

IT'S WHAT'S INSIDE THAT COUNTS.

LEGACY
 LEADERSHIP
 PROVEN PERFORMANCE
 PEOPLE
 PASSION
 ENGINEERING
 EXCLUSIVITY
 EXPERIENCE
 TRUST
 CONTINUOUS IMPROVEMENT
 INGENUITY
 MILLIONS OF MILES
 COMMITMENT
 GLOBAL EXPERIENCE
 TECHNOLOGY
 TOUGHNESS
 DRIVE
 RELIABILITY
 DEPENDABILITY
 SECURITY



TF-880 Draft Gear

The only friction elastomer draft gear to surpass 1.7 million installed units, 2 million miles of tested service life, and 40 years of proven reliability in service.

Discover the difference inside original Miner equipment.

Inside every Miner brake beam and draft gear, hatch cover and gate, side bearing and running board...you'll discover a promise. An uncommon commitment to make a difference—in the performance of your fleet, in the protection of your commodity, in the productivity and efficiency of your car. It's a promise we've made and kept daily, for 125 years and counting. And it's why Miner is the most widely specified brand of railcar components in the industry.



DRAFT GEARS
 CONSTANT CONTACT SIDE BEARINGS
 BRAKE BEAMS
 TECSPAK
 RAPID DISCHARGE SYSTEMS
 HATCH COVERS
 RUNNING BOARDS
 OUTLET GATES
 BALLAST/MOW OUTLETS



The Leader in Innovation and Technology. *Simple. Reliable. Proven.*

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IT'S WHAT'S inside THAT COUNTS

A closer look into the most trusted components in the industry.

From the outside, railcar parts may look the same. But to truly understand what goes into designing, refining and supporting the top-performing railcar components worldwide, let's take a look inside at the people, process, and commitment to performance that are the heart of every Miner product.

A legacy of leadership.

40 years ago, a game-changing innovation was uncovered: Miner TecsPak® technology. Almost overnight, its unique elastomer design doubled (and in many cases tripled) product life expectancies and provided a superior solution to all-steel, rubber and urethane products.

Technology for the toughest environments.

Since its introduction, TecsPak has been put to the test across continents and in thousands of hard-working applications. Our decades of experience give us a unique understanding of how to make railcars perform better, longer. That legacy lives inside every TecsPak-equipped component we manufacture, and it shows in their unsurpassed performance.

Total quality that comes from complete manufacturing control.

Today, we still make every TecsPak-equipped draft gear and side bearing in-house. There is no better and more experienced manufacturing team than our own, and our total management of the production process promises consistent quality that meets or exceeds the high expectations of our customers.

The restless spirit of innovation.

As the demands of the railcar industry continue to evolve, Miner continues to innovate and drive improvements in performance and longevity. Our dedicated product development teams work with our customers to determine the needs and are inspired by their desire to exceed limitations as we work to continually improve the ways we can be an indispensable partner in long-term performance.

TecsPak-equipped draft gears and side bearings.

The core of our top-performing components is TecsPak technology. Invented by us decades





ago and continuously improved ever since, our TecsPak-equipped product line sets the industry standard for global excellence and reliability.

Proven draft gear performance.

As a pioneer and industry leader in draft gear design, Miner has over 130 years' experience and has produced 5.5 million units operating in a wide variety of services worldwide. Our TF-880™ TecsPak friction draft gear is the lightest weight high-performance option, allowing extra payload capacity and greater car design flexibility. With its patented elastomer compression spring package and proven friction clutch design, TF-880 absorbs more energy and can significantly reduce the transfer of damaging forces to your railcar. With a 40+ year track record and over 1.7 million units installed, the TF-880 is the most specified draft gear in the industry.

Reliability that runs for millions of miles.

Miner draft gears have consistently demonstrated that their superior capacity actually increases over time, even in the most punishing service applications. In fact, our draft gears are known to perform as good as or better

than new after prolonged use. Tests have shown Miner draft gears provide double-digit increases in capacity well after 2,000,000 miles of service.

Engineering side bearings to reduce wear.

Miner TecsPak Constant Contact Side Bearings help minimize railcar life cycle costs by providing exceptional, proven control over the railcar truck instability known as truck hunting. Manufactured with the tightest tolerances in the industry, our side bearings are able to maximize energy absorption, allowing railcars to operate at high speeds while substantially reducing truck and wheel wear to extend service life and drive down maintenance costs.

Inside every Miner component is a promise of partnership.

In everything that we do and in every product we make, you'll find a company-wide commitment to providing outstanding value and customer-focused innovation. We see ourselves as dedicated partners in driving performance and productivity for your rail fleet. Now that you've been able to look inside what goes into every Miner product, we hope you'll see it that way, too.

Perfecting Railcar Performance | minerent.com

Millions of miles ahead.



The only OEM elastomer friction draft gear proven to perform well over **2 million miles**.

A difference measured in millions. Light weight. High performance. Long-running reliability. Just a few reasons why the Miner TF-880™ is the most widely specified draft gear in the industry, with over 40 years and 2 million miles of service, and 1.7 million units installed. Miner continues to effectively manage energy with our proven TecsPak® elastomer compression spring package and refined friction clutch. When it comes to maximum protection of your railcar, put our unmatched experience to work for you.



It's What's Inside That Counts

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