

RAILCAR PROGRESSIONERS

RUGGED, ADAPTABLE, EASY TO USE

Designed to make the movement of railcars easier and more efficient, the NORDSTRONG Railcar Progressioner is a double drum traction type unit that allows a single operator to handle the loading, unloading and movement of cars.

The unit features a continuous run of cable which moves railcars in both directions. Once railcars are hooked to the cable, the unit can be operated from a remote location.

Main Frame

All railcar progressioner components mount on a single rigid steel frame, which bolts directly to the site's foundation.

Counterweight Assembly

The counterweight assembly automatically compensates for cable stretch by keeping tension on the main cable. Tension sheaves are mounted on anti-friction bearings and housed in heavy duty frames. The assembly includes a solid steel counterweight and a self-contained mast. The complete system mounts directly on top of the railcar progressioner frame.

Safety Guards

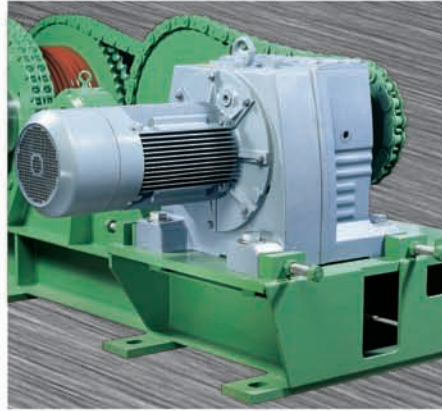
The railcar progressioner is completely enclosed by a protective cage. Expanded metal panels and lockable doors provide complete visual access to all components for inspection and maintenance.



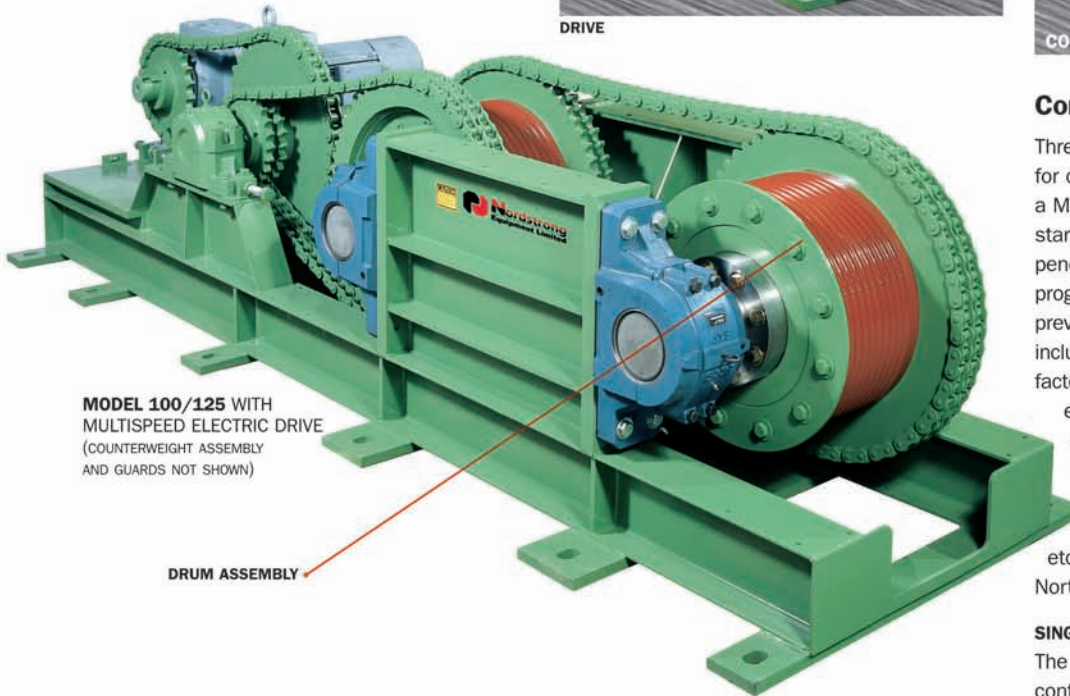
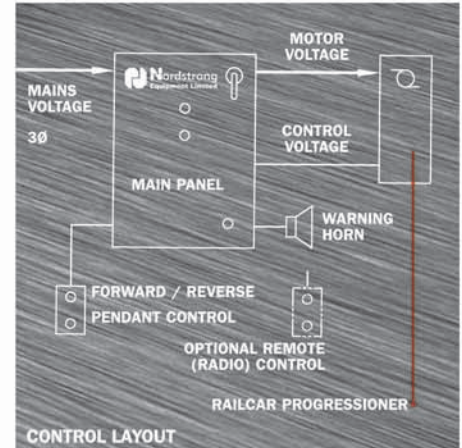
MODEL 100/125 WITH DTC DRIVE, 45,000 LBS. LINE PULL

Drive

The Railcar Progressioner's main drive is a rugged parallel-helical gear brake motor. A hydraulically driven gear reducer is available as an option. Both come factory-filled with lubrication suitable for year-round use in all climates. Final reduction of the main drive train is through a high strength roller chain and sprocket combination. Drive sprockets have hardened teeth, are piloted and bolt directly to the drums.



DRIVE



MODEL 100/125 WITH MULTISPEED ELECTRIC DRIVE (COUNTERWEIGHT ASSEMBLY AND GUARDS NOT SHOWN)

DRUM ASSEMBLY

Drum Assembly

The grooved drums are machined from solid steel blanks, which are shrink-fitted on high strength alloy steel shafts. The shafts are mounted in oversized spherical roller bearing pillow blocks.

Travel Limit Switch

This switch prevents over-travel of cable connections.



TRAVEL LIMIT SWITCH

Controls

Three basic control systems are available for our Railcar Progressioners. All three include a MCP main breaker, a reversing starter assembly and a remote push button pendant. A warning horn to signal the railcar progressioner is in use, and a limit switch to prevent over-travel of the cable connections is included. All main components have been factory assembled and placed within a dust-tight enclosure. Remote radio control is available as an option on all units. In addition, controls can be modified to suit specific needs (such as additional push button stations, interlocks with other equipment, etc.) All controls are available in common North American and International voltages.

SINGLE SPEED ELECTRIC CONTROL

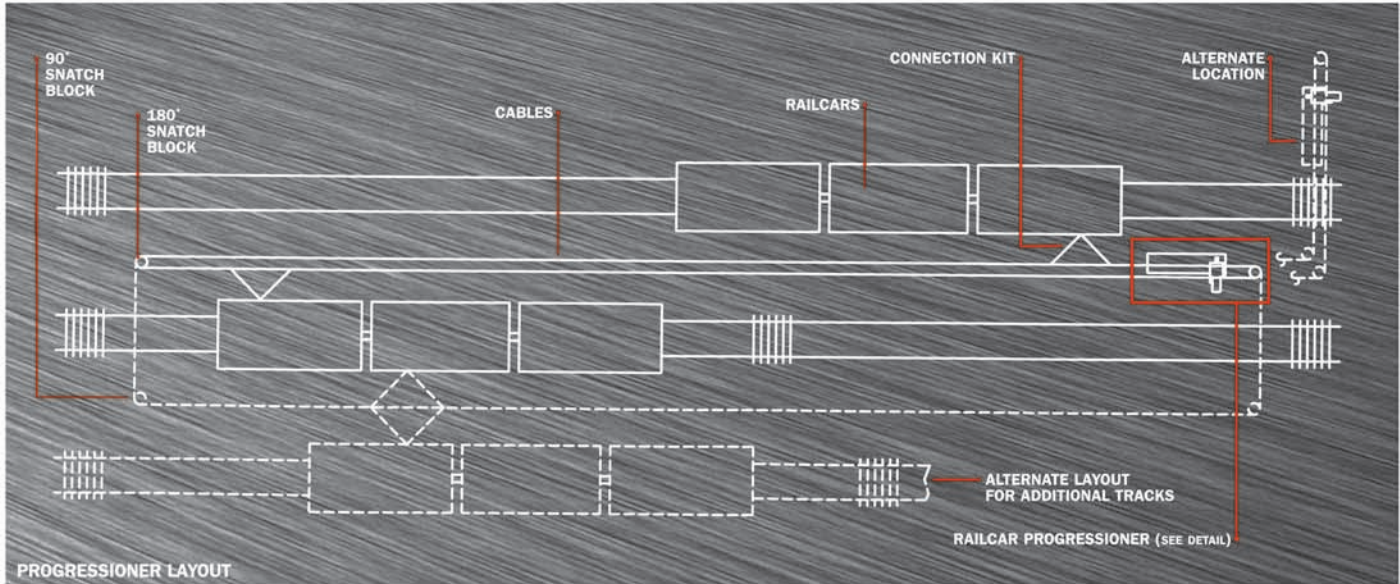
The components listed above come with a control transformer, relays, and required terminals to complete field connections.

ELECTRIC WITH DIRECT TORQUE CONTROL (DTC*)

A DTC unit is provided, which limits the output torque of the drive to the maximum design line pull of the railcar progressioner. The unit also allows for smoother stopping and starting, and multiple-speed operations.

HYDRAULIC/ELECTRIC

Includes a hydraulic power unit (the reservoir comes complete with electric motor, pump, valving, and accessories), and a hydraulic motor which attaches to the railcar progressioner's gear reducer. Its operating features are similar to the DTC unit.



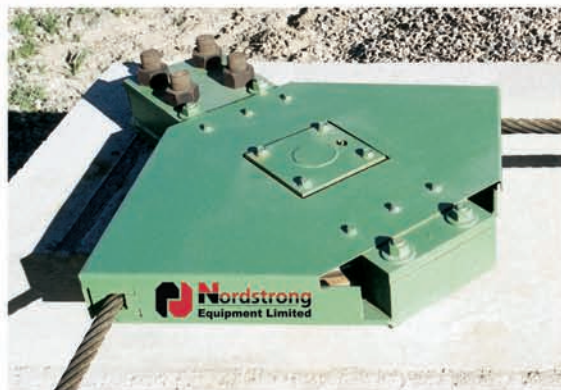
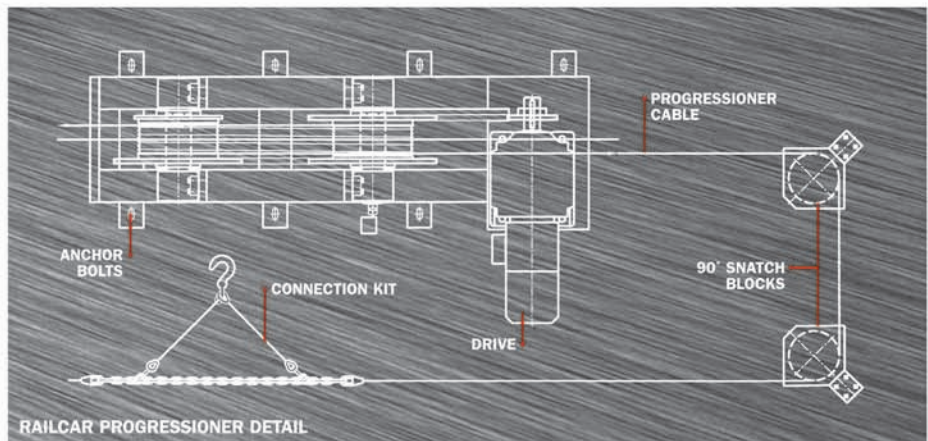
Our Railcar Progressioner Systems can be adapted to a variety of track arrangements. Up to four tracks can be handled by one progressioner. Contact NORDSTRONG to discuss your requirements. A typical layout for one or two tracks is shown here, with an alternate layout for additional tracks.

Cable and Connections

Nordstrong supplies die-drawn, compacted strand cables, which offer higher strength and improved flexibility. Complete cable connection kits, featuring a variety of different sling arrangements, are available for joining the cable ends and hooking to the railcars. Each type of sling is supplied with a break-away link to protect the main cable and railcar progressioner from accidental overloads.

Snatch Blocks

To make possible a wide range of railcar progressioner and track configurations, both 90° and 180° models are available. Both feature steel sheaves and anti-friction bearings housed in substantial frames.



90° SNATCH BLOCK



180° SNATCH BLOCK



Railcar Progressioner Specifications

Model	Drive	Cable Dia.	Line Pull**	Line Speed***	Weight
75/78 Single Speed Electric	10 HP (7.5 kw)	7/8" (22 mm)	20,000 lbs starting (90 kN) 10,000 lbs running (45 kN)	33 fpm (.18 m/s)	10,000 lbs (4500 kg)
75/78 Multi-Speed Electric	25 HP-DTC* (17 kw)	7/8" (22 mm)	23,000 lbs (100 kN)	Multiple	10,000 lbs (4500 kg)
75/78 Multi-Speed Hydraulic	30 HP-HYD (22 kw)	7/8" (22 mm)	23,000 lbs (100 kN)	Multiple	12,000 lbs (5400 kg)
78/112 Multi-Speed Electric	40 HP-DTC* (30 kw)	1 1/8" (29 mm)	37,000 lbs (160 kN)	Multiple	13,000 lbs (5900 kg)
78/112 Multi-Speed Hydraulic	50 HP-HYD (37 kw)	1 1/8" (29 mm)	37,000 lbs (160 kN)	Multiple	15,000 lbs (6800 kg)
100/125 Multi-Speed Electric	50 HP-DTC* (37 kw)	1 1/4" (32 mm)	45,000 lbs (200 kN)	Multiple	19,000 lbs (8600 kg)
100/125 Multi-Speed Hydraulic	60 HP-HYD (45 kw)	1 1/4" (32 mm)	45,000 lbs (200 kN)	Multiple	21,000 lbs (9500 kg)

Other models available – contact Nordstrong for information.

* Direct Torque Control (DTC) technology is patented by ABB.

** Line Pulls represent a minimum factor of safety of 4 on the main cable, based on use of die-drawn, compacted strand wire rope.

*** Multiple speed units are set at 25 fpm and 35 fpm (.13 m/s and .18 m/s) at maximum line pull. A high speed of 70 fpm (.36 m/s) is for moving the cable when not hooked to railcars.

