



# DUMPER UPGRADES

Smart Retrofits Bolster Savings and Safety.



Engineered Replacement Parts and Upgrades



Vintage Photo From Our Archive



Mechanical Clamping System

Intelligent designs to simplify, save time and money, and make the work environment safer. It's what you expect from Heyl & Patterson, and precisely what our current line of dumper upgrades delivers:

1. A robust solution for converting your existing dumper into one capable of handling the heavier loads easily and securely.
2. Better planning and capital expense efficiencies through "selective parts" replacement.
3. **What's new?** A top-to-bottom package of field-tested enhancements—you can make all at once, or as necessary—to accommodate heavier loads with greater reliability and reduced maintenance costs.  
**How?** With designs that spread weight more uniformly, decreasing the potential for problems and extending dumper life—now more critical than ever with the growing use of heavier unit-trains.



Hydraulic Power Unit



Equalized Trunnions

#### KEY MECHANICAL UPGRADES:

- Spill girder—for aluminum cars.
- Integrated scale—NTEP certified.
- Equalized trunnions—for extending the life of your dumper.
- Dust collection/suppression.
- Bottom dump conversion—when necessary, or for emergency back up.
- Drives—efficient single-reducer design.
- Drive chain upgrade.
- Tagline—featuring advanced engineering and capability.
- Clamps—newer, enhanced styles.
- Split-sheave.
- Chain anchor.
- Re-designed positioner head—for cost-effective replacement.
- Dumper over-travel bumpers.
- Autolube system.

## Mechanical Makeover

*Longer Lasting and More Durable*

Machinery made tougher and built to withstand the rigors of processing heavier cars. Our mechanical improvements increase reliability where it counts most. Already a step ahead with the only built-in scale earning NTEP certification, Heyl & Patterson's full-line upgrade provides dramatic operation boosts through fine-tuned features such as:

**Platen**—Weigh scale that's National Testing and Evaluation Program [NTEP] certified.

**Spill Girder**—With a more even weight dispersal to protect car, prevent damage.

**Equalized Trunnions**—For less stress, reduced wear and increased life.

**Dust Collection/Suppression**—Variety of systems to accommodate individual needs.

**Bottom Dump Conversion**—Modified platen for bottom-dumping flexibility when required.

**Dumper Over-Travel Bumpers**—Cushion impact in over-travel situations.

**Autolube Systems**—Insures consistent lubrications.

**Wheel Chock**—Redesigned.

**Anti-Rotation Lock Outs**—Positively secure dumper against rotation during maintenance.

**Drive Upgrades**—Advanced single-reducer design simplified with fewer moving parts for greater reliability.

**Redesigned Hydraulic Clamps**—Increased reliability.

**Chain**—More robust chain, chain anchors and sprockets.

**Split-Sheave**—Easier to replace, less down time.

**Chain Anchor**—Redesigned for better performance and increased chain life.

**Spring**—Revamped to handle heavier cars.

**Re-Engineered Positioner Head**—Incorporates simpler head design that is inexpensive to replace.

**Equalized Positioner Wheels**—Extends life of positioner runway.

**Disc Brakes**—Ultramodern design allows for predictable and steadfast execution.

**Hydraulics**—Leading-edge technology and functionality.

## Electrical Refinements

*Wired for Peak Performance*

Heyl & Patterson has modified and improved multiple components for heightened throughput, smoother operation and reduced wear, and added safety features all-around:

**Variable Frequency Drive [VFD]**—Increases life-span of electrical/mechanical components to dramatically extend motor operation.

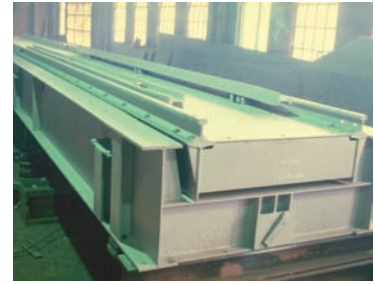
**Programmable Controllers**—Offering optimum precision and safety at every command phase.

**Tagline Sensor**—Intuitively senses integrity of Railcar Clamping System.

**Tag Reader**—Creates a computerized manifest documenting car SKU specifics. Instantly detects wrong-way cars to prevent coupling breakage.

**Platen Weigh Scale Retrofit**—Model dependent.

**Closed-Circuit Monitoring/Historian**—Problem tracking/performance evaluation profoundly enhanced through cameras/applications that document operating adequacy and efficiency.



Platen with Weigh Scale



Weigh Scale Load Cell

### KEY ELECTRICAL UPGRADES:

- State-of-the-art controllers—fully programmable.
- Tag reader—automatic documentation and wrong-way detection.
- Disc brakes.
- Closed-circuit monitoring—round-the-clock system viewing and documentation.



Electrical Upgrades



## Safe and Secure

*Minimizing Risks, Protecting Workers and Equipment*

We work diligently to ensure the utmost protection measures are incorporated into everything we do. Namely: mechanical anti-rotation lock outs, safety beams, rotation over travel buffer and premier electrical advancements—all collectively work to safeguard against overall component failures, while shielding workers and equipment at optimum levels.

At Heyl & Patterson we've been pioneering solutions for the bulk material handling industry since 1887—let us go to work for you. Go with a name you trust, a name with experience. For further information view our website at [www.heylpatterson.com](http://www.heylpatterson.com) or call today!



Spill Girder



Equalized Trunnions