# Record of Letter Ballot Review by TC Chapter for Procedural Review

**Region/Locale: Japan**
**Global Technical Committee: Physical Interface & Carrier Technical Committee**
**TC Chapter Cochairs: N Tsuyoshi Nagashima/Miraial, Yasuhisa Ito/Murata Machinery,**
**Daisuke Sado /Daihen**
**Standards Staff: Hirofumi Kanno (SEMI Japan)**

|  | Scheduled in Background Statement | Actual |
|---|---|---|
| **Date** | **04/14/2021** | **04/14/2021** |
| **Location** | **Tokyo, Japan / Online** | **Tokyo, Japan / Online** |
| **Reason for Change of Date and/or Location (if changed)** | n/a | |

**Note: See *Regulations* ¶ 9.5 Exceptions for allowable reason to change.**

## I. Document Number and Title

| Document Number | Document Title |
|---|---|
| **6689** | **New Standard: Specification for 300mm Tape Frame FOUP** |

## II. Tally

**Standards staff to fill in.**

**Voting Tally: As-cast tally after close of voting period**

**Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (*Regulations* ¶ 9.6.2.1.1)**

**Voting Tally (with example values):**

| Voting Interest: | Returned Votes | | Distribution | | Return Rate | |
|---|---|---|---|---|---|---|
| **Letter Ballot** | **59** | ÷ | **96** | = | **61.5%** | **≥60%** |
| **Intercommittee Ballot** | **41** | | | | | |
| **Voting Interest Reject(s)** | **1** | | | **Total Voters with Rejects** | **1** | |
| **Voting Interest Accept(s)** | **42** | | | | | |

**Note: See *Regulations* § 3.2.1 for definition of Voting Interest.**

# III. Rejects
## Voting Interest Reject 1 (Voting Interest Name: RECIF Technologies)
## Voter Reject 1 (Voter: Thomas Brillouet (RECIF Technologies)
**Negative 1**

<table>
<tr><td rowspan="5"><strong>Negative</strong></td><td rowspan="2"><strong>Referenced Section/ Paragraph</strong></td><td colspan="4"><em>*TF/TC Chapter to fill in, including text in the ballot if necessary.</em></td></tr>
<tr><td colspan="4"><strong>Section 7</strong></td></tr>
<tr><td rowspan="3"><strong>Negative Text</strong></td><td colspan="4"><em>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</em></td></tr>
<tr><td colspan="4">FOUP dimensions require a LP design that would not be compatible with existing 300mm equipments (i.e. E63 BOLT standard).<br>A previous study in a European collaborative program, where a Tape Frame FOUP and its LP were designed and prototyped, showed that compliance with existing 300mm standards was possible (especially E63-BOLT, with for instance a FOUP width of 419mm, and a FOUP's door width of 403mm).<br>That would greatly ease adoption of such FOUP and LP by the industry, not requiring new equipments and giving the opportunity to<br>handle both wafers and Tape Frames on existing 300mm equipments...</td></tr>
<tr></tr>
<tr><td colspan="2"><strong>TF input (optional)</strong></td><td colspan="4"></td></tr>
<tr><td rowspan="2"><strong>Withdrawal (check one)</strong></td><td rowspan="2"></td><td></td><td colspan="2">No Negative withdrawal made by Voter.</td><td><strong>GO TO "Related" subsection</strong></td></tr>
<tr><td>x</td><td colspan="2">Withdrawal document received by Standards staff on 03/20/2021.</td><td><strong>GO TO "Final" subsection → (A)</strong></td></tr>
<tr><td rowspan="9"><strong>Related</strong></td><td rowspan="3"><strong>Motion and Reason (check one)</strong></td><td></td><td colspan="2">'Related' is mutually agreed upon. <strong>(Needs no motion.)</strong></td><td><strong>GO TO "Persuasive" subsection</strong></td></tr>
<tr><td></td><td colspan="3">Negative is not related. <strong>(Needs ≥2/3 votes to pass.)</strong></td></tr>
<tr><td></td><td>Reason</td><td colspan="2">XXXX</td></tr>
<tr><td><strong>Motion by/ 2<sup>nd</sup> by</strong></td><td colspan="4">Name (Company)/Name (Company)</td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="4"></td></tr>
<tr><td rowspan="3"><strong>Result of Vote (check one)</strong></td><td colspan="4">XX Y-XX N; Motion passed/failed.</td></tr>
<tr><td></td><td colspan="2">[Negative is not related.] < 2/3</td><td><strong>GO TO "Persuasive" subsection</strong></td></tr>
<tr><td></td><td colspan="2">2/3 ≤ [Negative is not related.]</td><td><strong>GO TO "Final" subsection → (B)</strong></td></tr>
<tr><td rowspan="6"><strong>Persuasive</strong></td><td rowspan="3"><strong>Motion and Reason (check one)</strong></td><td></td><td colspan="3">Negative is related and persuasive. <strong>(Needs >1/3 votes to pass.)</strong></td></tr>
<tr><td></td><td colspan="3">Negative is related and not persuasive. <strong>(Needs ≥2/3 votes to pass.)</strong></td></tr>
<tr><td></td><td>Reason</td><td colspan="2"></td></tr>
<tr><td><strong>Motion by/ 2<sup>nd</sup> by</strong></td><td colspan="4">Name (Company)/Name (Company)</td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="4"></td></tr>
<tr><td></td><td colspan="4">XX Y-XX N; Motion passed/failed.</td></tr>
</table>

| | Result of Vote (check one) | | [Negative is related and persuasive.] > 1/3 | Is a technical change recommended? (check one) | | Y | GO TO "Address by Technical Change Option" subsection |
|---|---|---|---|---|---|---|---|
| | | | [Negative is related and not persuasive.] < 2/3 | | | N | GO TO "Final" subsection → (E) |
| | | | 2/3 ≤ [Negative is related and not persuasive.] < 90% | GO TO "Final" subsection → (C) | | | |
| | | | 90% ≤ [Negative is related and not persuasive.] | GO TO "Not Significant Finding Option" subsection | | | |

**Technical Change Recommendations**
**Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.**

**Address by Technical Change Option**

| Technical Changes | 1 | FROM: Section/Paragraph XXX |
|---|---|---|
| | | TO: Section/Paragraph xxx |
| | | Justification (If necessary) |
| | 2 | FROM: Section/Paragraph XXX |
| | | TO: Section/Paragraph xxx |
| | | Justification (If necessary) |

| Motion | Negative is addressed by the technical change(s). | | |
|---|---|---|---|
| Motion by/2nd by | Name (Company)/Name (Company) | | |
| Discussion | | | |
| Result of Vote (check one) | XX Y-XX N; Motion passed/failed. | | |
| | | 2/3 ≤ [Negative is addressed by the technical change(s).] | GO TO "Incorporation of the Technical Change" subsection |
| | | [Negative is not addressed by the technical change(s).] < 2/3 | GO TO "Final" subsection → (E) |

| Incorporation of the Technical Change | Motion | To incorporate the technical change(s). | | |
|---|---|---|---|---|
| | Motion by/2nd by | Name (Company)/Name (Company) | | |
| | Discussion | | | |
| | Result of Vote (check one) | XX Y-XX N; Motion passed/failed. | | |
| | | | 90% ≤ [Agree to incorporate.] | GO TO "Final" subsection → (F) |
| | | | [Disagree to incorporate.]>10% | GO TO "Final" subsection → (E) |

**Not Significant**

**This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (*Regulations* ¶ 9.6.1.4.5.2)**

| | It is mutually agreed upon to term the Negative "not significant". | GO TO "Final" subsection → (D) |
|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Use of "Not significant finding option"** _(check one)_ | | It is mutually agreed upon to term the Negative "significant". | | | **GO TO "Final" subsection → (C)** |
| | | | Whether or not the Negative is "not significant" is decided by a vote. | | | |
| | **Motion** | The Negative is "not significant". | | | | |
| | **Motion by/ 2ⁿᵈ by** | Name (Company)/Name (Company) | | | | |
| | **Vote** | | XX **Y**-XX **N**; Motion passed with simple majority | | | **GO TO "Final" subsection → (D)** |
| | | | XX **Y**-XX **N**; Motion failed with simple majority | | | **GO TO "Final" subsection → (C)** |
| **Final** | **_(check if applicable)_** | x | **(A)** | Withdrawn **(counted under h in disposition)** | | |
| | | | **(B)** | Not related **(counted under i in disposition)** | | |
| | | | **(C)** | Related and not persuasive (significant) | | |
| | | | **(D)** | Not significant **(counted under j in disposition)** | | |
| | | | **(E)** | Related and persuasive and not addressed by technical change | **DOCUMENT FAILS** | |
| | | | **(F)** | Addressed by technical change **(counted under k disposition)** | | |
| | **_(check if applicable)_** | | _Comment generated._ **_See Section V-(ii) Comment #_** _X._ | | | |

**This table is needed for each Negative.**

## Negative 2

<table>
<tr><td rowspan="4"><strong>Negative</strong></td><td><strong>Referenced Section/ Paragraph</strong></td><td colspan="4"><span style="color:orange"><strong>*TF/TC Chapter to fill in, including text in the ballot if necessary.</strong></span></td></tr>
<tr><td colspan="4"><span style="color:orange"><strong>Section 7,</strong></span></td></tr>
<tr><td rowspan="2"><strong>Negative Text</strong></td><td colspan="4"><span style="color:orange"><strong>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</strong></span></td></tr>
<tr><td colspan="4"><span style="color:blue">Also, on the 25 capacity FOUP (Figure 5), the Tape Frames supports thickness (up to 5mm) seems very big and leaves only 5mm for Frames insertion/extraction. Compatibility with plastic Frames of 2.5mm (some of them going up to 3.5mm) is a concern.</span></td></tr>
</table>

<table>
<tr><td colspan="6"><strong>TF input</strong> <span style="color:orange">(optional)</span></td></tr>
</table>

<table>
<tr><td rowspan="2"><strong>Withdrawal (check one)</strong></td><td></td><td>No Negative withdrawal made by Voter.</td><td><span style="color:orange"><strong>GO TO "Related" subsection</strong></span></td></tr>
<tr><td>x</td><td>Withdrawal document received by Standards staff on <span style="color:blue">03/20/2021</span>.</td><td><span style="color:orange"><strong>GO TO "Final" subsection</strong></span> <span style="color:red">→ <strong>(A)</strong></span></td></tr>
</table>

<table>
<tr><td rowspan="10"><strong>Related</strong></td><td rowspan="3"><strong>Motion and Reason (check one)</strong></td><td></td><td colspan="2">'Related' is mutually agreed upon. <span style="color:orange"><strong>(Needs no motion.)</strong></span></td><td><span style="color:orange"><strong>GO TO "Persuasive" subsection</strong></span></td></tr>
<tr><td></td><td colspan="2">Negative is not related. <span style="color:orange"><strong>(Needs ≥2/3 votes to pass.)</strong></span></td><td></td></tr>
<tr><td style="background:black"></td><td>Reason</td><td><span style="color:blue">XXXX</span></td><td></td></tr>
<tr><td><strong>Motion by/ 2<sup>nd</sup> by</strong></td><td colspan="4"><span style="color:blue">Name (Company)/Name (Company)</span></td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="4"></td></tr>
<tr><td rowspan="3"><strong>Result of Vote (check one)</strong></td><td colspan="4"><span style="color:blue">XX <strong>Y</strong>-XX <strong>N</strong>; Motion passed/failed.</span></td></tr>
<tr><td></td><td colspan="2">[Negative is not related.] < 2/3</td><td><span style="color:orange"><strong>GO TO "Persuasive" subsection</strong></span></td></tr>
<tr><td></td><td colspan="2">2/3 ≤ [Negative is not related.]</td><td><span style="color:orange"><strong>GO TO "Final" subsection</strong></span> <span style="color:red">→ <strong>(B)</strong></span></td></tr>
</table>

<table>
<tr><td rowspan="12"><strong>Persuasive</strong></td><td rowspan="3"><strong>Motion and Reason (check one)</strong></td><td></td><td colspan="4">Negative is related and persuasive. <span style="color:orange"><strong>(Needs >1/3 votes to pass.)</strong></span></td></tr>
<tr><td></td><td colspan="4">Negative is related and not persuasive. <span style="color:orange"><strong>(Needs ≥2/3 votes to pass.)</strong></span></td></tr>
<tr><td style="background:black"></td><td>Reason</td><td colspan="3"></td></tr>
<tr><td><strong>Motion by/ 2<sup>nd</sup> by</strong></td><td colspan="5"><span style="color:blue">Name (Company)/Name (Company)</span></td></tr>
<tr><td><strong>Discussion</strong></td><td colspan="5"></td></tr>
<tr><td rowspan="6"><strong>Result of Vote (check one)</strong></td><td colspan="5"><span style="color:blue">XX <strong>Y</strong>-XX <strong>N</strong>; Motion passed/failed.</span></td></tr>
<tr><td></td><td>[Negative is related and persuasive.] > 1/3</td><td rowspan="2"><strong>Is a technical change recommended?</strong> <span style="color:orange">(check one)</span></td><td></td><td>Y</td><td><span style="color:orange"><strong>GO TO "Address by Technical Change Option" subsection</strong></span></td></tr>
<tr><td></td><td>[Negative is related and not persuasive.] < 2/3</td><td></td><td>N</td><td><span style="color:orange"><strong>GO TO "Final" subsection</strong></span> <span style="color:red">→ <strong>(E)</strong></span></td></tr>
<tr><td></td><td>2/3 ≤ [Negative is related and not persuasive.] < 90%</td><td colspan="3"><span style="color:orange"><strong>GO TO "Final" subsection → (C)</strong></span></td></tr>
<tr><td></td><td>90% ≤ [Negative is related and not persuasive.]</td><td colspan="3"><span style="color:orange"><strong>GO TO "Not Significant Finding Option" subsection</strong></span></td></tr>
</table>

| | Technical Change Recommendations | | | |
|---|---|---|---|---|
| **Address by Technical Change Option** | **Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.** | | | |
| | **Technical Changes** | 1 | **FROM: Section/Paragraph XXX** | |
| | | | **TO: Section/Paragraph XXX** | |
| | | | **Justification (If necessary)** <br> **Same thickness as 300mm FOUP defined in E47.1** | |
| | | 2 | **FROM: Section/Paragraph XXX** | |
| | | | **TO: Section/Paragraph xxx** | |
| | | | **Justification (If necessary)** | |
| | **Motion** | | Negative is addressed by the technical change(s). | |
| | **Motion by/2ⁿᵈ by** | | Name (Company)/Name (Company) | |
| | **Discussion** | | | |
| | **Result of Vote (check one)** | | XX **Y**-XX **N**; Motion passed/failed. | |
| | | | 2/3 ≤ [Negative is addressed by the technical change(s).] | **GO TO "Incorporation of the Technical Change" subsection** |
| | | | [Negative is not addressed by the technical change(s).] < 2/3 | **GO TO "Final" subsection → (E)** |
| | **Incorporation of the Technical Change** | **Motion** | To incorporate the technical change(s). | |
| | | **Motion by/2ⁿᵈ by** | Name (Company)/Name (Company) | |
| | | **Discussion** | | |
| | | **Result of Vote (check one)** | XX **Y**-XX **N**; Motion passed/failed. | |
| | | | 90% ≤ [Agree to incorporate.] | **GO TO "Final" subsection → (F)** |
| | | | [Disagree to incorporate.]>10% | **GO TO "Final" subsection → (E)** |
| **Not Significant Finding Option** | **This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.1.4.5.2)** | | | |
| | **Use of "Not significant finding option" (check one)** | | It is mutually agreed upon to term the Negative "not significant". | **GO TO "Final" subsection → (D)** |
| | | | It is mutually agreed upon to term the Negative "significant". | **GO TO "Final" subsection → (C)** |
| | | | Whether or not the Negative is "not significant" is decided by a vote. | |
| | **Motion** | | The Negative is "not significant". | |
| | **Motion by/ 2ⁿᵈ by** | | Name (Company)/Name (Company) | |
| | **Vote** | | XX **Y**-XX **N**; Motion passed with simple majority | **GO TO "Final" subsection → (D)** |
| | | | XX **Y**-XX **N**; Motion failed with simple majority | **GO TO "Final" subsection → (C)** |

| | | | | | |
|---|---|---|---|---|---|
| **Final** | **(check if applicable)** | x | **(A)** | Withdrawn **(counted under h in disposition)** | |
| | | | **(B)** | Not related **(counted under i in disposition)** | |
| | | | **(C)** | Related and not persuasive (significant) | |
| | | | **(D)** | Not significant **(counted under j in disposition)** | |
| | | | **(E)** | Related and persuasive and not addressed by technical change | **DOCUMENT FAILS** |
| | | | **(F)** | Addressed by technical change **(counted under k disposition)** | |
| | **(check if applicable)** | | | Comment generated. *See Section V-(ii) Comment # X.* | |

**This table is needed for each Negative.**
**Check only when the Document has not been failed.**

| | | | |
|---|---|---|---|
| 2 | Original number (#) of Negatives | | **(g)** |
| 2 | Number of Negatives withdrawn | | **(h)** |
| 0 | Number of Negatives found not related | | **(i)** |
| 0 | Number of Negatives found not significant | | **(j)** |
| 0 | Number of Negatives addressed by technical change **(Negative becomes not significant)** | | **(k)** |
| **Final** | x | $g - (h + i + j + k) = 0$ | Reject is Not Valid and is not included in the denominator of § VI. *Approval Conditions Check* |
| | | $g - (h + i + j + k) > 0$ | Reject is included in the denominator of § VI. *Approval Conditions Check* |
| | | Reject without a Negative | **Not Valid** |

**This table is needed for each Voting Interest Reject.**

**Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. (*Regulations* ¶ 9.4.3.3)**
**Note: A Negative addressed by a technical change is automatically considered to be not significant. (*Regulations* ¶ 9.6.1.4.5.2)**
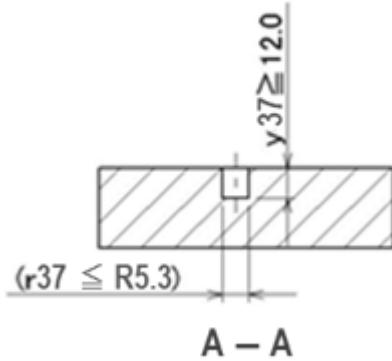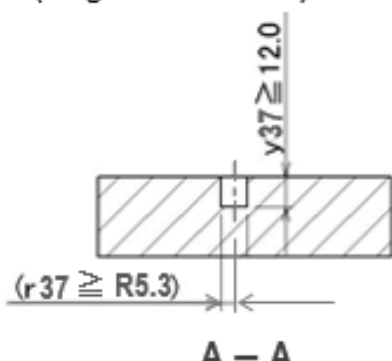
# IV. Other Technical Issues

**Note: TC Chapter may choose to address a technical issue that is not part of a Negative received on a Letter Ballot (i.e., a Comment or a reason not addressed by a Vote response) by handling it as a Negative and finding it related and technically persuasive. The TC Chapter may then fail the Document or address such technical issue by using the procedure defined in *Regulations* § 9.6.1.4.3 to make a technical change to the Document. (*Regulations* ¶ 9.6.1.4.2.5)**

| | | |
|---|---|---|
| **Technical Issue** | **Origin** | *TF/TC Chapter to choose<br>Offline comment from TF member through email after voting |
| | **Referenced Section/ Paragraph** | *TF/TC Chapter to fill in including text in the ballot as appropriate.** |
| | | Figure 2: r37 $\leqq$ R5.3 |
| | **Reason** | *Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied.**<br>Conflicts found in the document:<br>- Figure 2: r37 $\leqq$ R5.3 (additionally, the figure indicates diameter instead radius)<br>- Table 3: r37 $\geqq$ R5.3<br>Table 3 is correct. |

| | | | | |
|---|---|---|---|---|
| **Handle technical issue identified above as a Negative.** | | | | |

| | | | | |
|---|---|---|---|---|
| **Related** | **Motion and Reason (check one)** | x | 'Related' is mutually agreed upon. **(Needs no motion.)** | **GO TO "Persuasive" subsection** |
| | | | Negative is not related and assigned to TF. **(Needs ≥2/3 votes to pass.)** | |
| | | | Negative is not related and placed on agenda of current TC Chapter meeting as new business. **(Needs ≥2/3 votes to pass.)** | |
| | | ■ | Reason | XXXX |
| | **Motion by/ 2nd by** | Name (Company)/Name (Company) | | |
| | **Discussion** | | | |
| | **Result of Vote (check one)** | XX **Y**-XX **N**; Motion passed/failed. | | |
| | | | [Negative is not related.] <2/3 | **GO TO "Persuasive" subsection** |
| | | | 2/3 ≤ [Negative is not related] and assigned to TF. | **GO TO "Final" subsection → (B)** |
| | | | 2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business. | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Persuasive** | **Motion and Reason (check one)** | x | Negative is related and persuasive. **(Needs >1/3 votes to pass.)** | | | |
| | | | Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)** | | | |
| | | ■ | Reason | Conflicts in the document itself | | |
| | **Motion by/ 2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | | | | |
| | **Discussion** | None | | | | |
| | **Result of Vote (check one)** | 13 **Y**-0 **N**; Motion passed. | | | | |
| | | X | [Negative is related and persuasive.] > 1/3 | **Is a technical change recommended? (check one)** | x **Y** | **GO TO "Address by Technical Change Option" subsection** |
| | | | [Negative is related and not persuasive.] < 2/3 | | **N** | **GO TO "Final" subsection → (E)** |
| | | | 2/3 ≤ [Negative is related and not persuasive.] < 90% | **GO TO "Final" subsection → (C)** | | |

| | |
|---|---|
| **Add ress** | **Technical Change Recommendations** <br> **Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.** |

| | | |
|---|---|---|
| **Technical Changes** | **1** | **FROM: Section/Paragraph Figure 2**<br>**r37 ≦ R5.3**<br><br>(Registration Hole)<br><br>y37≧12.0<br><br>(r37 ≦ R5.3)<br><br>A − A |
| | | **TO: Section/Paragraph xxx**<br>**r37 ≧ R5.3**<br><br>(Registration Hole)<br><br>y37≧12.0<br><br>(r37 ≧ R5.3)<br><br>A − A |
| | | **Justification (If necessary)** |
| | **2** | **FROM: Section/Paragraph XXX** |
| | | **TO: Section/Paragraph xxx** |
| | | **Justification (If necessary)** |

| Motion | Negative is addressed by the technical change(s). | |
|---|---|---|
| **Motion by/2<sup>nd</sup> by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | |
| **Discussion** | None | |
| **Result of Vote (check one)** | 13 Y-0 N; Motion passed. | |
| | **x** 2/3 ≤ [Negative is addressed by the technical change(s).] | **GO TO "Incorporation of the Technical Change" subsection** |
| | [Negative is not addressed by the technical change(s).] < 2/3 | **GO TO "Final" subsection → (E)** |

9

| | | | | | |
|---|---|---|---|---|---|
| **Incorporation of the Technical Change** | **Motion** | | To incorporate the technical change(s). | | |
| | **Motion by/2nd by** | | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | | |
| | **Discussion** | | None | | |
| | **Result of Vote (check one)** | | 13 **Y**-0 **N**; Motion passed. | | |
| | | X | 90% ≤ [Agree to incorporate.] | | **GO TO "Final" subsection → (F)** |
| | | | [Disagree to incorporate.] >10% | | **GO TO "Final" subsection → (E)** |
| **Final** | **(check one)** | | | **(B)** | Not related | |
| | | | | **(C)** | Related and not persuasive | |
| | | | | **(E)** | Related and persuasive and not addressed by technical change | **DOCUMENT FAILS** |
| | | x | | **(F)** | Addressed by technical change | |
| | **(check if applicable)** | | | Comment generated. See Section V-(ii) Comment # X. | |

<br>

| | | | | |
|---|---|---|---|---|
| **Technical Issue** | **Origin** | | *TF/TC Chapter to choose<br>Offline comment from TF member through email after voting | |
| | **Referenced Section/ Paragraph** | | *TF/TC Chapter to fill in including text in the ballot as appropriate.<br>7.3.6.3 The latch torque – When …, shall be within *f34* for both open and close direction.<br>Table 3: (latch torque symbol is missing) | |
| | **Reason** | | *Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied.<br>As described in Table 3, *f34* is not the latch torque but door closure force. | |
| **Handle technical issue identified above as a Negative.** | | | | |
| **Related** | **Motion and Reason (check one)** | x | 'Related' is mutually agreed upon. **(Needs no motion.)** | **GO TO "Persuasive" subsection** |
| | | | Negative is not related and assigned to TF. **(Needs ≥2/3 votes to pass.)** | |
| | | | Negative is not related and placed on agenda of current TC Chapter meeting as new business. **(Needs ≥2/3 votes to pass.)** | |
| | | ■ | Reason | XXXX | |
| | **Motion by/ 2nd by** | | Name (Company)/Name (Company) | |
| | **Discussion** | | | |
| | **Result of Vote (check one)** | | XX **Y**-XX **N**; Motion passed/failed. | |
| | | X | [Negative is not related.] <2/3 | **GO TO "Persuasive" subsection** |
| | | | 2/3 ≤ [Negative is not related] and assigned to TF. | **GO TO "Final" subsection → (B)** |
| | | | 2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business. | |
| **Persuasive** | **Motion and Reason (check one)** | x | Negative is related and persuasive. **(Needs >1/3 votes to pass.)** | |
| | | | Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)** | |

| | | Reason | Conflicts in the document itself |
|---|---|---|---|

| **Motion by/ 2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon |
|---|---|
| **Discussion** | None |

**Result of Vote (check one)**

14 **Y**-0 **N**; Motion passed.

| | | | | |
|---|---|---|---|---|
| x | [Negative is related and persuasive.] > 1/3 | **Is a technical change recommended? (check one)** | x | **Y** | **GO TO "Address by Technical Change Option" subsection** |
| | [Negative is related and not persuasive.] < 2/3 | | | **N** | **GO TO "Final" subsection → (E)** |
| | 2/3 ≤ [Negative is related and not persuasive.] < 90% | **GO TO "Final" subsection → (C)** | | | |

**Address by Technical Change Option**

**Technical Change Recommendations**
**Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.**

**Technical Changes**

**1**

**FROM: Section/Paragraph 7.3.6.3**
7.3.6.3 The latch torque – When the door is placed at the nominal position, the torque to rotate the latching mechanism shall be within $f34$ for both open and close direction.

**TO: Section/Paragraph 7.3.6.3**
7.3.6.3 The latch torque – When the door is placed at the nominal position, the torque to rotate the latching mechanism shall be within $f30$ for both open and close direction.

**Justification (If necessary)**

**2**

**FROM: Section/Paragraph Table 3**

| $d65$ | 9, 10, 13 | 10 ± 0.5 | x65, FDP | surface of cylindrical fork-lift pin holes in left and right bottom conveyor rails |
|---|---|---|---|---|
| $f34$ | none | 180 N | n/a | force to close the door into the nominal door position |

**TO: Section/Paragraph Table 3**

| $d65$ | 9, 10, 13 | 10 ± 0.5 | x65, FDP | surface of cylindrical fork-lift pin holes in left and right bottom conveyor rails |
|---|---|---|---|---|
| $f30$ | none | 1.7 N | n/a | force to rotate the latch mechanism for both open and close direction |
| $f34$ | none | 180 N | n/a | force to close the door into the nominal door position |

**Justification (If necessary)**

| **Motion** | Negative is addressed by the technical change(s). |
|---|---|
| **Motion by/2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon |
| **Discussion** | None |

**Result of Vote (check one)**

14 **Y**-0 **N**; Motion passed.

| | | |
|---|---|---|
| x | 2/3 ≤ [Negative is addressed by the technical change(s).] | **GO TO "Incorporation of the Technical Change" subsection** |
| | [Negative is not addressed by the technical change(s).] < 2/3 | **GO TO "Final" subsection → (E)** |

**Incorporation of**

| **Motion** | To incorporate the technical change(s). |
|---|---|
| **Motion by/2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon |
| **Discussion** | None |

| | | | | | |
|---|---|---|---|---|---|
| | | **Result of Vote (check one)** | | 14 **Y**-0 **N**; Motion passed. | |
| | | | x | 90% ≤ [Agree to incorporate.] | **GO TO "Final" subsection → (F)** |
| | | | | [Disagree to incorporate.] >10% | **GO TO "Final" subsection → (E)** |
| **Final** | **(check one)** | | | **(B)** | Not related | |
| | | | | **(C)** | Related and not persuasive | |
| | | | | **(E)** | Related and persuasive and not addressed by technical change | **DOCUMENT FAILS** |
| | | x | | **(F)** | Addressed by technical change | |
| | **(check if applicable)** | | | Comment generated. See Section V-(ii) Comment # X. | |

| | | | | | |
|---|---|---|---|---|---|
| **Technical Issue** | **Origin** | | *TF/TC Chapter to choose<br>Pointed out in the ballot review in the TF Meeting | | |
| | **Referenced Section/ Paragraph** | | *TF/TC Chapter to fill in including text in the ballot as appropriate. | | |
| | | | § § 4.1<br>NOTE 1: Related Standard below is also under development;<br>- Specification for 300mm Tape Frame FOUP Load Port | | |
| | **Reason** | | *Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied. | | |
| | | | Improper referencing in §§4.1, Note 1<br>The Regulation doesn't allow to refer to the title of documents before publishing. | | |
| **Handle technical issue identified above as a Negative.** | | | | | |
| **Related** | **Motion and Reason (check one)** | x | 'Related' is mutually agreed upon. **(Needs no motion.)** | | **GO TO "Persuasive" subsection** |
| | | | Negative is not related and assigned to TF. **(Needs ≥2/3 votes to pass.)** | | |
| | | | Negative is not related and placed on agenda of current TC Chapter meeting as new business. **(Needs ≥2/3 votes to pass.)** | | |
| | | | Reason | XXXX | |
| | **Motion by/ 2nd by** | | Name (Company)/Name (Company) | | |
| | **Discussion** | | | | |
| | **Result of Vote (check one)** | | XX **Y**-XX **N**; Motion passed/failed. | | |
| | | | [Negative is not related.] <2/3 | | **GO TO "Persuasive" subsection** |
| | | | 2/3 ≤ [Negative is not related] and assigned to TF. | | **GO TO "Final" subsection → (B)** |
| | | | 2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business. | | |
| **Persuasive** | **Motion and Reason (check one)** | x | Negative is related and persuasive. **(Needs >1/3 votes to pass.)** | | |
| | | | Negative is related and not persuasive. **(Needs ≥2/3 votes to pass.)** | | |
| | | | Reason | Conflicts in the document itself | |

| | Motion by/ 2nd by | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | | | | | |
|---|---|---|---|---|---|---|---|
| | **Discussion** | None | | | | | |
| | **Result of Vote (check one)** | 14 **Y**-0 **N**; Motion passed. | | | | | |
| | | x | [Negative is related and persuasive.] > 1/3 | **Is a technical change recommended? (check one)** | x | **Y** | **GO TO "Address by Technical Change Option" subsection** |
| | | | [Negative is related and not persuasive.] < 2/3 | | | **N** | **GO TO "Final" subsection → (E)** |
| | | | 2/3 ≤ [Negative is related and not persuasive.] < 90% | **GO TO "Final" subsection → (C)** | | | |

**Technical Change Recommendations**
**Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.**

**Address by Technical Change Option**

**Technical Changes**

| 1 | **FROM: Section/Paragraph 4.1**<br>NOTE 1: Related Standard below is also under development;<br>- Specification for 300mm Tape Frame FOUP Load Port |
|---|---|
| | **TO: Section/Paragraph 4.1**<br>Note 1: Related Standard below is also under development;<br>- Specification for 300mm Tape Frame FOUP Load Port<br><br>NOTE 1: A Document covering specification of Load Port that is correspond to this document is under development by the Physical Interface and Carriers Global Technical Committee. |
| | **Justification (If necessary)** |
| 2 | **FROM: Section/Paragraph Table 3** |
| | **TO: Section/Paragraph Table 3** |
| | **Justification (If necessary)** |

| **Motion** | Negative is addressed by the technical change(s). | | |
|---|---|---|---|
| **Motion by/2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | | |
| **Discussion** | None | | |
| **Result of Vote (check one)** | 14 **Y**-0 **N**; Motion passed. | | |
| | x | 2/3 ≤ [Negative is addressed by the technical change(s).] | **GO TO "Incorporation of the Technical Change" subsection** |
| | | [Negative is not addressed by the technical change(s).] < 2/3 | **GO TO "Final" subsection → (E)** |

**Incorporation of the Technical Change**

| **Motion** | To incorporate the technical change(s). | | |
|---|---|---|---|
| **Motion by/2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | | |
| **Discussion** | None | | |
| **Result of Vote (check one)** | 14 **Y**-0 **N**; Motion passed. | | |
| | x | 90% ≤ [Agree to incorporate.] | **GO TO "Final" subsection → (F)** |
| | | [Disagree to incorporate.] >10% | **GO TO "Final" subsection → (E)** |

| **(check one)** | | **(B)** | Not related |
|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| | | **(C)** | Related and not persuasive | |
| | | **(E)** | Related and persuasive and not addressed by technical change | **DOCUMENT FAILS** |
| | x | **(F)** | Addressed by technical change | |
| **(check if applicable)** | | Comment generated. See Section V-(ii) Comment # X. | | |

# V. Comments
## V- (i) Voters' Comments
### Commenter 1 (Vargas-Bernal, Rafael/ ITSdl) - Comment 1

| | | | | |
|---|---|---|---|---|
| **Comment** | **\*TF/TC Chapter to fill in section/paragraph #, if necessary.** | | | |
| | In subsection 7.4.7 'Figure 5.and' must be reedited. | | | |
| **Action** | **The TC Chapter agreed to do one of the following actions.** | | | |
| | **\*No motion is required in this step.** | | | |
| | | Already addressed by Commenter #, Comment # | | |
| | | No further action was taken by the TC Chapter. | | |
| | | Refer to the TF for more consideration. | | |
| | | New Business | | |
| | x | Editorial Change | | |
| | | Options for editorial change **(check one)** | | **Case 1: No vote in this section:** |
| | | | | **To be included and voted on as a group in § VI.** *Editorial Changes Other than Those Voted on in § V.* |
| | | | | **Case 2: Voted in this section:** |
| | | | x | **Original section number and at least one full sentence are required in "FROM" and "TO" fields.** |
| **Editorial Changes** | 1 | **FROM: Section/Paragraph subsection 7.4.7** <br> See Figure 5.and Figure 6. | | |
| | | **TO: Section/Paragraph subsection 7.4.7** <br> See Figure 5 and Figure 6. | | |
| | | **Justification (If necessary)** <br> Remove "." After "Figure 5". | | |
| | 2 | **FROM: Section/Paragraph xxx** | | |
| | | **TO: Section/Paragraph xxx** | | |
| | | **Justification (If necessary)** | | |
| **Motion** | To approve above editorial change(s) | | | |
| **Motion by/2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | | | |

| Discussion | None |
|---|---|
| *Vote* | *14* **Y**-*0* **N**; *Motion passed.* |

## Commenter 2 (Kwakman, Laurens/FEI) - Comment 1

| | | | | |
|---|---|---|---|---|
| **Comment** | **\*TF/TC Chapter to fill in section/paragraph #, if necessary.** | | | |
| | the document is acceptable in terms of writing and definitions, but I cannot judge whether the choices for the values of all the various dimensions are correct. | | | |
| **Action** | **The TC Chapter agreed to do one of the following actions.** | | | |
| | **\*No motion is required in this step.** | | | |
| | | Already addressed by Commenter #, Comment # | | |
| | x | No further action was taken by the TC Chapter. | | |
| | | Refer to the TF for more consideration. | | |
| | | New Business | | |
| | | Editorial Change | | |
| | Options for editorial change **(check one)** | x | **Case 1: No vote in this section:** | |
| | | | **To be included and voted on as a group in § VI.** *Editorial Changes Other than Those Voted on in § V.* | |
| | | | **Case 2: Voted in this section:** | |
| | | | **Original section number and at least one full sentence are required in "FROM" and "TO" fields.** | |
| **Editorial Changes** | 1 | **FROM: Section/Paragraph xxx** | | |
| | | **TO: Section/Paragraph xxx** | | |
| | | **Justification (If necessary)** | | |
| | 2 | **FROM: Section/Paragraph xxx** | | |
| | | **TO: Section/Paragraph xxx** | | |
| | | **Justification (If necessary)** | | |
| **Motion** | To approve above editorial change(s) | | | |
| **Motion by/2nd by** | Name (Company)/Name (Company) | | | |
| **Discussion** | XXXX | | | |
| *Vote* | *XX* **Y**-*XX* **N**; *Motion passed/failed.* | | | |

## V-(ii) Comments Created by Handling Negative
**None**
## VI. Editorial Changes Other than Those Voted on in § V
**None**

## VII. Approval Conditions Check
### VII. - (i). Approval Rate

**APPROVAL CONDITION 1: All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (*Regulations* ¶ 9.6.2.1.2)**

**APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.6.2.1.3)**

**Note: If both approval conditions are not satisfied, the Document fails.**

| | | **Accepts** | **(Accepts + Valid Rejects)** | | | |
|---|---|---|---|---|---|---|
| **Approval Rate** | = | **42** | / | **42** | = | **100.0%** | **≥90%** |
| | | | | | | |
| | | | | | | |

### VII. – (ii) Approval Level (check one)
**Note: See *Regulations* § 9.6.2 for further information.**

| | |
|---|---|
| | **Globally Approved (No Ratification Ballot needed):** The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee. |
| **X** | **Need a Ratification Ballot:** The Letter Ballot meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes. |

## VIII. Safety Check
**Note: See *Regulations* § 15 for further information.**

| | | |
|---|---|---|
| Motion | **x** | **This is not a Safety Document**, when all safety-related information is removed, the Document is still technically sound and complete. (*Regulations* ¶ 8.7.1) |
| | | **This is a Safety Document**, when all safety-related information is removed, the Document is not technically sound and complete. (*Regulations* ¶ 8.7.2) |
| | | Safety Checklist (*Regulations* ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (*Regulations* ¶ 15.1.2) |
| **Motion by/2nd by** | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon | |
| **Discussion** | None | |
| **Vote** | 13 **Y**-0 **N**; Motion passed | |

# IX. Intellectual Property (IP) Check

**Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. Regardless of the coverage, this IP check applies to the entire Standard or Safety Guideline\*. See *Regulations* § 16 for further information.**

| x | The TC Chapter meeting chair asked those participating, if they were aware of any patented technology that might be relevant (see *Regulations* ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see *Regulations* ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, *Regulations* § 8.8) | | | | |
|---|---|---|---|---|---|
| | x | The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.) | **GO TO SECTION X.** | | |
| | | The question is answered in affirmative | Is any of the known IPs a patented technology? | **Yes, at least one of them is a patented technology** | **GO TO IX (a) "Patented Technology" subsection** |
| | | | | **No** | **GO TO IX (b) "Copyright items" subsection** |

## IX(a) Patented Technologies subsection
### IX(a1) Total numbers of Patented Technologies to be dealt with

| **#** **Fill number** | **(l)** Known Patented Technology that might be relevant to the Standard/Safety Guideline | **#** **Fill number** | **(m)** Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot | **Postpone assessment of such patented technologies to be performed at the next scheduled TC Chapter meeting.** |
|---|---|---|---|---|
| | | **#** **Fill number** | **(n)** Number of patented technologies first became known to the TC Chapter before the day of the issuance of this Letter Ballot | **GO TO IX (a2)** |

## IX(a2) Assessment of disclosed patented technologies

| **Disclosed patented technology #1** (*Brief description, e.g., patent title and number*): | | | | **Date of Assessment (If different from the date of Letter Ballot adjudication)** MM/DD/YYYY | |
|---|---|---|---|---|---|
| Is disclosed patented technology #1 found to be "might be material" to the Standard/Safety Guideline? | | YES (It is a PMPT) | Is the use of this PMPT technically justified? | **YES** | **PROCEED to assess NEXT one, or** **if this is the last one, GO TO IX(a3)** |
| | | | | **NO** | **The Document is failed and returned to the TF** |
| | | NO | No further action is needed for patented technology #1 | | |

*This table is needed for each disclosed patented technology.*

### IX(a3) LOA status check of PMPT of which inclusion assessed to be justified

| LOA Status of PMPT #1 | | | | | | |
|---|---|---|---|---|---|---|
| Has an LOA for this patented technology been received from every owner ? | | YES | | **PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)** | | |
| | | NO | MOTION | | Ask ISC for special permission to publish. | |
| | | | | | Quit activity. | **The Document is failed and returned to the TF** |
| | | | | | Wait for LOA | **PROCEED to check NEXT one, or if this is the last one, GO TO IX(b1)** |
| | | | **Motion by/ 2nd by** | | Name (Company)/Name (Company) | |
| | | | **Discussion** | | XXXX | |
| | | | **Vote** | | XX **Y**-XX **N**; Motion passed (or failed) | |

*This table is needed for each PMPT of which inclusion assessed to be justified.*

### IX(b1) Total numbers of copyrighted items to be dealt with

| **#** **Fill number** | **(o)** Known copyrighted items that are used or reproduced to the Standard/Safety Guideline | | **o > 0** There is at least one known copy righted items that might be relevant to the Standard/Safety Guideline | **GO TO IX (b2)** |
|---|---|---|---|---|
| | | | **o = 0** There is no disclosed copyrighted item | **GO TO IX (c)** |

### IX(b2) Assessment of disclosed copyrighted items

| Disclosed copyrighted item #1 (*Brief description of its use in the Document*): | | | | | | | |
|---|---|---|---|---|---|---|---|
| Is disclosed copyrighted item #1 used or reproduced in the Standard/Safety Guideline? | | YES | Is the use/reproduction of this copyrighted item technically justified? | | YES | | **PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)** |
| | | | | | NO | | **The Document is failed and returned to the TF** |
| | | NO | No further action is needed for copyrighted item #1 | | | | |

*This table is needed for each disclosed copyrighted item.*

### IX(b3) Copyright release status check of copyrighted item of which inclusion assessed to be justified

| Copyright release Status of copyrighted item #1 | | | | | |
|---|---|---|---|---|---|
| Has the copyright release been received from its owner ?. | | YES | | **PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)** | |
| | | NO | M | | Ask ISC for special permission to publish. |

| | | | | | Quit activity. | **The Document is failed and returned to the TF** |
|---|---|---|---|---|---|---|
| | | | | | Wait for copyright release letter | **PROCEED to check NEXT one, or if this is the last one, GO TO IX(c)** |
| | | | **Motion by/ 2nd by** | | | Name (Company)/Name (Company) |
| | | | **Discussion** | | | XXXX |
| | | | **Vote** | | | XX **Y**-XX **N**; Motion passed (or failed) |

*This table is needed for each copyrighted item of which use/reproduction assessed to be justified.*

## IX(c) Assessment of disclosed (identified) trademark

| | | | | | YES | **GO TO IX(d)** |
|---|---|---|---|---|---|---|
| Is there any trademark in the Standard/Safety Guideline? | | YES | Is every instance of trademark use technically justified? | | NO | **The Document is failed and returned to the TF** |
| | | NO | **GO TO IX(d)** | | | |

## IX(d) IP check completion condition check

| | | | |
|---|---|---|---|
| The co-chair checks if any Patented Technologies first become known to the TC Chapter on or after the day of the issuance of this Letter Ballot? i.e., m>0 in IX(a1) | | YES | **Sections IX(a2) and IX(a3) shall be completed and recorded for such patented technologies at next scheduled meeting of the TC Chapter. Until then, the TC Chapter shall NOT go to X** (making motion to pass/fail this Document) **(see *Regulations* ¶ 16.4.1.2) Until then this Letter Ballot Review is on hold.** |
| | | NO | **GO TO X** |

# X. Action for This Document

| | | |
|---|---|---|
| **Motion** | | This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review. |
| | | This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review. |
| | x | This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes. |
| | | This Document failed TC Chapter review and will be returned to the TF for rework. |
| | | This Document failed TC Chapter review and work will be discontinued. |
| **Motion by/ 2nd by** | | Naomune Taniguchi / TOKYO SEIMITSU CO., LTD. / Tsukasa Fukunaga / Inficon |
| **Discussion** | | None |
| **Vote** | | 11 **Y**-0 **N** |
| **Final Action** | X | Motion passed |
| | | Motion failed |

**Note: If the use of PMPT or copyrighted item is justified by the TC Chapter, LOA or release form must be received before publication can proceed.**