



**Heavy haul freight railroading demands
the world's most reliable springs.**

**To meet that demand, we provide the expertise
for the world's most cost-effective
spring manufacturing.**



A world apart in reliability

Amsted Rail[®]

Increasing loads demand stronger springs

Over the past 75 years, the average freight car weight in North America has increased from approximately 70 tons to 110 tons. Axle loads globally reflect a similar trend and are rapidly approaching North American capacity levels.

As heavy haul operators continue to increase carrying capacity to reduce freight transportation costs, no spring provider in the world can match Amsted Rail's capabilities to manufacture the springs essential to optimize railcar performance.

Pioneers in heavy haul performance

Amsted Rail has helped advance nearly every facet of heavy haul rail worldwide. Our unmatched experience includes over 90 years of manufacturing high-quality springs for railcars and locomotives. We apply our expertise in manufacturing of rugged springs for earth-moving equipment, railcars and other heavy-duty vehicles where reliability is essential. Today, we lead the world in the production of robust, dependable springs built to withstand the increasing demands of heavy haul rail operations.

Go with a leader to achieve higher returns

The most productive heavy haul operators utilize the latest technology from Amsted Rail. With a reputation as solid as our spring components, it's no wonder nearly 3 million freight cars worldwide rely on us to roll with confidence.

When you partner with Amsted Rail, you gain access to the manufacturing expertise, accumulated knowledge and global resources of the largest railcar springs provider. Our springs have a proven record of unsurpassed performance in the harshest environments under the most extreme operating conditions.

Imagine leveraging state-of-the-art technology with our comprehensive engineering and manufacturing expertise. Let Amsted Rail assist you to better manage costs and increase the efficiency of your entire manufacturing operation.

Superior process. Superior productivity.

Amsted Rail's innovative, cost-effective manufacturing process guarantees delivery of the highest quality springs in the shortest possible turnaround time. These advantages are significantly magnified when every railcar requires 50 to 60 springs to provide superior ride performance under today's burgeoning axle loads.

The world's lowest cost and highest ROI spring manufacturing facility

- Fully automated, more than twice the throughput of traditional manufacturing lines
- One-piece flow for continuous processing
- Only 2 ½ hours from raw steel to finished spring
- Capacity up to 500 springs per hour
- Automation improves workplace safety
- Uses 62% less energy than traditional spring manufacturing processes
- Requires a fraction of the square footage of traditional manufacturing lines

Provides manufacturing flexibility

- Able to produce different size springs on the same line
- Quick change set up; fast, easy calibration of automated equipment
- More responsive to the time-sensitive demands of heavy haul rail market
- Minimizes costly, unplanned downtime

Robotic tapering for superior and consistent quality

- Maintains ultra-tight tolerances at full line velocity
- Ensures precise alignment of tapered ends

Robust quality control standards

- Automation helps eliminate human variability
- Enforce 10 quality control checkpoints throughout the manufacturing process
- Real-time, online tracking monitors entire manufacturing line
- Data analysis to better anticipate most advantageous time for line maintenance



Line central controller monitors and controls all manufacturing process parameters.



Steel bars are robotically sized, cut and precision tapered at both ends.



Easily changed coil dies allow for multiple spring sizes on the same assembly line.



Automation greatly enhances workplace safety and eliminates human variability.





About Amsted Rail

Amsted Rail has been an industry leader in freight railroading for more than 100 years. Our experience, dedication and efficiency in servicing today's demanding heavy haul operations is unequalled as we keep railcars rolling in some of the world's toughest railroad environments. To learn more, visit www.amstedrail.com.

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