

# MULTIPURPOSE STONEBLOWER





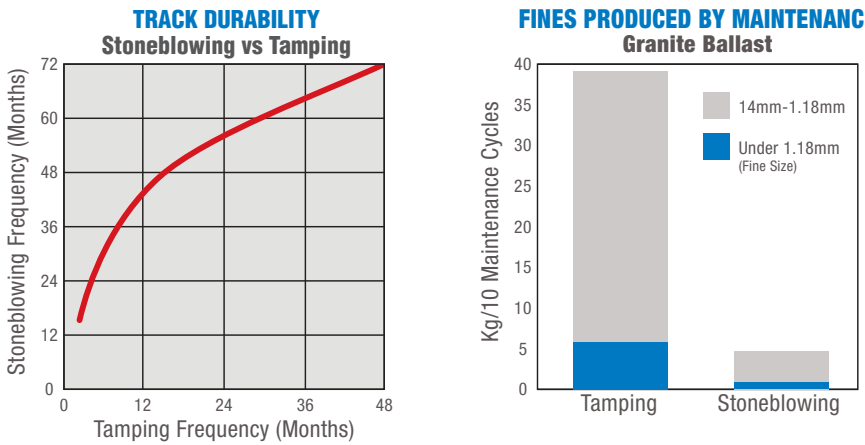
# MULTIPURPOSE STONEBLOWER

## 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 that pneumatically injects ballast under the sleeper to achieve track-position accuracy without disturbing the pre-existing compacted formation.

The result is a smooth track surface. 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 touchscreen 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.

### 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, up to four times longer than track maintained by traditional tamping methods.

# MULTIPURPOSE STONEBLOWER

## 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	20 tonnes (22 tons)
Average Output	440 m/hr (1,400 ft./hr.)
Measuring Speed	16 km/h (10 mph) max
Engine	Based on customer requirements
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)

### Harsco Rail, Harsco Corporation Facility Locations:

Harsco Rail Global Headquarters  
3440 Toringdon Way  
Suite 100, Building 3  
Charlotte, NC 28277, USA  
Tel: +1 980 960-2624  
E-Mail: [railinfo@harsco.com](mailto:railinfo@harsco.com)

Harsco Rail Manufacturing Operations  
2401 Edmund Road, Box 20  
West Columbia, SC 29171-0020, USA  
Tel: +1 803 822-9160  
E-Mail: [railinfo@harsco.com](mailto:railinfo@harsco.com)

Harsco Rail Engineering Center  
306 West 4th Street  
Fairmont, MN 56031-1837, USA  
Tel: +1 507 235-7376  
E-Mail: [railinfo@harsco.com](mailto:railinfo@harsco.com)

Harsco Rail Manufacturing Operations  
200 South Jackson Road  
Ludington, MI 49431, USA  
Tel: +1 231 843-3431  
E-Mail: [railinfo@harsco.com](mailto:railinfo@harsco.com)

Protran Technology  
1960 Old Cuthbert Road  
Suite 100  
Cherry Hill, NJ 08034, USA  
Tel: +1 856 779-7795  
E-Mail: [info@protrantechnology.com](mailto:info@protrantechnology.com)

Harsco Rail Pty Ltd Australia  
4 Strathwyn Street, P.O. Box 5287  
Brendale  
Queensland 4500, Australia  
Tel: +61 7 3205 6500

Harsco Rail Ltd United Kingdom  
Unit 1, Chewton Street, Eastwood  
Nottingham NG16 3HB, United Kingdom  
Tel: +44 (0) 1773 539480  
Email: [uksales@harsco.com](mailto:uksales@harsco.com)

Harsco Rail Ltda Brazil  
Av. Marechal Câmara, 160 / 1615,  
Centro  
Rio de Janeiro RJ 20020-080, Brazil  
Tel: +55 21 2510-5164 / -5151

Harsco Rail Europe GmbH  
Luetticher Str. 130  
40547 Duesseldorf, Germany  
Tel: +49 (0) 211 60116 0  
E-Mail: [info@harsco-r.de](mailto:info@harsco-r.de)

Harsco Rail China  
Room C1201 Tower 2,  
No.36 BeiSanHuan Dong Lu,  
DongCheng District,  
Beijing 100013, P.R. China  
Tel: +87 10-6590-6399

Harsco Track Machines and Services  
Private Limited India  
2nd Floor, Building Alpha,  
Bengal Intelligent Park Block EP & GP,  
Sector V, Salt Lake, Kolkata  
700091 West Bengal, India  
Tel: +91 33 2357 5651

The HARSCO RAIL equipment pictured in this brochure is intended to illustrate the general appearance and features of this product. It is equipped as specified by a particular customer and may or may not show items that are optional or recommended by HARSCO RAIL, Harsco Corporation. Specifications, illustrations, and descriptive materials herein were accurate as known at the time this publication was approved for printing. HARSCO RAIL, Harsco Corporation reserves the right to discontinue models or options at any time or change specifications and materials, equipment and design without notice and without incurring obligation. Federal, State or Provincial, and/or local laws and regulations may require additional equipment for the particular use intended for this product. It is the buyer's responsibility to determine the applicability of such laws and regulations to the buyer's intended use for the product and to arrange for the installation of the required equipment. Other products and companies referred to herein are trademarks or registered trademarks of their respective companies and/or mark holders.

### Harsco Rail Global Headquarters

3440 Torrington Way  
Suite 100, Building 3  
Charlotte, NC 28277, USA

Main Tel: +1 803 822-9160  
Email: [railinfo@harsco.com](mailto:railinfo@harsco.com)  
[www.harscorail.com](http://www.harscorail.com)

Bulletin #S-01B-0116

Updated in USA, September 2018

**HARSCO**  
RAIL

