

# MULTIPURPOSE STONEBLOWER



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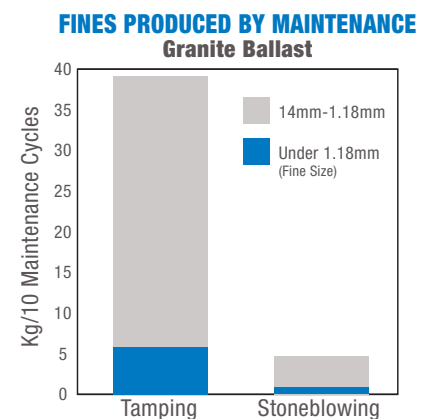
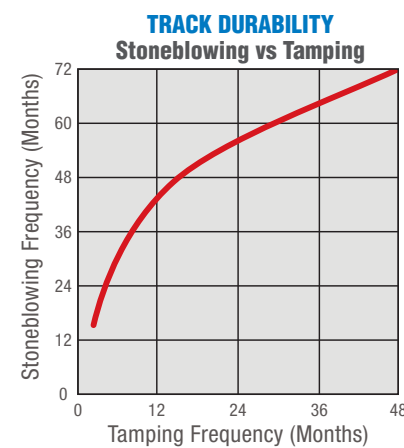
## Special Features

The Multipurpose Stoneblower is a revolutionary machine developed specifically as an alternative to traditional tamping methods for the restoration of the track's vertical and lateral alignment. The machine utilizes a process which pneumatically injects ballast under the sleeper to achieve a track position accuracy without disturbing the pre-existing compacted formation.

The result is a smooth track surface which can be immediately available for unrestricted line speeds. The machine has undergone extensive testing to meet demanding requirements and has demonstrated the ability to significantly extend the time required between track maintenance cycles.

### Features & Benefits

- Complete vertical and lateral track design capabilities
- Automatic indexing with two sleepers treated simultaneously
- Automatic sleeper position sensing
- Computer accessed calibration routines for reference system, workheads, and stone supply system
- Dual encoder system for distance and feature recording
- On-board crane loads machine completely with stone in less than one hour
- Complete track recording system
- Operator interface via touch screen monitors
- Diagnostic system to monitor all machine functions including drive and stone supply system
- Paint marking system



Multipurpose Stoneblower injecting stone under sleepers to lift track.

### Measurement

The machine travels over the site at up to 16 km/h (10 mph) measuring the pre-maintenance condition of the track.

### Design

On-board computers use the data collected during the measurement process to determine the profile of the track and calculate the lift, slew, and stone quantity for each sleeper. The design uses a pre-selected track quality level to minimize lifts and the stone quantity for each sleeper.

### Maintenance

The machine moves down the track, in the opposite direction to measurement, treating each selected pair of sleepers simultaneously. At the completion of maintenance, the machine produces a record of pre- and post-treatment track quality. The resultant condition of the track is generally suitable for immediate unrestricted line speeds.

### Increased Productivity

The Multipurpose Stoneblower's track design system targets only sections that require rectification and does not treat track with acceptable pre-maintenance quality.

On-board diagnostic systems monitor quality during operation. Post maintenance record of quality immediately available.

### Improved Ballast Life

Stoneblowing is significantly less damaging to ballast as compared to normal tamping methods. Tests conducted in the United Kingdom and repeated in the United States have verified reduced ballast degradation. Up to 4 kg of fines per sleeper are produced by one tamping insertion while only 0.5 kg of fines per sleeper are produced by an equivalent stoneblowing cycle.

### Special Application

After stoneblowing, tests have shown that the track remains in position on average, four times longer than track maintained by traditional tamping methods.

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## Specifications

Length	32.2 m (106 ft.)
Gross Weight	113 tonnes (124 tons) carried on three bogies
Travel Speed	100 km/h (60 mph) Max
Maximum Axle Load	18 tonnes (20 tons)
Average Output	440 m/hr (1,400 ft./hr.)
Measuring Speed	16 km/h (10 mph) Max
Engine	CUMMINS QSK19, 567 kilowatt; 760 HP @ 2,100 RPM
Auxiliary Power Unit	220 VAC 50 Hz, 28 kilowatt electrical output
Track Lifting	0 to 80 mm (0 to 3.2 in.)
Track Slewing	0 to 80 mm (0 to 3.2 in.)
Minimum working radius	150 m (500 ft.)
Fuel Capacity	4,500 liters (1,200 gal.)
Hydraulic Tank Capacity	950 liters (250 gal.)
Stone Capacity	16 tonnes (18 tons)
Stone Size	#6—approximately 20 mm (0.8 in.)
Automatic Index Distance	1 sleeper pair

Download full specs at [www.harscorail.com](http://www.harscorail.com)  
 Watch video at [www.youtube.com/user/harscorail](http://www.youtube.com/user/harscorail)

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