

NEW TRACK CONSTRUCTION



NEW TRACK CONSTRUCTION

Special Features

Harsco Rail's New Track Construction (NTC) machine installs new track on a previously prepared roadbed in a continuous operation. The NTC lays 1.5 km of track per day, improving productivity, safety, efficiency, and quality. The NTC works with concrete, pre-plated wood, or steel ties and provides efficient and effective means to laying new track.

Features & Benefits

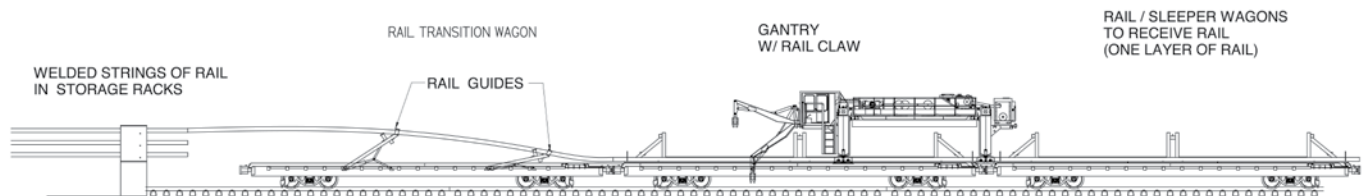
- Works with concrete, pre-plated wood, or steel ties
- Rails capable of being laid: Up to 136 lbs
- Approximately 3 times faster than stick building track
- Working Speed: 10 ties per minute
- Controls the flow of material without overhead cranes
- Move ties to the point of attack
- More precise tie spacing and tie squares



Clipping is carried out by a Nipper-Clipper mechanism on the New Track Construction Machine.



Rail Guide rollers suspended from the Laying Beam. Rails are guided into place on ties by an operator positioned below the beam.



Truss Frame

The NTC unit is supported at one end by a specially modified flatcar running on the newly laid track and at the other end, by a non-powered crawler running on the roadbed. The truss frame contains a conveyor system for carrying the crossties down to the tie laying mechanism which places the crossties on the roadbed at a precise and predetermined spacing.

Tie Pads

Prior to being positioned on the roadbed, cushioning pads are placed on the ties to cushion the effect of steel rails on concrete ties. The entire consist is pulled by a crawler-type auxiliary power unit.



Gantries

A self-propelled gantry, requiring one operator, keeps the ties supplied to the conveyor systems. The tie handling cars are equipped with auxiliary rails which form a continuous running rail for the gantry. Pivoting extensions between the cars allow the gantry to operate on curves. After being deposited by the gantry, the ties move via the conveyor system to the tie drop area.

Rail Laying/Threading

After the rail has previously been distributed along the roadbed, it is threaded through guides located at the rear of the tow unit. It is then guided inward to a gauging station. Final placing of the rail on the new ties is controlled by an operator who guides the rail onto the tie seat. The operator is also responsible for the proper alignment of the track.

Contract Services

Harsco Rail's New Track Construction Contract Services have installed over 4,000,000 ties (equal to 1,515 miles or 2,400 km). NTC Contract Services provide customers with a high quality service by crews that know the machine's maintenance and operation best.

NEW TRACK CONSTRUCTION Specifications

| | |
|-----------------------------|---|
| Length | Working: 45 m (148 ft.) inclusive of flatcar and front end loader Traveling: 36.5 m (120 ft.) transported on 3 flat cars |
| Width | On Bogie: 3.24 m (10 ft., 8 in.) |
| Height | 4.72 m (15 ft., 6 in.) |
| Weight | 250 tons - without locomotive |
| Truss Unit Only | 10,886 kg (24,000 lbs.) |
| Ready to travel on flatcars | 101,151 kg (223,000 lbs.) |
| Recommended tow tractor | Cat 953 track-type front end loader |
| Working Speed | 10 ties per minute |
| Travel Speed | Towed by locomotive for track travel-up to 80 km/h (50 mph) |
| Rails capable of being laid | Up to 136 lbs. |
| Min Curve Radius | Working: 144 m (478 ft.) 12 degrees Traveling: 97.5 m (320 ft.) 18 degrees |
| Gantries | |
| Length | 8.6 m (28.16 ft.) |
| Width | 3.215 m (124 ft.) |
| Height | 6.6 m (15 ft.) above rail |
| Capacity | Up to 22 ties |
| Fuel Capacity | 379 liters (100 gal.) |

Download full specs at www.harscorail.com
Watch video at www.youtube.com/user/harscorail

Harsco Rail
2401 Edmund Rd., Box 20
Cayce-West Columbia, SC 29171-0020

Tel: (803) 822-9160
Fax: (803) 822-8107
Email: railinfo@harsco.com
www.harscorail.com



Bulletin #NTC-01B-0513
Printed in USA, May, 2013



Harsco Rail, Harsco Corporation Facility Locations:

2401 Edmund Road
Box 20
Cayce-West Columbia, SC 29171-0020
Tel: (803) 822-9160
Fax: (803) 822-8107

415 North Main St.
Fairmont, MN 56031-1837
Tel: (507) 235-3361
Fax: (507) 235-7370

200 S. Jackson Rd.
Ludington, MI 49431
Tel: (231) 843-3431
Fax: (231) 843-4830

900 Kings Highway North
Suite 208
Cherry Hill, NJ 08034
Tel: (856) 779-7795
Fax: (856) 779-7431

4 Strathwyn St.
P.O. Box 5287 Brendale
Queensland 4500, Australia
Tel: 61 7 3205 6500
Fax: 61 7 3205 7369

Unit 1, Chewton Street, Eastwood
Nottingham NG16 3HB
United Kingdom
Tel: 01773 539480
Fax: 01773 539481

Av. Marechal Camara
160 Grupo 1901
Control CEP: 20020-080
Rio de Janeiro-RG
Tel: (21) 2510-5151
Fax: (21) 2224-3484

Harsco Rail Europe GmbH
Rehhecke 80
40885 Ratingen
Germany
Tel: +49 2102 937200
Fax: +49 2102 37651

Harsco APAC Rail Machinery Trading
(Beijing) Co. Ltd.
Room 805, State Guest Mansion
No. 11 Fuwai Ave.
100037 Beijing, China
Tel: +8610-6800-3286
Fax: +8610-6800-3288

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.