Proposed amendment to GCU Appendix 11

Amendment history

Amended by	Date	Paragraph	Amendment
Stefan Zebracki	30/1/2018		See minutes of TTI WG meeting of Jan 2018
TTI WG decision	21/3/2018		See the minutes of TTI WG meeting of March 2018
WU SG decision	29/5/2018		See minutes of WU SG meeting of May 2018

Title	Amendment concerning screw brake holding force on wagons equipped with screw brakes
Proposed amendment concerns RU/keeper/other:	DB Cargo AG
Proposed amendment concerns:	☐ Appendix 9 ☒ Appendix 11
Proposer:	Stefan Zebracki
Location, date:	Mayence, 16/3/2018
Concise description:	Description of holding force on wagons equipped with screw brakes in accordance with UIC Leaflet 545, point 4.2.

1. Starting point (current situation):

1.1 Introduction

The values currently shown in Appendix 11, point 4.2 (see examples in Figure 4) are not accurate.

1.2 Mode of operation

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1.3 Anomaly/description of problem

Chapter 6 of UIC report B126/RP44 (April 2014 version) regarding hand brakes on wagons equipped with composite brake blocks shows the formula for converting the hand brake's braked weight [t] to holding force [kN]. Taking conversion factors into account, the values in kN indicated in the examples are incorrect.
In addition, the examples describing the different between platform-operated hand brakes and ground-operated hand brakes are already contained in point 4.2, Figure 3 of Appendix 11, and UIC Leaflet 545 does not prescribe the colour of the inset for holding force.

1.1. Does this concern a recognised code of practice* (e.g. DIN, EN)?

☐No ☒ Yes (state which): Wagon TSI, UIC 544-1, UIC-545, UIC B 126/RP 44

* “a written set of rules that, when correctly applied, can be used to control one or more specific hazards." (Source: Regulation (source: Regulation EC 352/2009, Article 3)

"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 – guide published by German Ministry of Justice)

2. Target situation

2.1. Elimination of anomaly/problem (goal)

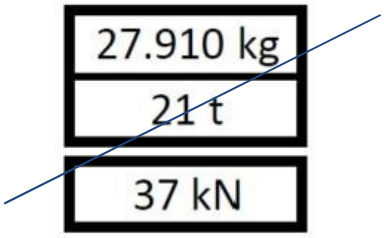
Addition of markings under point 4.2 of Appendix 11 indicating the holding force in kN in accordance with Appendix E of Leaflet 545 and with point 4.

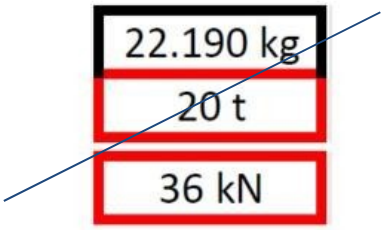
3. Additional text and/or modifications (relates to proposed amendments to GCU Appendix 11):

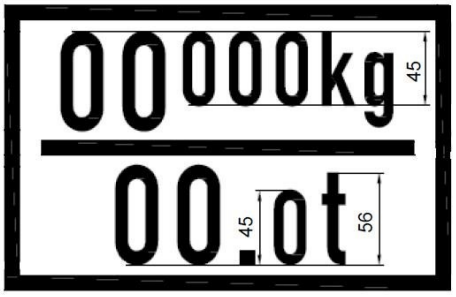
Amendment colour code:
Black: Current text, for info and remains unchanged
Red: new text
Blue**: (if crossed out): text to be deleted**

Fig. 4: Marking indicating the braked weight and the holding force ~~in kN~~ on vehicles fitted with screw brakes

~~Example for a platform-operated screw brake~~ ~~Example for a ground-operated screw brake~~







Note:
If the wagons are equipped with more than one screw brakes independent of each other, it is appropriate to specify the quantity in front of the relevant indication of holding force (e.g. 2 x 00.0 kN)

This marking will become mandatory with effect from 1/1/2021.

4. Reason:

This marking is mandatory with effect from 1/1/2021 according to UIC Leaflet 545.

5. Assess potential positive/negative impacts

Assess the possible positive and negative effects (operations, costs, administration, interoperability, safety, competition, etc.) on a scale of 1 (very low) to 5 (very high):

Impacts:
Operations, Interoperability, Competitiveness, Cost, Management: value 3
This amendment ensures compliance with UIC Leaflet 545.

Safety: value 4
This amendment enables identification of holding force for each wagon.

6. Safety appraisal of proposed amendment

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

Performance of risk analysis is unnecessary where only recognised standards are implemented.

Risk analysis conducted by:

6.1 Does the change have impact on safety?	☒No ☐ Yes
Reason:	
6.2 Is the change significant?	☒No ☐ Yes
Reason: see template. Attach the "significant change" test template.	
6.3 Determining and classifying risk	☒ 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:** ☐ No ☐ Yes (describe possible misuse):	
6.4 Have safety measures been applied?	☒No ☐ Yes
For each type of risk, one of the following risk acceptance criteria is to be selected: • *Code of practice* • *Use of reference system* • *Explicit risk assessment*	
6.5 Has a risk analysis been submitted to the assessment body?	☒No ☐ Yes
Assessment body: Attach the verdict reached by the assessment body:	[Appendix]