

National Conference on Weights and Measures
2019 Specifications and Tolerances Committee
Rachelle Miller, Chair

S&T Committee

On behalf of the NIST USNWG on Belt-Conveyor Scales (submitter of S&T Item BCS-1), I am requesting amendments to the proposed Item BCS-1 on the Committee's agenda. During the development of this proposal by the USNWG, there was an inadvertent omission of references to systems that are not marked with an accuracy class in two locations in the BCS Systems Code.

Under Section N.2.3., both subparagraphs N.2.3.1. and N.2.3.2. should have included references to systems not marked with an accuracy class when specifying minimum test loads for belt-conveyor scales and weigh-belt systems.

Also, the table included in user's requirement UR.3 in the Code addressing "Change in Factor (Reference) Established in N.3.3.(b)," there was an inadvertent omission of references to systems that are not marked with an accuracy class.

The responses from the USNWG when questioned about the lack of reference to systems not marked with an accuracy class, agreed that these omissions were unintentional. The work group members responding also agreed that the proposed changes should be amended to include references (as they appear in other sections within this proposal) to systems that are not marked with an accuracy class.

It is therefore requested that the BCS-1 "Item Under Consideration" be amended to include the following changes (highlighted in yellow).

N.2.3.1. Minimum Test Load, Weigh-Belt Systems. – The minimum test load shall not be less than the largest of the following values:

- (a) 2 000 divisions for systems marked Class 0.1, and 800 scale divisions for systems **not marked with an accuracy class and those** marked Class 0.25;
- (b) ...
- (c) ...

(Amended 2015 and 20XX)

N.2.3.2. Minimum Test Load, All Other Belt-Conveyor Scale Systems. – Except for applications where a normal weighment is less than 10 minutes, the minimum test load shall not be less than the largest of the following values.

- (a) 2 000 divisions for systems marked Class 0.1, and 800 scale divisions for systems **not marked with an accuracy class and those** marked Class 0.25;
- (b) ...
- (c) ...

...

UR.3. Maintenance Requirements – Scale and Conveyor Maintenance. –

...

The action to be taken as a result of the simulated load or material tests is shown in the following table.

<p>Change in Factor (Reference) Established in N.3.3.(b) [Δ N.3.3.(b)]</p>	<p>Action to be Taken</p>
<p>For scales not marked with an accuracy class and those marked Class 0.25, if the error is less than 0.25 % $(\Delta N.3.3.(b) < 0.25 \%)$, and For scales marked Class 0.1 if the error is less than 0.1 % $(\Delta N.3.3.(b) < 0.1 \%)$</p>	<p>No Action</p>
<p>For scales not marked with an accuracy class and those marked Class 0.25, if the error is at least 0.25 % but not more than 0.6 % $(0.25 \% \leq \Delta N.3.3.(b) \leq 0.6 \%)$, and For scales marked Class 0.1, if the error is at least 0.1% but not more than 0.25% $(0.1 \% \leq \Delta N.3.3.(b) \leq 0.25 \%)$</p>	<p>Inspect the conveyor and weighing area for compliance with UR.1. Installation Requirements and, after compliance is verified, repeat the test.</p> <p>If the result of that test remains greater than $\pm 0.25 \%$ for scales not marked with an accuracy class and those marked Class 0.25, or greater than $\pm 0.1 \%$ for scales marked Class 0.1, a span correction shall be made and the official with statutory authority notified.</p> <p>(Amended 1991)</p>
<p>For scales not marked with an accuracy class and those marked Class 0.25, if the error is greater than 0.6 % but does not exceed 0.75 % $(0.6 \% < \Delta N.3.3.(b) \leq 0.75 \%)$, and For scales marked Class 0.1, if the error is greater than 0.25% but does not exceed 0.3% $(0.25 \% < \Delta N.3.3.(b) \leq 0.3 \%)$</p>	<p>Inspect the conveyor and weighing area for compliance with UR.1. Installation Requirements and, after compliance is verified, repeat the test.</p> <p>If the result of that test remains greater than $\pm 0.256 \%$ for scales not marked with an accuracy class and those marked Class 0.25, or greater than $\pm 0.25 \%$ for scales marked Class 0.1, a span correction shall be made, the official with statutory authority shall be notified, and an official test shall be conducted.</p> <p>(Amended 1991)</p>
<p>For scales not marked with an accuracy class and those marked Class 0.25 %, if the error is greater than 0.75 % $(\Delta N.3.3.(b) > 0.75 \%)$, and For scales marked Class 0.1, if the error is greater than 0.3% $(\Delta N.3.3.(b) > 0.3 \%)$</p>	<p>An official test is required.</p> <p>(Amended 1987)</p>

Respectfully,

John Barton

NIST Technical Advisor to USNWG on Belt-Conveyor Scales