

Proposed amendment to GCU Appendix 9

Record of amendments

Amended by	Date	Paragraph	Amendment
Jean-Marc Blondé	01/02/2022	Ann.4	Drafted
Jean-Marc Blondé	22/03/2022	Ann.4	Changes in accordance with TTI WG meeting of March 2022
TTI WG decision	22/03/2022	Ann.4	In accordance with TTI WG meeting of March 2022
WU SG decision	16/05/2022	Ann.4	In accordance with WU SG meeting of May 2022
GCU JC decision	09/06/2022	Ann.4	Approved

Title:	Combined wheel gauge
Proposed amendment made by RU/keeper/other	SBB Cargo AG
Proposed amendment concerns:	<input checked="" type="checkbox"/> Appendix 9 <input type="checkbox"/> Appendix 11
Proposer:	Jean-Marc Blondé
Location, date:	Mainz, 10/03/2022
Concise description:	Application of a new combined wheel gauge in relation to the reduced Sh dimension of 32 mm (application 2020-01)

1. Starting point (current situation):**1.1. Introduction**

In accordance with proposal 2020-01, the contents of the Usage Guidelines for Composite (LL) Brake Blocks (tenth edition), Part 2: Brake operation, monitoring and maintenance, and the Design Rules for Composite (LL) Brake Blocks (ninth edition) were transposed in full in Appendix 9, Annex 1 of the General Contract of Use (GCU) last year.

1.2. Mode of operation

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1.3. Anomaly / description of problem:

Following the introduction of the 32.0 mm flange height limit measurement for axles fitted to LL-braked vehicles and the 33.0 mm flange thickness limit measurement for axles fitted to LL- and K-braked vehicles, these limit measurements cannot be checked using the existing gauge in suspicious cases.

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

No Yes (state which):

* "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)

"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" (translation/source: BMJ Handbuch der Rechtsförmlichkeit – German Ministry of Justice)

2. Target situation**2.1. Elimination of anomaly/problem (goal)**

Addition of a new combined wheel gauge in Appendix 9, Annex 4

3. Amendments/additional texts (relate only to proposed amendments to GCU Appendix 9):

Colour codes for changes:

Black: currently applicable text; provides information and remains unchanged

Red: New text

Blue (may be crossed out): Text to be deleted

Annex 4

Verification using a combined gauge of ~~qR~~

The combined gauge may be used to verify qR , S_d , S_h , including projection and false flanges

~~Measured~~ **Verified** at the wheel flange using a combined gauge, the qR of the wheel flange must always be greater than 6.5 mm, with no sharp edges or ~~burrs~~ **projection** on the outer part of the flange over a distance of 2 mm from the top of the flange.

Fig. 1 – Permissible profile for outer part of flange

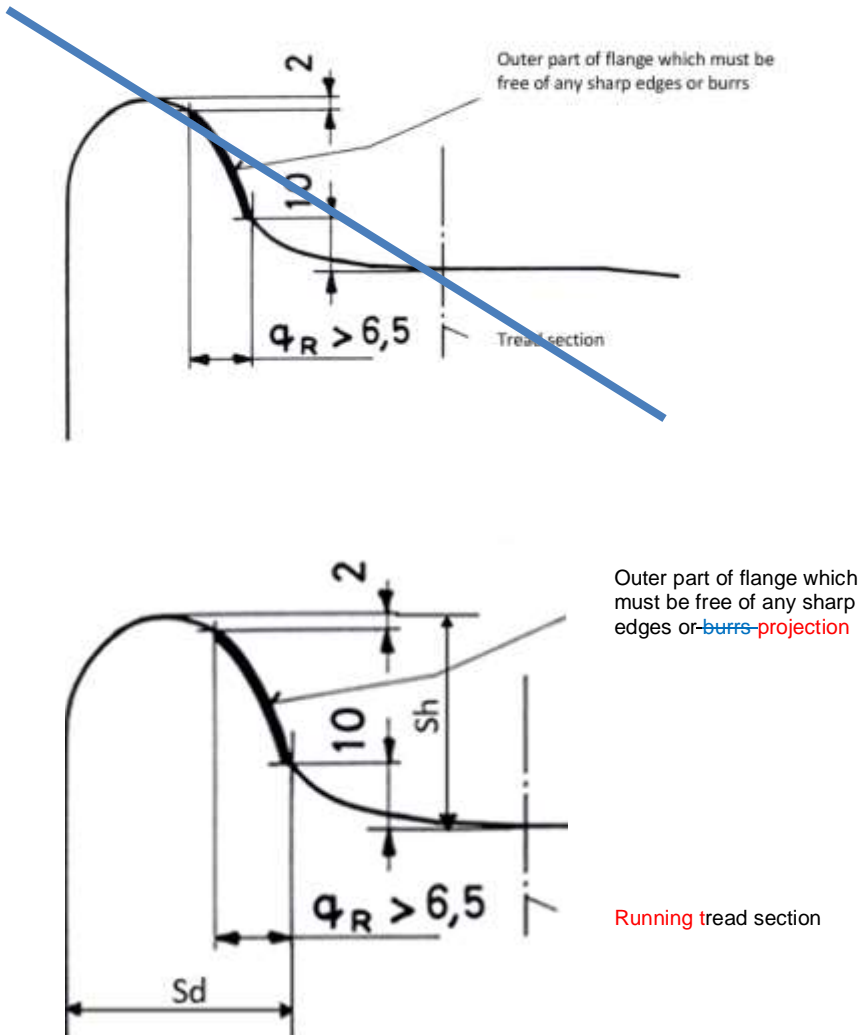


Fig. 2 – Gauge for verifying qR Dimensions of combined gauge for verifying qR, Sd, Sh, including projections and false flanges

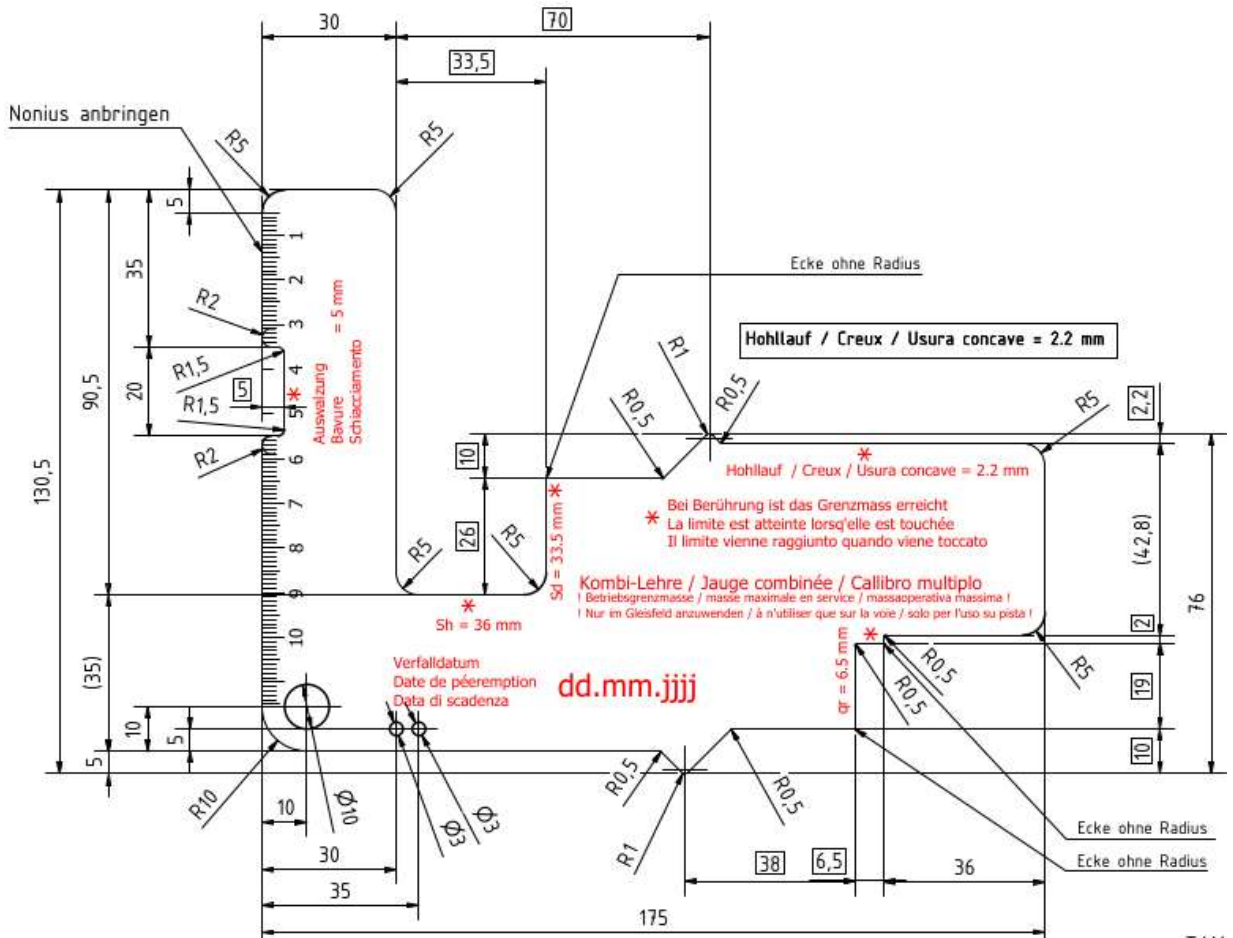
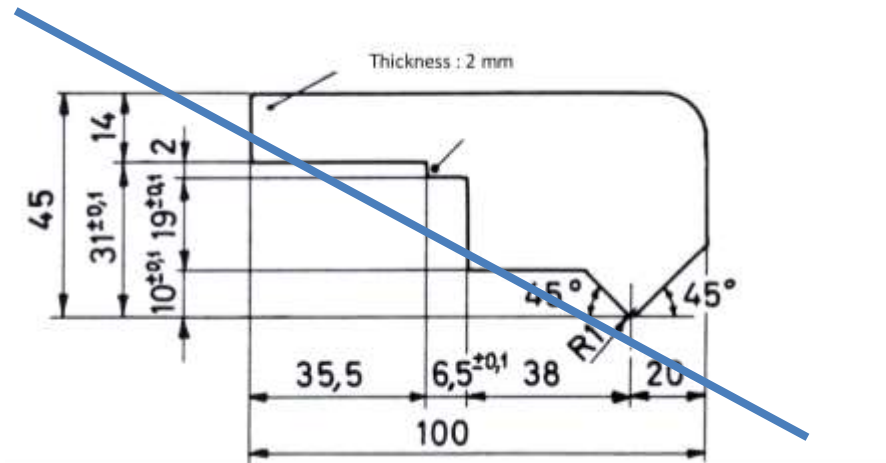


Fig. 3 – Wheel flange

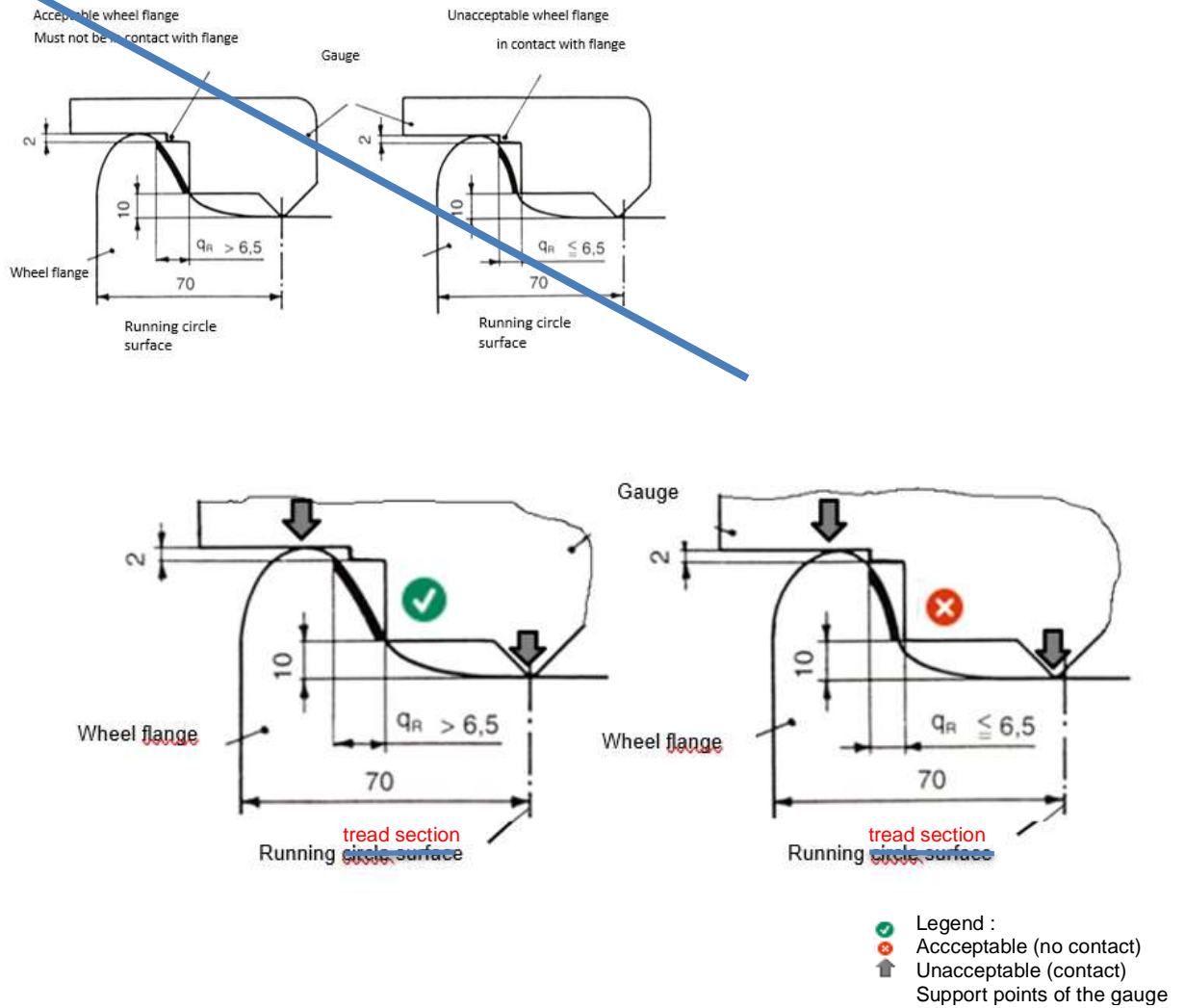
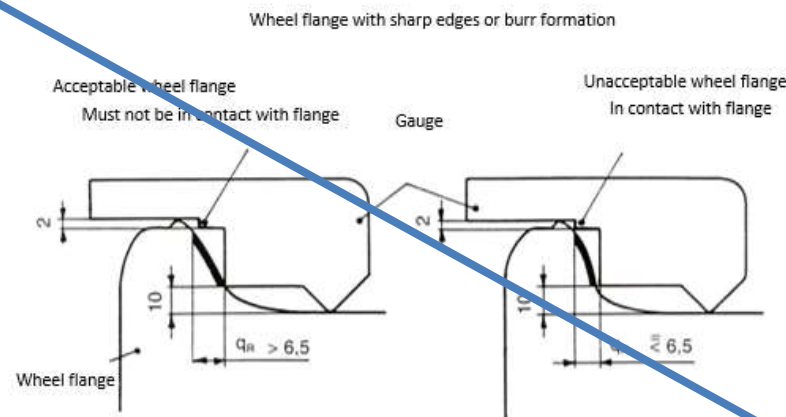


Fig. 4 – Wheel flange with sharp edges or burr formation



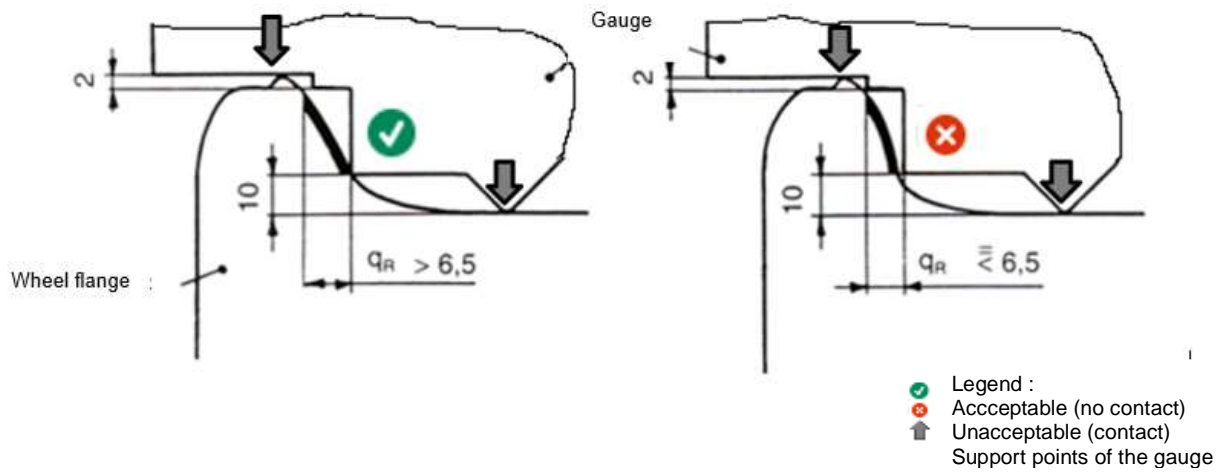


Fig. 5 – Wheel flange height (Sh)

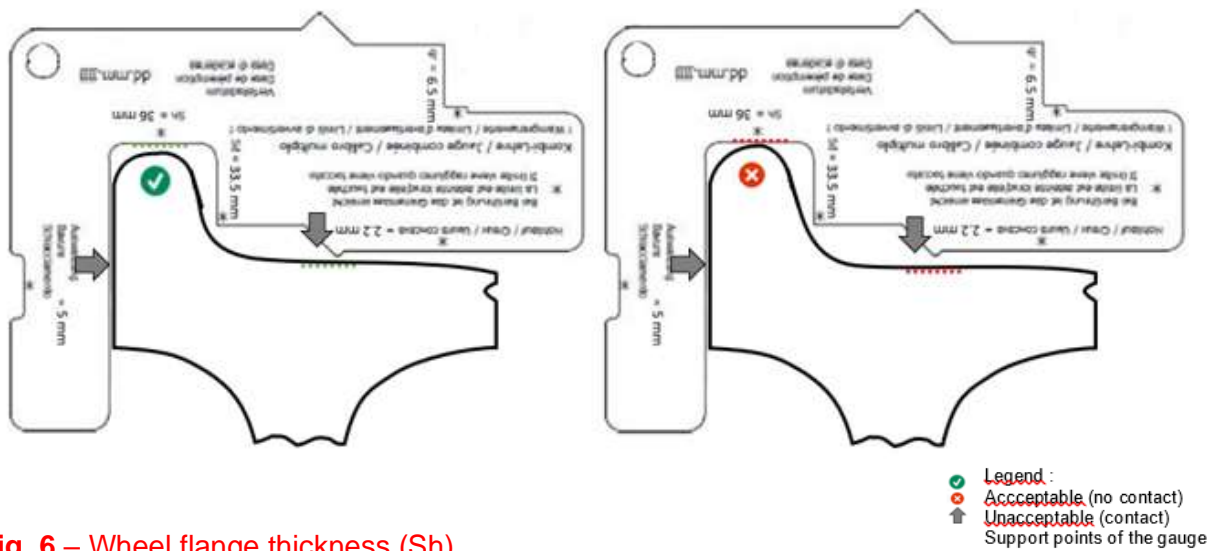


Fig. 6 – Wheel flange thickness (Sh)

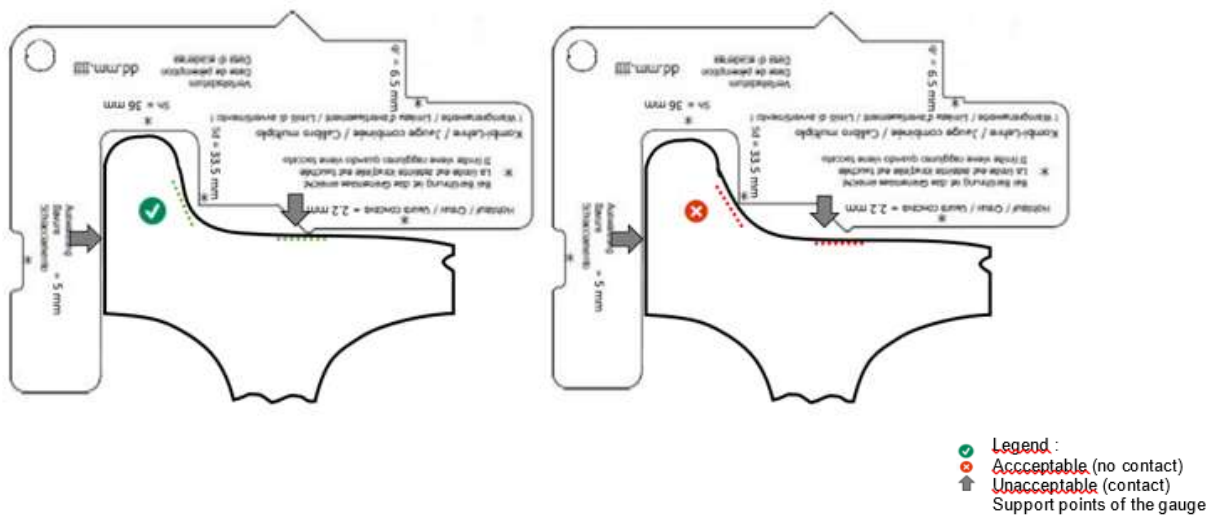


Fig. 7 – Projection
 The maximum permissible value for projection (S max) is 5 mm

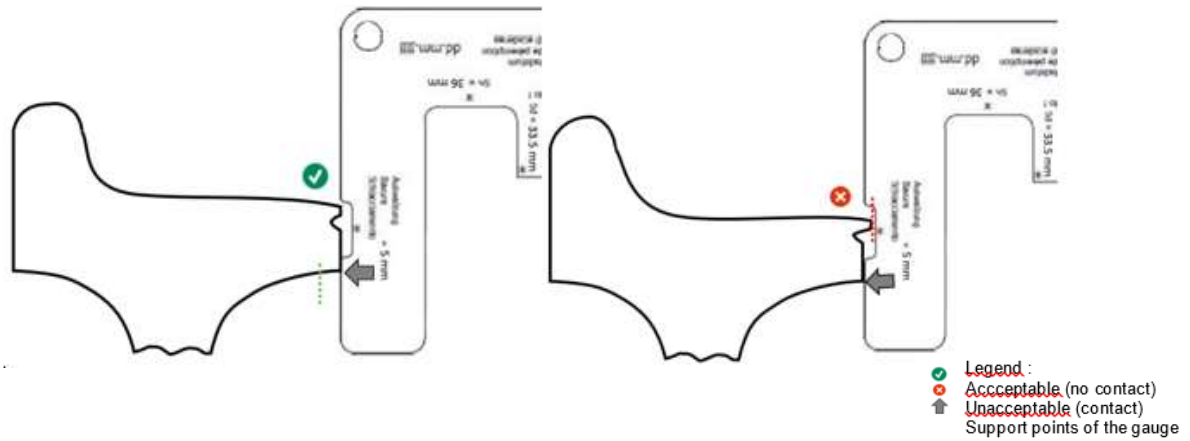
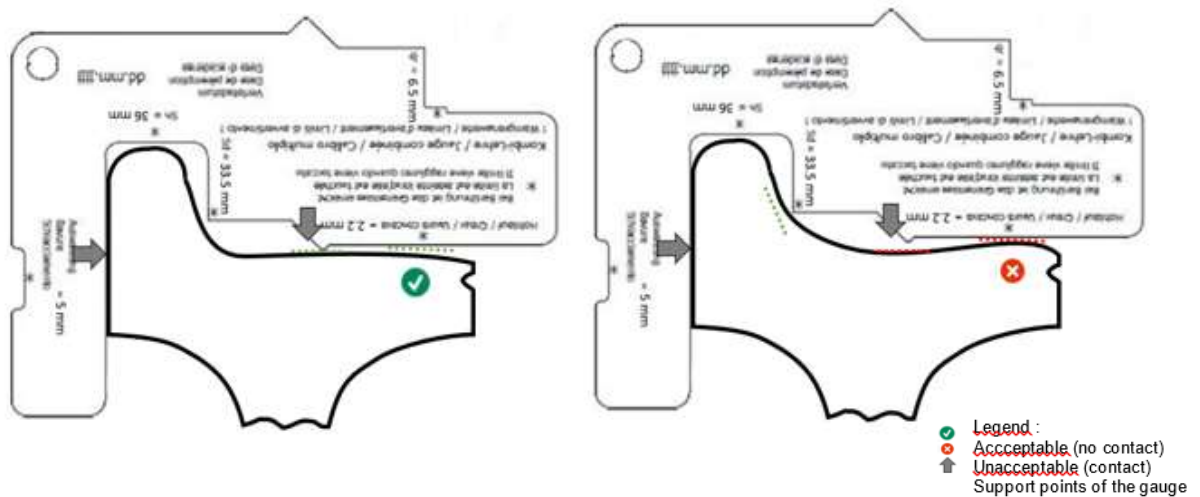


Fig. 8 – False flange
 A false flange deeper than 2 mm is not permitted and has been defined as 2.2 mm on the combined gauge



4. Reason:

This combined gauge allows a better assessment of the various irregularities on the running surface of the wheel.

5. Assess potential positive/negative impacts

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

Justify observations

Impacts:

Operations, interoperability, competitiveness, costs, administration (value: 3)

Safety (value: 3)

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 made impact on safety?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reasoning:	
6.2. Is the change significant?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reasoning: see template Attach the "significant change" test template	
6.3. Determining and classifying risk:	<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):	
6.4. Have safety measures been applied?	<input checked="" 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"> • Code of practice • Use of reference system • Explicit risk estimate 	
6.5. Has a risk analysis been submitted to the assessment body?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Assessment body: Attach the verdict reached by the assessment body:	[Appendix]