

North America TC Chapter Facilities & Gases Joint Global Technical Committee

Liaison Report | December 2020

v1

Meeting Information

Facilities & Gases meet jointly

- Last meeting
 - Tuesday, November 5, 2019 at the SEMI Standards NA Fall Meetings
 - SEMI Headquarters, Milpitas, CA
- Next meeting
 - TBD

<http://www.semi.org/en/standards-events>

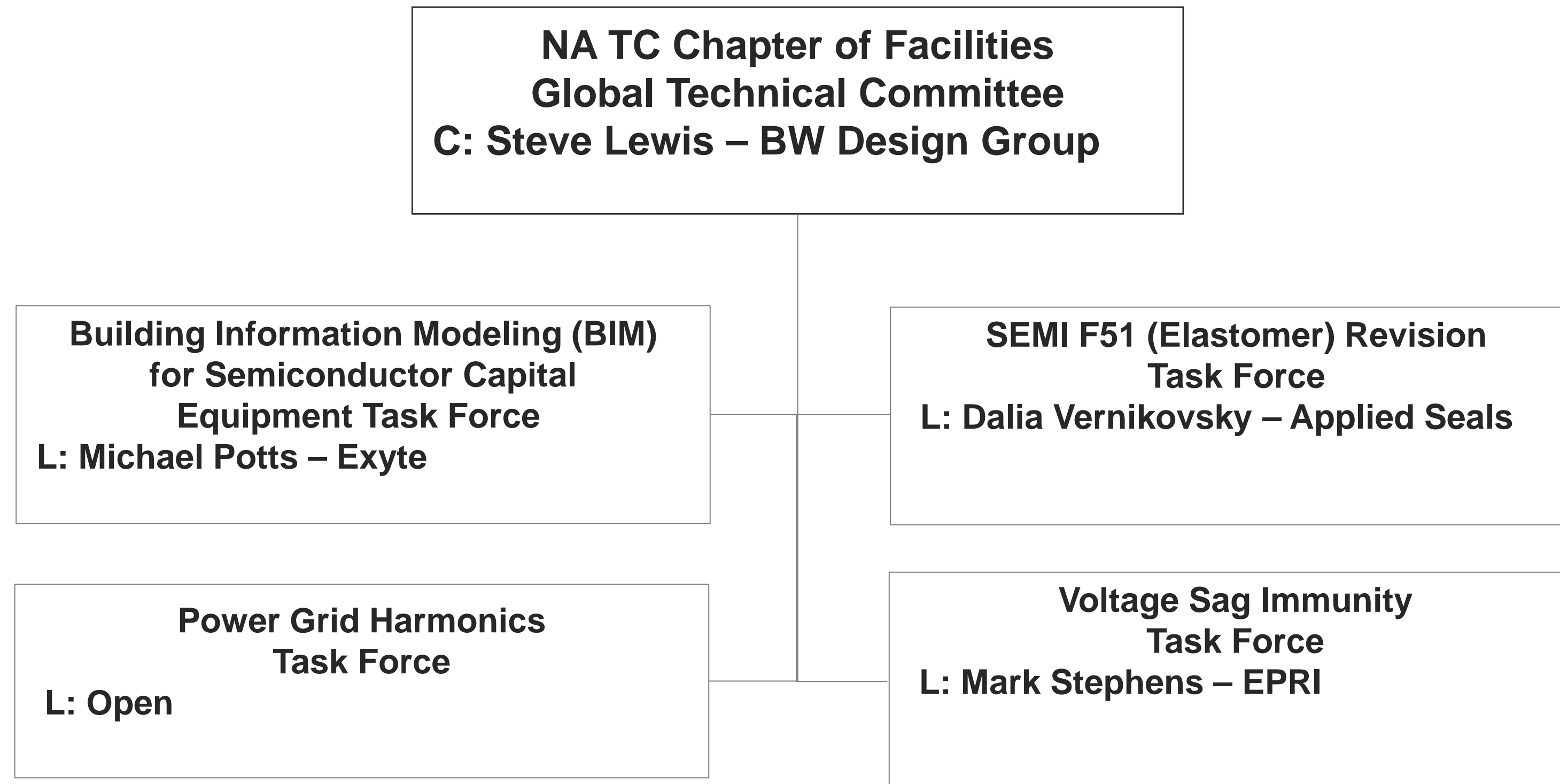
North America TC Chapter Facilities Global Technical Committee

Facilities Cochair



Steve Lewis
BW Design Group

Facilities Organization Chart



Committee Highlights



- North America TC Chapter completed simulation training for the OVTCCM on October 6, 2020.
- Special online ballot to vote on whether to adopt or not adopt has been sent out for a 14-day voting period (November 25th – December 9th).
- Task Force Activities
 - Building Information Modeling (BIM) for Semiconductor Capital Equipment TF
 - Ongoing TF Web conferences
 - Voltage Sag Immunity TF
 - Ongoing TF Web conferences
 - SEMI F51 (Elastomeric Sealing) Revision TF
 - Not currently meeting

Ongoing

- Facilities

- 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

- 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

Activities Approved via GCS between Meetings

Doc #	Type	SC/TF/CFG	Title/Details
6628	SNARF	BIM TF	<p>New Standard: Guide for Facilities Data Package for Semiconductor Equipment Installation and Building Information Modeling</p> <p>– TC Member Review took place between 11/20/2019-12/03/2019 – Approved by GCS on 01/20/2020</p>

Facilities 5-Year Review

Designation #	Standard Title	Action By	Assigned to
SEMI E76-0299 (Reapproved 0913)	Guide for 300 mm Process Equipment Points of Connection to Facility Services	Past Due	Facilities NA TC Chapter
SEMI F49-0200 (Reapproved 1213)	Guide for Semiconductor Factory Systems Voltage Sag Immunity	Past Due	Facilities NA TC Chapter
SEMI F50-0200 (Reapproved 1213)	Guide for Electric Utility Voltage Sag Performance for Semiconductor Factories	Past Due	Facilities NA TC Chapter
SEMI E70-1213	Guide for Tool Accommodation Process	Past Due	Facilities NA TC Chapter
SEMI E6-0914	Guide for Semiconductor Equipment Installation Documentation	Past Due	Facilities NA TC Chapter

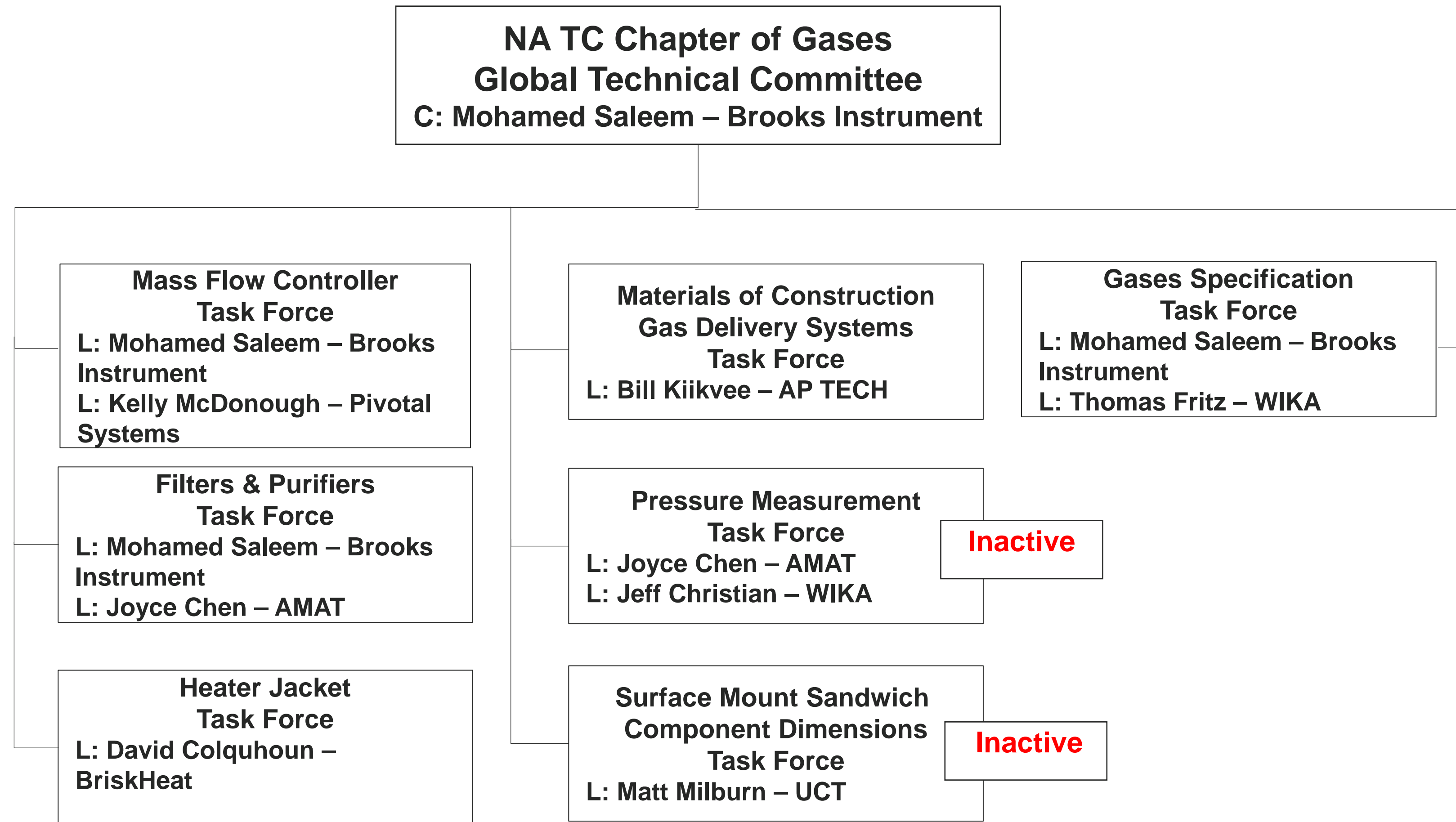
North America TC Chapter Gases Global Technical Committee

Gases Cochair



Mohamed Saleem
Brooks Instrument

Gases Organization Chart



Committee Highlights



- North America TC Chapter completed simulation training for the OVTCCM on October 6, 2020.
- Special online ballot to vote on whether to adopt or not adopt has been sent out for a 14-day voting period (November 25th – December 9th).
- Activities Approved by the GCS Between Meetings
 - Adjudication locale transfer for 6 ballots from NA Chapter to Japan Chapter.
 - Approved on December 2, 2020
- Task Forces have not met since Spring 2020 Meetings.
 - Current activities that have been balloted and approved via GCS are listed in the next two slides “Activities Approved via GCS between Meetings”

Activities Approved via GCS between Meetings [1/2]

Doc #	Type	SC/TF/CFG	Title/Details
6616	SNARF	Mass Flow Controller TF	Revision to SEMI E12-1213, Guide for Standardized Pressure, Temperature, Density, and Flow Units Used in Mass Flow Meters and Mass Flow Controllers – <i>TC Member Review took place between 11/19/2019-12/02/2019</i> – <i>Approved by GCS on 12/17/2019</i>
6616	Ballot Authorization	Mass Flow Controller TF	Revision to SEMI E12-1213, Guide for Standardized Pressure, Temperature, Density, and Flow Units Used in Mass Flow Meters and Mass Flow Controllers – <i>Approved by GCS on 01/17/2020</i>
6656	SNARF/ Ballot Authorization	Gases Specification TF	Line Item Revision to SEMI C3.6-0710 (Reapproved 0815), Specification for Phosphine (PH ₃) in Cylinders, 99.98% Quality – <i>Approved by GCS on 05/29/2020</i>
6657	SNARF/ Ballot Authorization	Gases Specification TF	Line Item Revision to SEMI C3.35-1109E (Reapproved 0815), Specification for Hydrogen Chloride (HCl), 99.997% Quality – <i>Approved by GCS on 05/29/2020</i>

Activities Approved via GCS between Meetings

Doc #	Type	SC/TF/CFG	Title/Details
6658	SNARF/ Ballot Authorization	Gases Specification TF	Line Item Revision to SEMI C71-0815, Specification and Guide for Boron Trichloride (BCl ₃) –Approved by GCS on 05/29/2020
6643	SNARF/ Ballot Authorization	Mass Flow Controller TF	Revision to SEMI E12-1213, Guide for Standardized Pressure, Temperature, Density, and Flow Units Used in Mass Flow Meters and Mass Flow Controllers – TC Member Review took place between 03/23/2020-04/05/2020 – Approved by GCS on 04/20/2020
--	Adjudication Locale Transfer	Gases NA TC	Transfer responsibilities for Letter Ballot review from the North America Chapter to the Japan Chapter for NA Ballots 6616, 6623, 6643, 6656, 6657, and 6658. –Approved by GCS on 12/02/2020

Gases 5-Year Review [1/4]

Designation #	Standard Title	Action By	Assigned to
SEMI F43-0308 (Reapproved 0613)	Test Method for Determination of Particle Contribution by Point-of-Use Gas Purifiers and Gas Filters	Past due	Filters & Purifiers TF
SEMI F59-0302 (Reapproved 0613)	Test Method for Determination of Filter or Gas System Flow Pressure Drop Curves	Past due	Filters & Purifiers TF
SEMI F67-1101 (Reapproved 0713)	Test Method for Determining Inert Gas Purifier Capacity	Past due	Filters & Purifiers TF
SEMI F68-1101 (Reapproved 0713)	Test Method for Determining Purifier Efficiency	Past due	Filters & Purifiers TF
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

Gases 5-Year Review [2/4]

Designation #	Standard Title	Action By	Assigned to
SEMI F72-0214	Test Method for Auger Electron Spectroscopy (AES) Evaluation of Oxide Layer of Wetted Surfaces of Passivated 316L Stainless Steel Components	Past due	Materials TF
SEMI F79-0914	Guide for Gas Compatibility with Silicon Used in Gas Distribution Components	Past due	Materials TF
SEMI F105-0914	Guide for Metallic Material Compatibility in Gas Distribution Systems	Past due	Materials TF
SEMI F60-1214	Test Method for ESCA Evaluation of Surface Composition of Wetted Surfaces of Passivated 316L Stainless Steel Components	Past due	Materials TF
SEMI F73-1214	Test Method for Scanning Electron Microscopy (SEM) Evaluation of Wetted Surface Condition of Stainless Steel Components	Past due	Materials TF

Gases 5-Year Review [3/4]

Designation #	Standard Title	Action By	Assigned to
SEMI F19-0815	Specification for the Surface Condition of the Wetted Surfaces of Stainless Steel Components	Past due	Materials TF
SEMI F28-1103 (Reapproved 0815)	Test Method for Measuring Particle Generation from Process Panels	Past due	Filters & Purifiers TF
SEMI E77-1104 (Reapproved 0815)	Test Method for Calculation of Conversion Factors for a Mass Flow Controller Using Surrogate Gases	Past due	Mass Flow Controller TF
SEMI C88-0815	Specification for Dimensions of Sandwich Components for 1.125 Inch Type Surface Mount Gas Distribution Systems	Past due	Surface Mount Sandwich Component Dimensions TF
SEMI F77-0915	Test Method for Electrochemical Critical Pitting Temperature Testing of Stainless Steel Surfaces Used in Corrosive Gas Systems	Past due	Materials TF

Gases 5-Year Review [4/4]

Designation #	Standard Title	Action By	Assigned to
SEMI E80-0299 (Reapproved 0915)	Test Method for Determining Attitude Sensitivity of Mass Flow Controllers (Mounting Position)	Past due	Mass Flow Controller TF
SEMI C91-1115	Test Method for Determination of Moisture Dry-Down Characteristics of Gas Delivery Components	Past due	Filters & Purifiers TF
SEMI C3.34-0116	Specification for Disilane (Si ₂ H ₆) in Cylinders, 97% Quality	Winter 2021	Gases Specification TF
SEMI C3.12-0116	Specification for Ammonia (NH ₃) in Cylinders, 99.998% Quality	Winter 2021	Gases Specification TF
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	Winter 2021	Materials TF

Thank you!

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