– Compacted, moderately fouled—28 yd<sup>3</sup>/hr (22 m<sup>3</sup>/hr)</li> <li>– Heavily cemented or clay filled—13 yd<sup>3</sup>/hr (10 m<sup>3</sup>/hr)</li> </ul>
Max. Excavating Depth	5.5 ft (1.7 m) from top of rail
Excavating Width	15 ft (4.6 m) from track center
Material Storing Capacity	20 yd <sup>3</sup> (16 m <sup>3</sup> )
Air Flow, Open Flow	10,200 ft <sup>3</sup> (289 m <sup>3</sup> ) per minute
Vacuum	14 psi (0.95 bar)
Material Discharge	Up to 30 ft (9.1 m) from either side of track center or into an auxiliary car
Travel Speed	<ul style="list-style-type: none"> <li>– Self-powered: Up to 45 mph (74 km/h)</li> <li>– In train consist: Up to 60 mph (100 km/h)</li> </ul>
Gradeability	Up to 4%
Minimum Work Radius	22° curve (80 m radius)
Minimum Travel Radius	22° curve (80 m radius)

<sup>1</sup> Excluding Auxiliary Cars

<sup>2</sup> Typical; subject to application and material conditions

*Specifications subject to change*

### LRV Additional Features & Benefits:

- Built to work in tough Class I railroad conditions and on commuter or transit railroad environments
- Advanced, self-cleaning dust filtration system
- AAR 400 & 401 compliant
- Designed to travel at track speeds up to 45 mph (74 km/h) while towing fully-loaded material handling cars

### LRV Excavation Applications Include:

- Cribbing and undercutting mainline mud spots
- Removing fouled ballast and debris from tunnels
- Cleaning and installing drain tiles and culverts
- Cross trenching for cables and pipes
- Removing ballast from bridge decks and grade crossings without removing ties or rail
- Undercutting switches and diamonds
- Excavating contaminated materials from yards and stations
- Yard cleaning and reconstruction
- Locating and excavating cables without damage



### SERVICE & SUPPORT

With a 60-year plus legacy of serving the railroad industry with the most advanced technologies, the most reliable and productive maintenance of way equipment and world-class contract service work, Loram brings its partnership approach to every customer relationship. This includes an extensive training and technical support program with every machine. Whether for a heavy haul, high-speed, underground or metro-rail system, Loram has the equipment and services you need.

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