

## Technical Information

Assessment of lining ruptures





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#### **Assessment of lining ruptures**

### Assessment/evaluation of cracks and ruptures in the lining layer of disc brake linings

On the basis of this technical report the expert inspector should be able to visually assess the brake linings for BPW ECO Disc TS2 3709 / TS2 4309 trailer disc brakes with reference to crack or edge rupture characteristics. It is still up to the inspector to assess whether or not the brake lining should be replaced. His assessment should include both the visual condition of the linings as well as the overall impression of the vehicle and its operating conditions.

The instructions and regulations in the workshop manual "BPW trailer axles with ECO Disc TS2 trailer disc brakes" must be followed.

The main causes of lining ruptures or cracks are an increased effect of contamination or thermal load on the brake, which can be reduced through improved means of covering. If this does not happen, the condition of the brake linings can worsen. This should be checked at regular maintenance intervals and more often than generally recommended.

The warranty service regarding lining damage is not affected by this technical report. Warranty claims always depend on the individual case and its specific ancillary conditions.

#### **Backing plate:**

Distortions on the lining's backing plate are not permissible; the linings should be replaced in this case.

#### Ruptures at the edges of the lining:

The defined areas shown in Figure 1 may display ruptures to the edges under the following conditions:

- Ruptures are only permissible in the edge areas marked (3 mm from the peripheral edges and the central groove (only passive brake lining) and a maximum of 10 mm to the upper lining corners).
- The ruptures are no larger than shown in Figure 1.
- The total rupture surface is no larger than 10% of the total lining surface.
- The ruptures, as shown in Figure 2, are not in the area of the lining connection (2 mm distance from the lining's backing plate).
- There are no ruptures in other areas.

Figure 3 shows a comparison between permissible and impermissible edge ruptures.

The ruptures shown above do not signify a defective product but instead are a sign of normal wear. Therefore, a replacement of the linings is not yet necessary.

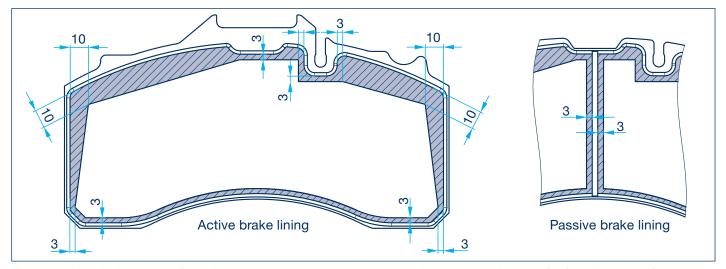


Figure 1: Permissible areas for edge ruptures are marked, but must be no more than 10% of the lining surface.

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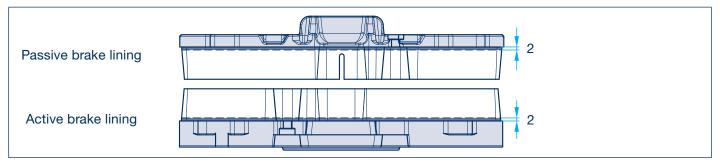


Figure 2: Protected area of the lining connection — no ruptures or stripping are permissible here.



Figure 3: Lining with impermissible

#### Cracks in the lining material:



Figure 4: Cracks in the permissible area of the lining surface

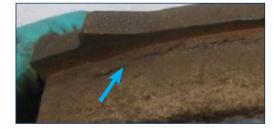




Figure 5, 6: Cracks running parallel to the backing plate are inadmissible

The cracks in the lining surface shown in Figure 4 are acceptable under the following conditions:

- The cracks do not go all the way to the lining connection area (2 mm above the lining's backing plate), see Figure 2.
- The cracks do not run horizontal to the backing plate.

The cracks shown do not signify a defective product but instead are a sign of normal wear. Therefore, a replacement of the linings is not yet necessary.



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We thereby ensure outstanding transparency in loading and transport processes and facilitate efficient fleet management. Today, the well-established brand represents an international corporation with a wide product and service portfolio for the commercial vehicle industry. Offering running gear systems, telematics, lighting systems, composite solutions and trailer superstructures, BPW is the right system partner for automotive manufacturers.

BPW, the owner-operated company, consistently pursues one target: To always give you exactly the solution which will pay off. To this end, we focus our attention on uncompromising quality for high reliability and service life, weight and time-saving concepts for low operating and maintenance costs as well as personal customer service and a close-knit service network for quick and direct support. You can be sure that with your international mobility partner BPW, you always use the most efficient method.

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