

AMSTED RAIL – BRENCO® BEARINGS



The world's most reliable bearings
for heavy haul rail operations.



A world apart in reliability **Amsted Rail**

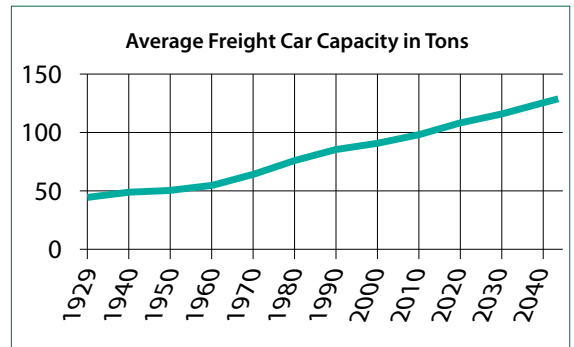


Heavier loads. Higher speeds. Highest quality bearings.

The average freight car weight in North America, and around the world, is increasing dramatically due to the universal allure of lower freight transportation costs. Meanwhile, the railroad industry is constantly pushed to carry the heavier loads at higher speeds.

These situations demand stronger bearings. To meet this demand, Amsted Rail continuously improves its line of Brenco

bearings and develops new products to reliably support the heaviest of loads under the most extreme operating conditions. In pursuit of maximum durability, we engineer proprietary lubricants, contact geometries and grease seals to significantly extend the longevity of our bearing components and lower costs over the long haul.



As your bearings go, so goes your truck system

As the loads exerted upon bearings mount, so can damage caused by axle deflection and metal-to-metal contact. Without

high-performance stabilization, the efficacy of the entire undercarriage truck system is steadily compromised.

Preventable accidents, incidents and unchecked maintenance issues can derail your profitability.

For peace of mind, look to the global leader in railway bearings: Amsted Rail. We customize or identify the optimal bearing to suit the application based on a wide range of factors: axial and radial loads; duty cycle; environmental and track conditions; railcar and truck type; track gauge; type of cargo being moved; and more. This attention to detail is one reason nearly 3 out of every 4 new railcars in North America roll with confidence on our bearings. We consistently deliver the highest quality and most reliable bearings in the world.



Expertise all down the line

Amsted Rail has helped advance nearly every facet of freight railroading to keep pace with steadily increasing demands. As a premier supplier of systems, components and equipment with worldwide manufacturing capacity, we can be a single reliable source to meet every need.

Amsted Rail's line of Brenco bearings is renowned for developing the tapered roller bearing. Today, with a full range of fatigue-resistant bearings and bearing components, we can provide the right fit for any heavy haul application. All of these bearings include a low torque seal option to increase fuel efficiency while also decreasing bearing operating temperatures.

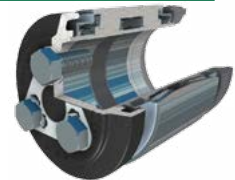
Generation 2000 Bearings: Class K, Class M

Prevent excessive axle deflections which lead to fretting, back face wear and loose components. The use of hardened steel components in inboard contact areas provides fretting performance benefits over the competition.



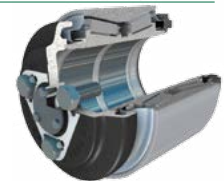
AAR Standard Bearings: Class D, Class E, Class F, Class G

Employ Polyamide Cages to reduce the likelihood of bearing failure resulting from high impact. Seamless forged rings ensure optimal performance under extreme loads.



Locomotive Bearings: Class GG

Equipped with Polyamide Cages as a safety standard along with seamless forged rings, these super heavy-duty bearings were created specifically to meet the higher demands of locomotive service.



Tru-Fit® Backing Ring

Eliminates loose backing rings which account for nearly 40% of all bearing-related wheel set removals, leading to millions of dollars in lost revenue annually. Prevents relative motion and wear on the axle while adding excellent water exclusion properties.

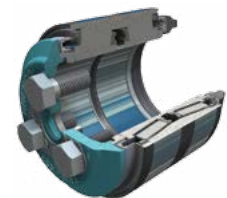


International Bearings

We work closely with customers the world over to meet diverse applications. Whether the model is high reliability or high utilization, we engineer our products to meet or exceed the highest standards. Using the Tru-guard™ seal, most of our international bearings operate with zero seal torque.

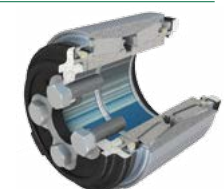
Inch Bearings: Ausbrid®, Ausbrid Plus®, MEGA-TONNE™

Developed for the world's heaviest haul railroads, they are typically sold in Australia and China. Mega-Tonne bearings, manufactured with the best materials in the industry, provide up to twice the relative bearing fatigue life as the AAR Class G bearing.



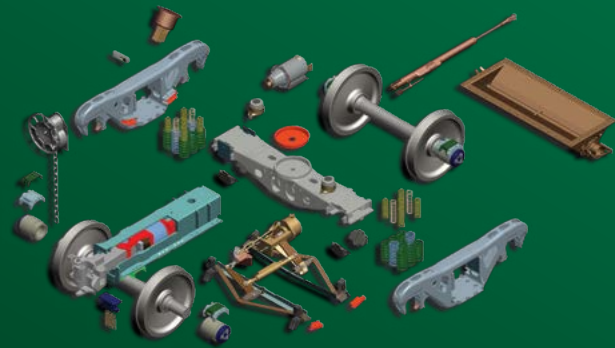
Metric Bearings: I30x230, I50x250, I30x250

We support the Russian and Ukrainian markets to ensure they have the bearings best suited for their applications. Amsted Rail was the first bearing supplier approved to supply tapered roller bearings into this non-AAR market.





**Amsted Rail, the global leader
in fully integrated freight car systems
for the heavy haul rail market.**



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.

Amsted Rail[®] *A world apart in reliability*

www.amstedrail.com | +1.312.922.4501 | 311 S.Wacker Drive, Suite 5300, Chicago, IL 60606
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