

## WAGON USERS Study Group

### Proposed amendment to GCU Appendix 10

#### Amendment history

Amendment made by	Date	Paragraph	Amendment
Burkhard Lerche	27/02/17	1.6	Turn point 1.6 into point 1.6.1 and add a point 1.6.2
<u>B Schmitt</u>	<u>13/06/2017</u>	<u>1.6.2</u>	<u>Modification Visual inspection of the wheels</u>

<b>Title</b>	Testing of wheelsets with LL blocks
<b>Proposed amendment made by (RU / keeper / other body):</b>	DB Cargo AG
<b>Proposed amendment concerns:</b>	<input checked="" type="checkbox"/> Appendix 10
<b>Proposer:</b>	Burkhard Lerche, D. Schlickelmann
<b>Location, date:</b>	Frankfurt am Main, 27.02.2017
<b>Concise description:</b>	This amendment to Appendix 10 will ensure that the rules governing composite brake blocks (LL) are applied to wheelsets on wagons fitted with LL blocks during every trip to the workshop.

**1. Starting-point (current situation):**

<b>1.1. Introduction</b>
<b>1.2. Mode of operation</b>
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<b>1.3. Anomaly / description of problem:</b>
The Usage Guidelines for Composite (LL) Brake Blocks state that wheelsets with LL blocks must be tested during every trip to the workshop. Amending Chapter A, point 1.6 in the way described will meet this requirement.

<b>1.4. Does this concern a recognised code of practice* (e.g. DIN, EN)?</b>
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (state which): Usage guidelines for composite (LL) brake blocks
<small>* "Code of practice: a written set of rules that, when correctly applied, can be used to control one or more specific hazards."          (Source: Regulation EC 352/2009, Article 3)</small>
<small>"Technical provisions laid down in writing or conveyed verbally and pertaining to procedures, equipment and modes of operation which are generally agreed by the populations concerned (specialists, users, consumer and public authorities) to be suitable for achieving the objective prescribed by law, and which have either proven their worth in practice or, it is generally agreed, are likely to within a reasonable period of time" (Source: BMJ Handbuch der Rechtsförmlichkeit – German Ministry of Justice)</small>

**2. Target situation**

<b>2.1. Elimination of anomaly/problem (goal)</b>
<p>1.6.1 The wheel tread must not:</p> <ul style="list-style-type: none"> <li>- be partly crushed;</li> <li>- display wheel flats, shelling, exfoliation or metal build-up:</li> <li>- over 60 mm in length for wheels of diameter &gt; 840 mm and axle load ≤22.5 t (maximum load limit D or less);</li> <li>- over 50 mm in length (maximum load limit E) for wheels of diameter &gt; 840 mm and axle load &gt;22.5 t;</li> <li>- over 40 mm in length for wheels of diameter ≤ 840 mm and &gt; 630 mm;</li> <li>- over 30 mm in length for wheels of diameter ≤ 630 mm;</li> <li>- have cracks at the transition between the tread and the outer face or on the flange top;</li> <li>- display any hollowing or "false flange" deeper than 2 mm or any sharp-edged grooves.</li> </ul> <p>1.6.2* Wheelsets fitted with LL blocks must be inspected and dealt with as follows:</p> <ul style="list-style-type: none"> <li>- Inspect running surfaces in accordance with 1.6.1</li> <li>- <del>Inspect</del> Visual inspection of the wheels in accordance with the criteria for thermal overload as set out in 1.18</li> </ul>

1.18 ~~If a monobloc wheel is suspected to have sustained a thermal overload from braking, as characterised by:~~ **Monobloc wheels may not display marks of thermal overload caused by the brake:**

- A paint burn of 50 mm or more at the connection between the rim and wheel centre or recent traces of rust on the tyre (unpainted wheels) or
- fusion of brake blocks or
- deterioration of wheel tread with build-up of metal,

**If thermal overload is suspected**, the distance between the inner faces of the tyres of axles must be measured as indicated in points 1.1.2 and 1.17.

If this distance is within the specified tolerances, the air brake must be isolated and the vehicle fitted with labels R1 and K (Appendix 9, Annex 11) marked:

"~~Brake and bearing surface~~ **wheel tread** to be verified for thermal overload".

These checks are not to be carried out on wheels that are able to withstand high thermal stresses and which are marked on the axle-box casing with a solid vertical white line (Appendix 11, point 6.1).

### 3. Additional text and/or change relates only to proposed amendments to GCU Appendix 10:

#### 4. Reason:

Implements the Usage Guidelines for Composite (LL) Brake Blocks

#### 5. Assess potential positive/negative impacts

Impact on costs, administration, interoperability, safety, competitiveness:

Costs: 2 (additional inspection costs)

Administration: 1 (inspection only during workshop visits)

Interoperability: 1

Safety: 3

Competition: 2 (additional inspection costs)

## 6. Safety appraisal of proposed amendment

Description of actual/target system, and scope of change to be made (see points 1 and 2).

The safety appraisal should be removed since only known guidelines would be implemented.

Safety study conducted by:

<b>6.1. Does the change made impact on safety?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reasoning: Implements the Usage Guidelines for Composite (LL) Brake Blocks	
<b>6.2. Is the change significant?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reasoning:	
<b>6.3. Determining and classifying risk:</b>	<input checked="" type="checkbox"/> N/A
6.3.1. Effect of change in normal operation: 6.3.2. Effect of change in the event of disruption / deviation from normal operation: 6.3.3. Potential misuse of system: <input type="checkbox"/> No <input type="checkbox"/> Yes (describe possible misuse):	
<b>6.4. Have safety measures been applied?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes
For each type of risk, one of the following risk acceptance criteria is to be selected: <ul style="list-style-type: none"> <li>• Code of practice</li> <li>• Use of reference system</li> <li>• Explicit risk estimate</li> </ul>	
<b>6.5. Has a risk analysis been submitted to the assessment body?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Assessment body: Attach the verdict reached by the assessment body:	[Appendix]