NEW TRACK CONSTRUCTION

HARSCO
RAIL
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NEW TRACK CONSTRUCTION
Special Features

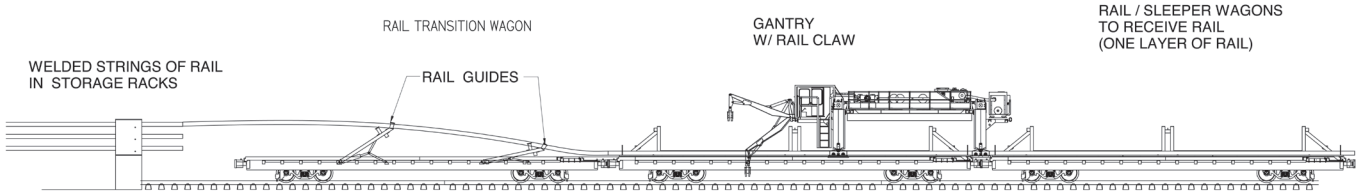
Harsco Rail's New Track Construction (NTC) machine installs new track on a previously prepared roadbed in a continuous operation. The NTC lays 1.5 km of track per day, improving productivity, safety, efficiency, and quality. The NTC works with concrete, pre-plated wood, or steel ties and provides efficient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

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