APPLICATIONS
Freight Cars | High-Speed Trains | Light Rail Vehicles | Locomotives | Metros | Passenger Coaches | Regional and Commuter Trains
ADVANTAGES

- Proven brake performance in many high-speed applications
- Standardized interface and fixing of brake discs on wheel
- Resistant against thermal cracks due to movable disc fixation
- Robust design to withstand high external shocks and vibrations up to 100 g
- Optimized cooling channel with excellent heat transfer and low ventilation loss
- Low weight
- Split friction discs for easy replacement

ALUMINUM BRAKE DISC – High Runner for Metros

The aluminum brake disc weighs half as much as conventional cast-iron ones, saving over 400 kilograms per individual car.
- 50-60% energy savings due to reduced weight and rotational mass
- Reducing track fees because of low unsprung masses
- Three times longer lifetime compared to gray cast iron discs

FREIGHT CAR BRAKE DISC – For Modern Freight Cars

Knorr-Bremse freight car discs have been specially developed using FEM, CFD and casting solidification simulation techniques.
- Based on the proven flat seated brake discs
- Standard width of 110 mm
- Wear volume of 10 mm per side
- Best downhill braking performance due to maximized number of cooling ribs
- Weight only 95 kg

KNorr-Bremse integrated engineering is customer-oriented and offers optimized project-specific friction pairings. With more than 50 years of experience, Knorr-Bremse has the capability to provide customers with a selection of brake discs and brake pads that significantly influence life-cycle costs. Proven design principles are the basis for reliability and brake safety. A wide range of brake discs, brake pads, and materials for all railway applications guarantees high flexibility for customer requirements and a short lead time. Hundreds of service-proven friction pairing variations allow us to offer the most suitable solution for each and every customer.

- More than 50 years of know-how and experience in friction pairing designs
- Optimized LCC, high safety assurance and noise reduction with Knorr-Bremse friction pairing designs
- Friction pairing designs validated as a system at our testing facilities

HIGH-QUALITY BRAKE DISCS FOR ALL RAIL APPLICATIONS.

Depending on the type of application, Knorr-Bremse axle- and wheel-mounted brake discs come with split or solid friction rings made of cast iron, aluminum or steel.

FRICITION PAIRING EXCELLENCE

KRS brake pad design: Friction pairing know-how allows Knorr-Bremse to optimize the design of brake pads and brake discs to enhance performance for top-performing friction pairing products.