



Facilities & Gases Joint North America TC Chapter Meeting Summary and Minutes

NA Standards Summer Meetings 2021

Tuesday, July 13, 09:00 – 12:00 Noon Pacific

via Official Virtual TC Chapter Meeting (OVTCCM)

TC Chapter Announcements

Next TC Chapter Meeting

SEMICON West Standards Meetings 2021

Tuesday, December 7, 2021, 09:00 – 12:00 Noon Pacific

Hybrid

Table 1 Meeting Attendees

Italics indicate virtual participants

Facilities Co-Chairs: Steve Lewis (Lam Research)

Gases Co-Chairs: Mohamed Saleem (Brooks Instrument)

SEMI Staff: Laura Nguyen

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Air Liquide America Corp/Balaz	Pan	Maohua	M+W Germany GmbH	Megahey	Chris
Applied Materials	Chen	Yanli	Nikon Precision Inc.	Sutton	Carolyn
AP Tech	Kiikvee	Bill	Page Southerland Page	Denning	Alana
Brooks Instrument	Nagarajan	Arun	Pivotal Systems	Findleton	Kevin
Brooks Instrument	Saleem	Mohamed	Safety Guru	Sklar	Eric
Daido Steel	Yoshida	Yutaka	SCREEN	Nishimura	Takayuki
Electric Power Research Institute	Stephens	Mark	TEL	Machida	Ryo
Exyte Management GmbH	Potts	Michael	TEL	Mashiro	Supika
Festo SE & Co. KG	van de Berg	Max	WIKA Instruments	Fritz	Thomas
JE Dunn	Perez	Dave			
Mettler-Toledo Thornton Inc.	Cannon	Jim	SEMI	Nguyen	Laura

Table 2 Leadership Changes

None

Table 3 Committee Structure Changes

None

Table 4 Ballot Results

Document #	Document Title	Committee Action
<i>Facilities</i>		
6628	New Standard: Guide for Facilities Data Package for Semiconductor Manufacturing Equipment Installation and Building Information Modeling	Failed
6771	Reapproval of SEMI E6-0914, Guide for Semiconductor Equipment Installation Documentation	Failed
6772	Reapproval of SEMI E70-1213, Guide for Tool Accommodation Process	Passed , as balloted
6773	Reapproval of SEMI E76-0299 (Reapproved 0913), Guide for 300 mm Process Equipment Points of Connection to Facility Services	Failed
6774	Reapproval of SEMI F49-0200 (Reapproved 1213), Guide for Semiconductor Factory Systems Voltage Sag Immunity	Passed , as balloted
6775	Reapproval of SEMI F50-0200 (Reapproved 1213), Guide for Electric Utility Voltage Sag Performance for Semiconductor Factories	Passed , as balloted
<i>Gases</i>		
6643A	New Standard: Specification for Location and Dimensions for Power Connectors and EtherCAT Ports in Mass Flow Controllers and Mass Flow Meters	Passed , with editorial change(s)
6747	Line Item to Replace Designation Letter from C to F for: · SEMI C88-0815, Specification for Dimensions of Sandwich Components for 1.125 Inch Type Surface Mount Gas Distribution Systems, · SEMI C91-115, Test Method for Determination of Moisture Dry-Down Characteristics of Gas Delivery Components, and · SEMI C92-0216, Test Method for Determining the Critical Pitting Temperature of Stainless Steel Surfaces Used in Corrosive Gas Systems by Use of a Ferric Chloride Solution	
Line Item 1	Replace Designation Letter of SEMI C88 to SEMI FXXX.	Passed , as balloted
Line Item 2	Replace Designation Letter of SEMI C91 to SEMI FXXX.	Passed , as balloted
Line Item 3	Replace Designation Letter of SEMI C92 to SEMI FXXX.	Passed , as balloted
6582	New Standard: Test Method for Measuring Pitting Resistance of Stainless Steel Component	Failed
6813	Reapproval of SEMI F28-1103 (Reapproved 0815), Test Method for Measuring Particle Generation from Process Panels	Failed
6814	Reapproval of SEMI F43-0308 (Reapproved 0613), Test Method for Determination of Particle Contribution by Point-of-Use Gas Purifiers and Gas Filters	Failed
6815	Reapproval of SEMI F59-0302 (Reapproved 0613), Test Method for Determination of Filter or Gas System Flow Pressure Drop Curves	Failed
6816	Reapproval of SEMI F67-1101 (Reapproved 0713), Test Method for Determining Inert Gas Purifier Capacity	Failed
6817	Reapproval of SEMI F68-1101 (Reapproved 0713), Test Method for Determining Purifier Efficiency	Failed

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 5 Activities Approved by the GCS between meetings of the TC Chapter

None

Table 6 Authorized Activities

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

None

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>

Table 7 Authorized Ballots

#	When	TF	Details
<i>Facilities</i>			
6628A	Cycle 6, 7 or 8-2021.	BIM TF	New Standard: Guide for Facilities Data Package for Semiconductor Manufacturing Equipment Installation and Building Information Modeling
<i>Gases</i>			
6394	Cycle 6, 7, or 8-2021	Materials of Construction of Gas Delivery Systems TF	Line Item Revision to SEMI F74-1103 (Reapproved 0710), Test Method for the Performance and Evaluation of Metal Seal Designs for Use in Gas Delivery Systems
6510	Cycle 6, 7, or 8-2021	Materials of Construction of Gas Delivery Systems TF	Line Item Revision to SEMI F32-0211, Test Method for Determining of Flow Coefficient for High Purity Shutoff Valves
6582A	Cycle 6, 7, or 8-2021	Materials of Construction of Gas Delivery Systems TF	New Standard: Test Method for Measuring Pitting Resistance of Stainless Steel Component

Table 8 SNARF(s) Granted a One-Year Extension

None

Table 9 SNARF(s) Abolished

None

Table 10 Standard(s) to receive Inactive Status

None

Table 11 New Action Items

Item #	Assigned to	Details
2021July#01	Laura Nguyen	Mohamed to reach out to Steve about creating a new Task Force for the Reapproval Ballots that failed (SEMI E6, E76). Ongoing
2021July#02	Laura Nguyen	Work with Mohamed to abolish Reapproval SNARFs and reissue new SNARFs. Ongoing .
2021July#03	Laura Nguyen	Invite Eric Sklar to new BIM TF and 6582 Working Meeting. Completed . Closed .

Table 12 Previous Meeting Action Items

Item #	Assigned to	Details
2019Nov#01	Laura Nguyen	Create invite-only TF in connect@SEMI for SEMI E49.6-E49.8 revision. Ongoing .
2021Feb#01	Bill Kiikvee	Reach out to Swagelok contact on Doc 6612. Ongoing .
2021Feb#02	Max van de Berg	Review SEMI E49.6/E49.8. Ongoing .
2021Feb#03	Bill, Mohamed, Max, Matthew Milburn	Review SEMI F19. Ongoing .
2021Feb#04	Laura Nguyen	Resend Bill Kiikvee rejects from Doc 6394: SEMI F74. Completed .



1 Welcome, Reminders, and Introductions

Mohamed Saleem (Brooks Instrument) called the meeting to order at 09:05. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: SEMI Standards Required Meetings Elements

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: To accept the previous meeting minutes as written.

By / 2nd: By: Thomas Fritz / WIKA Instrument Corporation
Second: Michael Potts / Exyte Management GmbH

Discussion: None.

Vote: 10-0 in favor. Motion passed.

Attachment: [2021 Winter] F&G Joint NA TC Chapter Meeting Minutes FINAL

3 Liaison Reports

3.1 *Gases & Liquid Chemicals Europe TC Chapter*

There is no update since last meeting. The next Gases & Liquid Chemicals Europe TC Chapter will be held in conjunction with SEMICON Europa 2021.

3.2 *Gases & Facilities Japan TC Chapter*

Laura Nguyen (SEMI) reported for the Japan TC Chapter. Of note:

Meeting Information

- Last meeting: Friday, May 14, 2021, at the SEMI Japan office, Tokyo/Web
- Next Meeting: Wednesday, November 24, 2021, Web

F&G Leadership

- Committee Co-chairs
 - Hiromichi Enami (Consultant), Isao Suzuki (Consultant), Masafumi Kitano (Fujikin)

F&G Current Organization Chart of Japan TC Chapter {See attachment for Org Chart}

F&G Five-Year Review

- SEMI F80-0309 (Reapproved 0914), Test Method for Determination of Gas Change/Purge Efficiency of Gas Delivery System

Staff Contact: Mami Nakajo, mnakajo@semi.org

Attachment: 20210518_JA_G+F_LiaisonR_v1.2

3.3 *Facilities Korea TC Chapter*

There is no update for this TC Chapter at this time.

3.4 *SEMI Staff Report*

Laura Nguyen (SEMI) gave the SEMI Staff Report. Of note:

SEMI Global Calendar of Events



- SEMICON Southeast Asia (August 23-27, Singapore)
- SEMICON Taiwan (Sept 8-10, 2021; Taipei, Taiwan)
- SEMICON Europa (November 16-19; Munich Germany)
- SEMICON West (December 7-9, 2021; San Francisco, CA)
- SEMICON Japan (December 15-17; Tokyo, Japan)

Critical Dates for SEMI Standards Ballots

- Cycle 5-2021: Ballot Submission Due: May 18/Voting Period: June 1 – July 1
- Cycle 6-2021: Ballot Submission Due: Aug 3/Voting Period: Aug 17 – Sept 16
- Cycle 7-2021: Ballot Submission Due: Sept 1/Voting Period: Sept 15 – Oct 15
- Cycle 8-2021: Ballot Submission Due: Oct 8/Voting Period: Oct 22 – Nov 22
- Cycle 9-2021: Ballot Submission Due: Nov 16/Voting Period: Nov 30 – Dec 30

Critical Dates: <http://www.semi.org/en/Standards/Ballots>

Standards Publications Report

<i>Cycle</i>	<i>New</i>	<i>Revised</i>	<i>Reapproved</i>	<i>Withdrawn</i>
March 2021	7	1	1	0
April 2021	3	10	3	0
May 2021	0	5	0	0

Total in portfolio – 1,040 (includes 274 Inactive Standards)

New Standards

<i>Cycle</i>	<i>Designation</i>	<i>Title</i>	<i>Committee</i>	<i>Region</i>
March 2021	SEMI E181	Specification for Panel FOUP for Panel Level Packaging	PIC	Japan
March 2021	SEMI PV98	Specification for Silicone Adhesive for the Back Rail Fixture on Photovoltaic (PV) Modules	Photovoltaic	China
March 2021	SEMI PV99	Classification of Building Integrated Photovoltaic (BIPV)	Photovoltaic	China
April 2021	SEMI A4	Specification for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS)	Automated Test Equipment	NA
April 2021	SEMI D79	Test Method for Local and Overall Flicker of Flexible Displays	FPD-Metrology	Taiwan
April 2021	SEMI D80	Test Method for Measurement of Water Vapor Transmission Rate for High Gas Barrier Plastic Film in a Short Time	FPD-Materials & Components	Japan

Inactive Standards

<i>Committee</i>	<i>Number of Inactive Standards</i>
Assembly & Packaging	48
Automated Test Equipment	2
Compound Semiconductor Materials	4
Environmental Health & Safety	8
Facilities	15
FPD – Equipment	5
FPD – Factory Automation	14
FPD – Materials & Components	13
Gases	18
Information & Control	37



Liquid Chemicals	26
MEMS	3
Metrics	12
Micropatterning	30
Photovoltaic	1
Physical Interfaces & Carriers	19
Silicon Wafer	11
Traceability	8

connect@SEMI - Contact your staff if a TF Site is desired

- Web link - <https://connect.semi.org>
 - Login using Standards account (username and password)
- Program Member
 - Join any task forces; Post discussion thread
- TF Leader/Community Admin; contact your staff if a TF Site is desired
 - Add member; Upload meeting minutes
 - Communicate TF members
- Details
 - www.semi.org/standards >> Committee Info >> Collaboration Community

Facilities: On-going

- SEMI E51, Guide for Typical Facilities Services and Termination Matrix
 - Abolished SNARF Fall 2017 - Reapproval ballot failed Committee review, new SNARF needs to be issued to reflect change in scope
 - Searching for volunteers to lead this activity
- SEMI F47, Specification for Semiconductor Processing Equipment Voltage Sag Immunity
 - Reapproval failed committee review; Spring 2018
 - Voltage Sag Immunity TF will take over this activity

Gases: On-going

- Materials of Construction of Gas Delivery Systems Task Force
 - 6394: Line Item Revision to SEMI F74-1103 (Reapproved 0710), Test Method for the Performance and Evaluation of Metal Seal Designs for Use in Gas Delivery Systems
 - 6510: Line Item to SEMI F32-0211, Test Method for Determining of Flow Coefficient for High Purity Shutoff Valves
 - 6612: New Subordinate Standard: Test Method for the Determination of Conductance of Fluid Handling Components at Subatmospheric and Vacuum Pressure, to SEMI F32-0211, Test Method for Determination of Flow Coefficient for High Purity Shutoff Valves

Five-Year Review



Designation #	Standard Title	Action By	Assigned to
SEMI C14-95 (Reapproved 0913)	Test Method for Particle Shedding Performance of 25 cm Gas Filter Cartridges	Past due	Filters & Purifiers TF
SEMI F36-0299 (Reapproved 0913)	Guide for Dimensions and Connections of Gas Distribution Components	Past due	Filters & Purifiers TF
SEMI F19-0815	Specification for the Surface Condition of the Wetted Surfaces of Stainless Steel Components	Past due	Materials TF
SEMI F21-1016	Classification of Airborne Molecular Contaminant Levels in Clean Environments	Fall 2021	Filters & Purifiers TF
SEMI F62-1016	Test Method for Determining Mass Flow Controller Performance Characteristics for Ambient and Gas Temperature Effects	Fall 2021	Mass Flow Controller TF

Designation #	Standard Title	Action By	Assigned to
SEMI C54-1116	Specification for Oxygen	Fall 2021	Gases Specification TF
SEMI C70-1116	Specification for Tungsten Hexafluoride	Fall 2021	Gases Specification TF
SEMI C58-1116	Specification for Hydrogen	Fall 2021	Gases Specification TF
SEMI C56-1116	Specification for Dichlorosilane	Fall 2021	Gases Specification TF
SEMI F113-1116	Test Method for Pressure Transducers Used in Gas Delivery Systems	Fall 2021	Pressure Measurements TF

Designation #	Standard Title	Action By	Assigned to
SEMI C60-0317	Specification for Nitrous Oxide	March 2022	Gases Specification TF
SEMI C59-0317	Specification for Nitrogen	March 2022	Gases Specification TF
SEMI C57-0317	Specification for Argon	March 2022	Gases Specification TF
SEMI C3-0317	Specification for Gases	March 2022	Gases Specification TF
SEMI E56-0317	Test Method for Determining Accuracy, Linearity, Repeatability, Short-Term Reproducibility, Hysteresis, and Deadband of Thermal Mass Flow Controllers	March 2022	Mass Flow Controller TF
SEMI E29-1110 (Reapproved 0417)	Terminology for the Calibration of Mass Flow Controllers and Mass Flow Meters	April 2022	Mass Flow Controller TF

Attachment: Staff Report July 2021_F&G

4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

4.1 Facilities Ballot Review

4.1.1 Document # 6628, New Standard: Guide for Facilities Data Package for Semiconductor Manufacturing Equipment Installation and Building Information Modeling

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment: 6628_Ballot Report Template_atm

4.1.2 Document # 6771, Reapproval of SEMI E6-0914, Guide for Semiconductor Equipment Installation Documentation

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.1.3 Document # 6772, Reapproval of SEMI E70-1213, Guide for Tool Accommodation Process

- The ballot passed TC Chapter review as balloted. See attachment for ballot adjudication.

Attachment: 6772_ProceduralReview

4.1.4 Document # 6773, Reapproval of SEMI E76-0299 (Reapproved 0913), Guide for 300 mm Process Equipment Points of Connection to Facility Services

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.1.5 Document # 6774, Reapproval of SEMI F49-0200 (Reapproved 1213), Guide for Semiconductor Factory Systems Voltage Sag Immunity

- The ballot passed TC Chapter review as balloted. See attachment for ballot adjudication.

Attachment: 6774_ProceduralReview

4.1.6 Document # 6775, Reapproval of SEMI F50-0200 (Reapproved 1213), Guide for Electric Utility Voltage Sag Performance for Semiconductor Factories

- The ballot passed TC Chapter review as balloted. See attachment for ballot adjudication.

Attachment: 6775_ProceduralReview

4.2 Gases Ballot Review

4.2.1 Document # 6643A, New Standard: Specification for Location and Dimensions for Power Connectors and EtherCAT Ports in Mass Flow Controllers and Mass Flow Meters



- The ballot passed TC Chapter review with editorial change(s). See attachment for ballot adjudication.

Attachment: 6643A_ProceduralReview

4.2.2 Document # 6747, Line Item to Replace Designation Letter from C to F for: SEMI C88-0815, Specification for Dimensions of Sandwich Components for 1.125 Inch Type Surface Mount Gas Distribution Systems, SEMI C91-115, Test Method for Determination of Moisture Dry-Down Characteristics of Gas Delivery Components, and SEMI C92-0216, Test Method for Determining the Critical Pitting Temperature of Stainless Steel Surfaces Used in Corrosive Gas Systems by Use of a Ferric Chloride Solution

4.2.2.1 Line Item #1: Replace Designation Letter of SEMI C88 to SEMI FXXX.

- Line Item #1 passed TC Chapter review as balloted. See attachment for ballot adjudication.

4.2.2.2 Line Item #2: Replace Designation Letter of SEMI C91 to SEMI FXXX.

- Line Item #2 passed TC Chapter review as balloted. See attachment for ballot adjudication.

4.2.2.3 Line Item #3: Replace Designation Letter of SEMI C92 to SEMI FXXX.

- Line Item #3 passed TC Chapter review as balloted. See attachment for ballot adjudication.

Attachment: 6747_ProceduralReview

4.2.3 Document # 6582, New Standard: Test Method for Measuring Pitting Resistance of Stainless Steel Component

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.2.4 Document # 6813, Reapproval of SEMI F28-1103 (Reapproved 0815), Test Method for Measuring Particle Generation from Process Panels

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.2.5 Document # 6814, Reapproval of SEMI F43-0308 (Reapproved 0613), Test Method for Determination of Particle Contribution by Point-of-Use Gas Purifiers and Gas Filters

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.2.6 Document # 6815, Reapproval of SEMI F59-0302 (Reapproved 0613), Test Method for Determination of Filter or Gas System Flow Pressure Drop Curves

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.2.7 Document # 6816, Reapproval of SEMI F67-1101 (Reapproved 0713), Test Method for Determining Inert Gas Purifier Capacity

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

4.2.8 Document # 6817, Reapproval of SEMI F68-1101 (Reapproved 0713), Test Method for Determining Purifier Efficiency

- The committee found the negatives related and technically persuasive. The ballot failed and returned to the task force for re-work and re-ballot in the next cycle if ready.

Attachment:

5 Subcommittee and Task Force Reports

5.1 Facilities

5.1.1 Power Grid Harmonics Task Force – Did not meet

5.1.2 SEMI F51 Revision Task Force – Did not meet

5.1.3 Voltage Sag Immunity Task Force

Mark Stephens (EPRI) reported for this Task Force. Of note:

- Task Force Objectives
 - Determine the characteristics of the power quality events that are still causing semiconductor plant process downtime
 - Take a new look at the sensitivities in the process equipment
 - To determine any required adjustments to equipment design or standards to further reduce voltage sag induced losses by the semiconductor industry.
- SEMI and EPRI joint Workshop – April 21
 - Recently, SEMI & Electric Power Research Institute (EPRI) virtually held a four-hour workshop on [April 21, 2021](#), on the perspectives from stakeholders on a persistent and difficult issue in microelectronics manufacturing - uncertain power quality.
 - Nearly 100 participants attended the workshop with speakers from Advanced Energy, ASML, Austin Energy, EPRI, HP, National Grid, Schneider Electric, and VELCO.
- Next TF Meeting plan
 - August 17, 2021, at 3:30 PM-5:00 PM Eastern Time
- To be a part of this effort or learn more, contact: Mark Stephens, mstephens@epri.com and Laura Nguyen, lnguyen@semi.org

Attachment: SEMI VS Task Force Report 071321

5.1.4 Building Information Modeling (BIM) for Semiconductor Capital Equipment Task Force

Michael Potts (Exyte) reported for this task force. Of note:

- Adjudication of Document 6628



- See §4.1.1 for detailed Ballot Results.
- Majority of the meeting was to review Document 6628. Since the ballot failed, the Task Force report does not reflect that change.
- BIM Roadmap
 - Phase 1: Document 6628, Equipment and Tool Installation
 - Phase 2: Proposing a SEMI Fab Facilities Lateral Distribution Systems and FPOC's BIM And Data Standard. SNARF to be issued in the interim
 - Phase 3: Proposing a SEMI Fab Shell and Main Distribution Systems BIM And Data Standard. SNARF to be issued in the interim.
- Phase 2 and 3 on hold since Phase 1 ballot failed
- Smart Manufacturing through actionable data
 - In efforts with BIM, SEMI Smart Manufacturing has evolved
 - Ensure purpose and goals align with SEMI Standards/Definitions, and Smart Manufacturing
 - Bringing the facilities component together with Smart Manufacturing
 - Holistic ideal state = happy fab owners

Attachment: SEMI BIM Task Force_TC Meeting_20210713_v1_atm

5.2 Gases

5.2.1 Materials of Construction of Gas Delivery Systems Task Force

Bill Kiikvee (AP Tech) reported for this task force. Of note:

Meeting Summary:

- Review Ballot Results:
 - Document 6582 — New Standard: Test Method for Measuring Pitting Resistance of Stainless Steel Component
 - Committee discussed Document 6582. It failed with three rejects.
 - Present during the discussion was Eric Sklar (Eric rejected the document) and Mike Blum (author).
 - Rejects were broken down into editorial, style and technical. BK deemed that editorial or style would not be emphasized during the TF discussion.
 - TF agreed that at least one rejection was technical and persuasive (for example SG06 section 5.2.1).
 - Eric offered to review the changes in the document prior to being re-balloted. Mike accepted Eric's offer.
- SNARFs approaching three-year document development period
 - SNARF 6510: Line Item Revision to SEMI F32-0211, Test Method for Determining of Flow Coefficient for High Purity Shutoff Valves
 - SNARF 6394: Line Item Revision to SEMI F74-1103 (Reapproved 0710), Test Method for the Performance and Evaluation of Metal Seal Designs for Use in Gas Delivery Systems
 - SNARF 6612: New Subordinate Standard: Test Method for the Determination of Conductance of Fluid Handling Components at Subatmospheric and Vacuum Pressure, to SEMI F32-0211, Test Method for Determination of Flow Coefficient for High Purity Shutoff Valves

Attachment: 2021Summer_MaterialsTF_minutes_v1

5.2.1 *Filters & Purifiers Task Force – Did not meet*

5.2.2 *Mass Flow Controller Task Force – Did not meet*

5.2.3 *Gases Specification Task Force – Did not meet*

5.2.4 *Heater Jacket Task Force*

Laura Nguyen (SEMI) reported on behalf of TF Leader, David Colquhoun. Of note:

- The Task Force reviewed:
 - General design guideline for heater. Old spec (SEMI F109) merged with new details of materials use and limits augmented into spec.
 - Proposal for specifications for heater particulation study and methods of testing for such.
- Contact Laura to be a part of this Task Force.

6 Old Business

6.1 *Ballot Authorizations*

Bill Kiikvee addressed the Committee on the below:

Motion: Authorize the Document for Letter Ballot 6582A, Test Method for the Electrochemical Critical Pitting Voltage Testing of Stainless Steel Used in Corrosive Gas Systems, for Cycle 6, 7, or 8-2021.

By / 2nd: By: Bill Kiikvee / AP Tech (Advanced Pressure Technology)
Second: Michael Potts / Exyte Management GmbH

Discussion: None.

Vote: 10-0 in favor. Motion passed.

Motion: Authorize the Document below for Letter Ballot in Cycle 6, 7, or 8-21.

- SNARF 6510: Line Item Revision to SEMI F32-0211, Test Method for Determining of Flow Coefficient for High Purity Shutoff Valves
- SNARF 6394: Line Item Revision to SEMI F74-1103 (Reapproved 0710), Test Method for the Performance and Evaluation of Metal Seal Designs for Use in Gas Delivery Systems

By / 2nd: By: Bill Kiikvee / AP Tech (Advanced Pressure Technology)
Second: Michael Potts / Exyte Management GmbH

Discussion: None.

Vote: 11-0 in favor. Motion passed.

Michael Potts (Exyte) addressed the Committee on the below:

Motion: Authorize the Document 6628 for Letter Ballot in Cycle 6, 7, or 8-21.

By / 2nd: By: Michael Potts / Exyte Management GmbH
Second: Bill Kiikvee / AP Tech (Advanced Pressure Technology)

Discussion: None.

Vote: 9-0 in favor. Motion passed.

7 New Business

7.1 *SCIS Update*

Max van de Berg (Festo) addressed the committee on this topic. Of note:



- Discussed SEMI E49.
- Proposal to make modification to add level 4 oxygen to SEMI F78 (welding doc).

8 Action Item Review

8.1 New Action Items are noted in Table 11. Previous action items are noted in Table 12 in 'red' and for recent updates in 'blue'. There is no further business.

9 Next Meeting and Adjournment

9.1 The next meeting is tentatively scheduled for the week of December 6-9, in conjunction with SEMICON West 2021. Schedule details TBD. Please check www.semiconwest.org for updates.

Adjournment: 12:47.

Respectfully submitted by:

Laura Nguyen

Sr. Coordinator, International Standards

SEMI Global Headquarters

Phone: +1.408.943.7019

Email: lnguyen@semi.org

Minutes tentatively approved by:

Steve Lewis (Lam Research), Facilities Co-chair	<Date approved>
Mohamed Saleem (Brooks Instrument), Gases Co-chair	<Date approved>

Minutes approved by: **F&G NA TC Chapter Hybrid on December 7, 2021.**

Table 13 Index of Available Attachments^{#1}

<i>Title</i>	<i>Title</i>
SEMI Standards Required Meetings Elements	6775_ProceduralReview
[2021 Winter] F&G Joint NA TC Chapter Meeting Minutes FINAL	6643A_ProceduralReview
20210518_JA_G+F_LiaisonR_v1.2	6747_ProceduralReview
Staff Report July 2021_F&G	SEMI VS Task Force Report 071321
6628_Ballot Report Template_atm	SEMI BIM Task Force_TC Meeting_20210713_v1_atm
6772_ProceduralReview	2021Summer_MaterialsTF_minutes_v1
6774_ProceduralReview	

^{#3} Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact Laura Nguyen at the contact information above.