

Record of Line-item Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **North America**

Global Technical Committee: **EH&S**

TC Chapter Cochairs: **Chris Evanston (Salus Engineering), Sean Larsen (LAM Research), Bert Planting (ASML)**

Standards Staff: **Kevin Nguyen**

	Scheduled in Background Statement	Actual
Date	4/2/2020	12/17/2020
Location	Milpitas, CA	OVTCCM
Reason for Change of Date and/or Location (if changed)	COVID-19 Pandemic	

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

Document Information

I. Document Number, Title, Lists of Line Items

Document Number 6593		Document Title Line Item Revision to SEMI S2-0818Ea, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Delayed Revision related to Section 18 Mechanical Design)
2	Line Item 1	Line Item Title Revision to section 18.7.5

Line Item 1 Adjudication

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:

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	73	÷	119	=	61.3%	≥60%
Intercommittee Ballot	46					
Voting Interest Reject(s)	2		Total Voters with Rejects			2
Voting Interest Accept(s)	52					

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: GlobalFoundries)

Voter Reject 1 (Voter: Lyman Tinc/GlobalFoundries)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Due to concern with the use of “should”			
	TF input (optional)				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	Motion by/ 2 nd by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
<input type="checkbox"/>		[Negative is not related.] < 2/3		GO TO “Persuasive” subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		

		Reason	<p>The line item revision in SEMI Ballot 6593 does not involve the addition or deletion of the word “should”. If your objection pertains to the appropriateness of the word “should”, as opposed to “shall”, it has been a standing requirement from SEMI not to use of the word “shall” in criteria within SEMI Guidelines, I believe stemming for liability concerns raised by SEMI Legal. If you would like the words “should” replaced with “shall” in Section 18.7.5, you would need to obtain SEMI EHS Committee’s concurrence to start a new Task Force in order to change this long-standing SEMI requirements. If I have mischaracterized your negative, I would appreciate further clarification so that the TF could properly address your negative comment of “Due to concern with the use of “should””.</p> <p>No response from GlobalFoundries to the email</p>				
Motion by/ 2 nd by	Edward Karl (Applied Materials, Inc.)/ Lauren Crane (TEL)						
Discussion	None						
Result of Vote (check one)	13 Y- 0 N; Motion passed						
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO “Address by Technical Change Option” subsection	
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)	
	<input checked="" type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)				
	<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection				
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 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/2 nd by		Name (Company)/Name (Company)				
Discussion							
Result of Vote		XX Y-XX N; Motion passed/failed.					

	(check one)		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection	
			<input type="checkbox"/> [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/2 nd by	Name (Company)/Name (Company)		
		Discussion			
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed.		
<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)				
<input type="checkbox"/> [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)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	Motion	The Negative is “not significant”.			
	Motion by/ 2 nd by	Name (Company)/Name (Company)			
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/> (A)	Withdrawn (counted under h in disposition)		
		<input type="checkbox"/> (B)	Not related (counted under i in disposition)		
		<input checked="" type="checkbox"/> (C)	Related and not persuasive (significant)		
		<input type="checkbox"/> (D)	Not significant (counted under j in disposition)		
		<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS	
		<input type="checkbox"/> (F)	Addressed by technical change (counted under k disposition)		
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

1	Original number (#) of Negatives	(g)
#	Number of Negatives withdrawn	(h)
#	Number of Negatives found not related	(i)
#	Number of Negatives found not significant	(j)

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

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)

Voting Interest Reject 2 (Voting Interest Name: Safety Guru)

Voter Reject 1 (Voter: Eric Sklar/Safety Guru)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		18.7.5		
	Negative Text	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>Negative: Do not change "Lifting Equipment" to "Hinged Loads" at the start of the paragraph.</p> <p>Reason/Justification: A "hinged load" is defined as a load supported by a hinge, the axis of which is not vertical. However, this paragraph is about the mechanisms that support and move hinged loads, not the hinged loads themselves. Therefore, the text in italics should not be "Subsequently produced hinged loads". "Subsequently produced mechanisms supporting and moving hinged loads" would work. Deleting the italicized text and the em dash would work, as well.</p>		
TF input (optional)		The TF vote was 8-2 in favor.		
Withdrawal (check one)	x	No Negative withdrawal made by Voter.	GO TO "Related" subsection	
		Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	x	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 nd 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.]	GO TO "Final" subsection → (B)	

Persuasive	Motion and Reason (check one)	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)					
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)					
			Reason	XXXX				
	Motion by/ 2 nd by	Edward Karl (Applied Materials, Inc.)/ Lauren Crane (TEL)						
	Discussion	None						
	Result of Vote (check one)	13 Y-0 N; Motion passed						
		<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/>	Y	GO TO “Address by Technical Change Option” subsection	
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)	
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)				
		<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection				
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: 18.7.5 Subsequently Produced Lifting Equipment Hinged Loads — Each hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of test records for at least 10 years from the date of shipment.						
		TO: 18.7.5 Subsequently Produced Lifting Equipment Hinged Loads Assemblies — Each <u>subsequently produced</u> hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of <u>the</u> test records, <u>including the results of the test (¶ 18.7.4.4.4.1 through 18.7.4.4.4.6).</u> for at least 10 years from the date of shipment.						
		Justification (If necessary) Added text in yellow highlighted						
Motion	Negative is addressed by the technical change(s).							
Motion by/2 nd by	Eric Sklar (Safety Guru, LLC) /John Visty (Salus Engineering)							
Discussion	None							
Result of Vote	12 Y-0 N; Motion passed							

	(check one)		<input checked="" type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection	
			<input type="checkbox"/>	[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/2 nd by	Eric Sklar (Safety Guru, LLC) /John Visty (Salus Engineering)			
		Discussion	None			
		Result of Vote (check one)	10 Y-0 N; Motion passed			
<input checked="" type="checkbox"/>	90% ≤ [Agree to incorporate.]		GO TO “Final” subsection → (F)			
<input type="checkbox"/>	[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)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.		GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.		GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.			
	Motion	The Negative is “not significant”.				
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority		GO TO “Final” subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)		
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)		
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)		
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)		
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS	
		<input checked="" type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)		
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.			

Negative 2

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.				
		18.7.5				
	Negative Text	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>Negative: Do not delete “and have records kept in accordance with 18.7.4.5”.</p> <p>Reason/Justification: If that clause is deleted, there is nothing that specifies what is to be recorded during testing. At a minimum, the records should contain the test procedure, acceptance requirements, observations, and data.</p>				
TF input (optional)		The TF vote was 9-0 in favor.				
Related	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.			GO TO “Related” subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.			GO TO “Final” subsection → (A)
	Motion and Reason (check one)	<input type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)			GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
		<input type="checkbox"/>	Reason	XXXX		
		<input type="checkbox"/>				
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Discussion	None				
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	[Negative is not related.] < 2/3			GO TO “Persuasive” subsection
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]			GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		<input type="checkbox"/>	Reason	XXXX		
	Motion by/ 2 nd by	Edward Karl (Applied Materials, Inc.)/ Bert Planting (ASML Netherlands BV)				
	Discussion	None				
	Result of Vote (check one)	13 Y-0 N; Motion passed.				
		<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/>	Y
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)

		<input type="checkbox"/> $2/3 \leq$ [Negative is related and not persuasive.] $< 90\%$ <input type="checkbox"/> $90\% \leq$ [Negative is related and not persuasive.]	GO TO “Final” subsection → (C) GO TO “Not Significant Finding Option” subsection
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: 18.7.5 Subsequently Produced Lifting Equipment <u>Hinged Loads</u> — Each hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of test records for at least 10 years from the date of shipment.
			TO: 18.7.5 Subsequently Produced Lifting Equipment <u>Hinged Loads Assemblies</u> — Each <u>subsequently produced</u> hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of <u>the</u> test records, <u>including the results of the test (§§ 18.7.4.4.4.1 through 18.7.4.4.4.6).</u> for at least 10 years from the date of shipment.
			Justification (If necessary) Added text in yellow highlighted
		Motion	Negative is addressed by the technical change(s).
		Motion by/2 nd by	Edward Karl (Applied Materials, Inc.)/ Bert Planting (ASML Netherlands BV)
		Discussion	None
		Result of Vote (check one)	9 Y-0 N; Motion passed <input checked="" type="checkbox"/> $2/3 \leq$ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection <input type="checkbox"/> [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/2 nd by		Eric Sklar (Safety Guru, LLC) / Lucian Girlea (Nikon Precision Inc.)	
Discussion		None	
Result of Vote (check one)		11 Y-0 N; Motion passed <input checked="" type="checkbox"/> $90\% \leq$ [Agree to incorporate.] GO TO “Final” subsection → (F) <input type="checkbox"/> [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)		
		<input type="checkbox"/> 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/ 2 nd 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)		(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
		x	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.		

Disposition of Voting Interest Reject 2

Check only when the Document has not been failed.

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

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 Comment # (Voter: Name and company) / A reason not addressed by a Vote response TC discussion of the technical change		
	Referenced Section/ Paragraph	*TF/TC Chapter to fill in including text in the ballot as appropriate.		
	Reason	*Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied. ¶ the use of 'shipment' in 18.7.5 and 18.6.3, is not aligned with the Machinery Directive, which notes indicate we are striving to be in alignment with, and it is not convenient to industry which tends to record date of manufacture more easily than date of shipment - without a commensurate benefit to safety.		
Handle technical issue identified above as a Negative.				
Related	Motion and Reason (check one)	<input type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection	
		<input checked="" type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)	
		<input type="checkbox"/>	Negative is not related and placed on agenda of current TC Chapter meeting as new business. (Needs ≥2/3 votes to pass.)	
		<input type="checkbox"/>	Reason	XXXX
	Motion by/ 2nd by	Eric Sklar (Safety Guru, LLC)/ John Visty (Salus Engineering)		
	Discussion	Eric Sklar: Not related to the balloted changes. The ballot does not include a proposed change to record retention period in section 18.7.5, and it includes no changes to section 18.6.3. Therefore, I do not believe it is related to the ballot. Lauren Crane: The technical changes proposed and accepted by the committee are related to the details of what should form 'the record' I am persuaded that a change about the starting of the 10 year clock is related, and that the similar section based on the same rationale is likewise related.		
	Result of Vote (check one)	5 Y- 5 N; Motion failed.		
<input type="checkbox"/>		[Negative is not related.] <2/3	GO TO "Persuasive" subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related] and assigned to TF.	GO TO "Final" subsection → (B)	
<input type="checkbox"/>	2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business.			
Persuasive	Motion and Reason (check one)	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
		<input type="checkbox"/>	Reason	XXXX

	Motion by/ 2nd by	Andrew Petraszak (TEL)/ Lauren Crane (TEL)																					
	Discussion	<p>Eric Sklar: If this negative is found persuasive, the technical change is needed to make from shipment to manufacture.</p> <p>Supika Mashiro: If proposed technical change does not approved, the entire line item ballot fails.</p> <p>Andrew Petraszak: For the interest of time, he will lead the administrative process to create a new SNARF dealing with this negative in a different ballot.</p> <p>Lauren Crane withdraws the negative, but he presented the flaw in the ballot and svm.</p>																					
	Result of Vote (check one)	<table border="1"> <tr> <td><input type="checkbox"/></td> <td>[Negative is related and persuasive.] > 1/3</td> <td rowspan="2">Is a technical change recommended? (check one)</td> <td><input type="checkbox"/></td> <td>Y</td> <td rowspan="2">GO TO "Address by Technical Change Option" subsection</td> </tr> <tr> <td><input type="checkbox"/></td> <td>[Negative is related and not persuasive.] < 2/3</td> <td><input type="checkbox"/></td> <td>N</td> <td>GO TO "Final" subsection → (E)</td> </tr> <tr> <td><input type="checkbox"/></td> <td colspan="2">2/3 ≤ [Negative is related and not persuasive.] < 90%</td> <td colspan="3">GO TO "Final" subsection → (C)</td> </tr> </table>					<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3	<input type="checkbox"/>	N	GO TO "Final" subsection → (E)	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%		GO TO "Final" subsection → (C)		
<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection																		
<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N		GO TO "Final" subsection → (E)																	
<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%		GO TO "Final" subsection → (C)																				
Final	(check one)	<input checked="" type="checkbox"/> (A)	Withdrawn																				
		<input type="checkbox"/> (B)	Not related																				
		<input type="checkbox"/> (C)	Related and not persuasive																				
		<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change			DOCUMENT FAILS																	
		<input type="checkbox"/> (F)	Addressed by technical change																				
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.																				

V. Comments

V- (i) Voters' Comments

Commenter 1 (Eric Sklar/Safety Guru) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	<p>Ballot Title</p> <p>Comment: There appears to be a ballot preparation error in that the title includes "Line Item Revisions", but only one Line Item appears in the ballot.</p>	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input type="checkbox"/>	Editorial Change
	Options for editorial	<p>Case 1: No vote in this section:</p> <p>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</p>

Editorial Changes	1	change (check one)	Case 2: Voted in this section:
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
	2		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/2 nd by		Name (Company)/Name (Company)	
Discussion		XXXX	
Vote		XX Y-XX N; Motion passed/failed.	

This table is needed for each Comment accompanied a Vote

Commenter 1 (Eric Sklar/Safety Guru) - Comment 2

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.		
	Prefatory Text Comment: The note explaining the editorial changes is incomplete. There is a Section symbol (§) with no number following it in the last clause.		
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		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:

		change (check one)		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/2 nd by		Name (Company)/Name (Company)		
Discussion		XXXX		
Vote		XX Y-XX N; Motion passed/failed.		

Commenter 1 (Eric Sklar/Safety Guru) - Comment 3

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.		
	<p>Delayed Revision X</p> <p>Comment: Why include several sections that do not contain changes in the DR Section? The DR Section should include only those portions of the document being changed. The ballot, however, is required to contain at least the prefatory Sections and the entirety of the Section(s) proposed to be changed.</p>		
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.
	x		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: Current ballot
		SEMI Draft Document #6593 Line Item Revisions to SEMI S2-0818E, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Re: Delayed Revision on Mechanical Design, Hinged Load Assembly)
		1 Purpose 2 Scope 3 Limitation 18 Mechanical Design
		Line Item 1: Revision of 18.7.5. 18.7.5 <i>Subsequently Produced</i> Lifting Equipment <u>Hinged Loads</u> — Each hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of test records for at least 10 years from the date of shipment.
		TO: SEMI Draft Document #6593 Line Item Revisions to SEMI S2-0818E, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Re: Delayed Revision on Mechanical Design, Hinged Load Assembly)
		Line Item 1: Revision of 18.7.5. 18.7.5 <i>Subsequently Produced</i> Lifting Equipment <u>Hinged Loads</u> — Each hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of test records for at least 10 years from the date of shipment.
		1 Purpose 2 Scope 3 Limitation 18 Mechanical Design
		Justification (If necessary) Error in ballot prep. Move all the entire prefatory Sections to the end of ballot.
Motion		To approve above editorial change(s)
Motion by/2nd by		Edward Karl (Applied Materials, Inc.)/ Clifton Brick (KLA)
Discussion		XXXX
Vote		11 Y-0 N; Motion passed.

Commenter 2 (Lauren Crane (TEL)) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.		
	<p>I accept the change as indicated in the Line item box. However, I think the ballot is poorly constructed and is ambiguous with regard to what will actually appear as a new delayed revision section in S2. My concern is roughly</p> <p>-- > The proposed delayed revision section does not currently exist in S2. Therefore, all of the proposed delayed revision text should be underlined. The current ballot shows a very large amount of existing S2 text repeated in the DR section which is not actually undergoing any change. It would like to see precise clarity in the text that will actually appear in the DR section, and how that DR section expresses the change that it will make to the body of the document when it's date arrives.</p>		
Action	The TC Chapter agreed to do one of the following actions.		
	*No motion is required in this step.		
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #	
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.	
	<input type="checkbox"/>	Refer to the TF for more consideration.	
	<input type="checkbox"/>	New Business	
	<input type="checkbox"/>	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:	
		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/2 nd 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

Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.

None other than listed in section V above.

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	=	52	/	53	=	98.1%		≥90%	

VII. – (ii) Approval Level (check one)

Note: See *Regulations § 9.6.2* for further information.

☐

Globally Approved (No Ratification Ballot needed):

Line Item 1 meets the Letter Ballot approval conditions for the global technical committee.

☒

Need a Ratification Ballot:

Line Item 1 meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

Checks for Entire Document Including All Approved Line Items

VIII. Safety Check

Note: This Safety check applies to the entire Standard or Safety Guideline including all the approved Line Items. See § 15 of the Regulations for further information.

Motion		This is not a Safety Document , when all safety-related information is removed, the Document is still technically sound and complete. (<i>Regulations</i> ¶ 8.7.1)
	x	This is a Safety Document , when all safety-related information is removed, the Document is not technically sound and complete. (<i>Regulations</i> ¶ 8.7.2)
	x	Safety Checklist (<i>Regulations</i> ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (<i>Regulations</i> ¶ 15.1.2)
Motion by/2 nd by		Lucian Girlea (Nikon Precision Inc.) / John Visty (Salus Engineering)
Discussion		None
Vote		11 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 including all the approved Line Items*. 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 <i>Regulations</i> ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see <i>Regulations</i> ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, <i>Regulations</i> § 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	# 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.
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	the Standard/Safety Guideline	# 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)
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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/ 2 nd 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	MOTION		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/ 2 nd 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

Is there any trademark in the Standard/Safety Guideline?		YES	Is every instance of trademark use technically justified?	YES	GO TO IX(d)
				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 (Check all applicable items)		Line item(s) [X], [X] and [X] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
		Line item(s) [X], [X] and [X] passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	x	Line item(s) [1] passed TC Chapter review with technical changes and with 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.
		Line item(s) [X], [X] and [X] failed TC Chapter review and will be returned to the TF for rework.
		Line item(s) [X], [X] and [X] failed TC Chapter review and work will be discontinued.
Motion by/ 2nd by		Edward Karl (Applied Materials, Inc.) / Clifton Brick (KLA)
Discussion		Eric Sklar: What is the consequences of voting no? Supika Mashiro: This is required per Regulations. The vote to pass is a simple majority.
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.