SINGLE AXLE DROP TABLES



NABHOLZ MANUFACTURES A SINGLE AXLE DROP TABLE THAT CAN BE CUSTOMIZED TO MEET YOUR NEEDS.

The Nabholz team has decades of experience and knowledge designing, fabricating, installing, and servicing drop table systems. Now, we're designing and manufacturing our own drop table equipment under the Nabholz name, with a few key client-focused goals in mind:

- Facilitate equipment maintenance and service
- Improve equipment reliability and longevity
- Provide safe and intuitive equipment operation
- Simplify the installation and equipment start up process

DEREK BARBER Railroad Services Director 501.217.5555 derek.barber@nabholz.com



WE KNOW WHAT YOU NEED.

SAFETY

Safety-first design keeps workers safe during change out of locomotive wheelsets and traction motor assemblies.

RELIABILITY

Rugged design and manufacturing ensure each Nabholz drop table can withstand even the harshest rail shop environments.

MODULAR DESIGN

Modular design simplifies the installation process and minimizes downtime during equipment maintenance.

OPTIMIZATION

A perfectly balanced combination of the latest technology and time tested design features optimizes operation and safety.

PRODUCTIVITY

Productivity-boosting features include raised rail sections on the service top for easy access.

CUSTOMIZATION

Customizable drop table layout and capacity mean each machine is manufactured to meet your unique needs.

FEATURES & SPECIFICATIONS



Direct loading crossbeams eliminate the use of complex nut housings. The load is directly transferred to the top of the lifting nut minimizing side loading on the jacking assemblies.

The jacking unit and crossbeams are designed so that the maximum lift height of the crossbeams extends above the crossbeams to minimize the pit depth required.

The base of the drop table carriage is covered with tread plate to protect electrical componets and provide a safe walking surface when servicing the drop table.



The service top is fabricated using a welded structural beam and utilizes standard rail to provide continuty with shop rail.

A manual lock bar mechanism engages pockets in the foundation to support railcar and locomotive rollover.

Adjustable wheel chocks secure rail wheel at any location on the service top.





A traction motor dolly may be used to support the traction motor assembly when replacing wheel sets with traction motors.

Rollers on the dolly allow it to be positioned along the rail, and locking pins on both sides hold it in place once positioned.

A jacking unit on the dolly allows the operator to adjust the height of the traction motor for proper alignment during the change out process.

Two-column jacking units are driven by a 20 HP gearmotor on each side. An absolute encoder mounted on each motor allows the PLC to monitor the motor speed to ensure that all of the columns are lifting at the same speed. This absolute motor feedback feature is patent-pending.

Carriage traversing is guided by a double flanged wheel on one of the pit rails to prevent carriage misalignment caused by pit rails that are not straight.





Each lifting column houses an acme threaded screw and a bronze load-carrying nut, which are designed to be self-locking — meaning the load will not lower unless the screw is turned by the motor.

A steel safety nut is mounted under the bronze nut, and a nut wear switch incrementally monitors the wear of the bronze nut. This nut gap monitoring system is patent-pending.

Grease is supplied to the screw and nut by a centralized automatic lubrication system.



Upper and lower mechanical limit switches on each column control the minimum and maximum lifting heights of the crossbeams.

The front column opening is covered with high temperature nylon pads to protect the screw and nut from dust and debris.

Laser distance measuring devices on both ends of the drop table carriage allow precise tracking and placement of the carriage as it travels through the drop table pit.





The touchscreen control panel allows the operator to control the operation functions of the drop table and provides the operator with detailed status and fault information.

A hinged protective cover protects the touchscreen when not in use.

The control panel also includes an ON/ OFF switch and an emergency stop switch, operation signal lights, and alarm.



PATENTS PENDING:

Dkt. OKC04279 - NUT GAP MONITORING SYSTEM Dkt. OKC04281 - DROP TABLE WITH MOTOR FEEDBACK

DEREK BARBER Railroad Services Director 501.217.5555 derek.barber@nabholz.com

