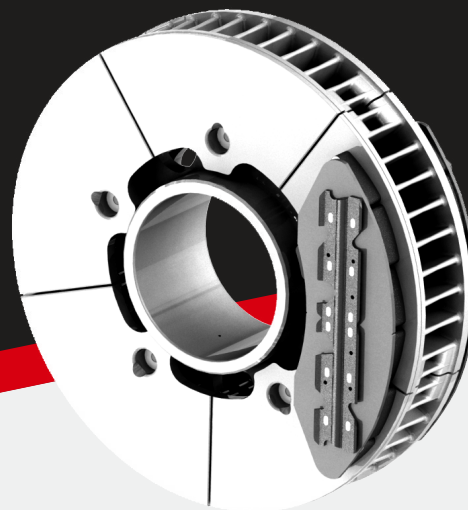




SEGMENTED HGCI FREIGHT CAR FRICTION PAIR

Increase asset performance while reducing costs



Triple disc lifespan compared to state of the art monobloc disc

Our Segmented HGCI Axle Mounted Freight Car Friction Pair combines our proven segmented disc brake and sintered brake pads technologies. Your operation and maintenance costs are drastically reduced thanks to an increased lifespan of the disc and pads, reduced mechanical stress and simplified and safer maintenance.

The disc and pads were developed as a whole friction pair to achieve improved performance and life cycle cost compared to the state-of-the-art monobloc cast iron disc brake.

Proven in comparative life tests, the HGCI disc lifespan (> 3,5 Mkm) is more than three times the lifespan of the cast iron brake disc. This translates in a HGCI disc lifespan higher than the wheel lifespan (~2,5 Mkm).

It is designed to equip all types of freight cars complying with TSI WAG and especially higher brake performances and/or high mileage applications in a two discs per axle arrangement. For new builds, overhaul or conversion projects.

KEY CUSTOMER BENEFITS

Lowest Total Cost of Ownership

- Increased disc and pads lifespan
- Lower thermal stress and reduced sensitivity to surface cracks
- Inspection free connecting pins

Easy Maintenance

- Friction ring disassembly without having to remove the wheels
- Easy and safe handling of each segment by one operator
- No specific tool needed

Light Weight

45kg less compared to state of the art monobloc cast iron freight car disc allowing more payload, lower unsprung mass and energy consumption.

Top Braking Performance

- Stable friction coefficient

Improved Supply Chain

- Simpler disc casting process
- Faster supply chain
- Less scrap
- Reduced inventory

REFERENCES

Conversion of Green Cargo high speed wagons (160 km/h). Doubled disc life time vs. original solution.

Technology widely used on passenger applications for lower CAPEX and OPEX compared to steel discs arrangements.



Disc in Green Cargo field test with measurement device



PRODUCT SPECIFICATIONS

DESCRIPTION

PARAMETERS

Dimensions

Ø 590 x 110 mm

Wear limit

7 mm each side

Weight

100 kg

Material

High grade cast iron HGCI

Hub diameter

206 mm H6
(other dimensions available)

Pads (UIC shape)

UIC homologated sintered
SP140FF-350 for optimum LCC

NORMS & VALIDATION

Disc designed according to
EN 14535-1 standard

Design validation according to EN 13749

Disc design integrity validated according to the latest simulation tools (FEM, CFD, thermal) and REX (used for decades on Passenger applications)

Friction pair performance validated according to UIC 541-3 program A1, TSI WAG stop and drag braking

Comparison life test with monobloc Cast Iron according to adapted UIC 541-4 program A11

UIC homologated SP140FF-350 brake pads

CONTACT

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