



Europe PV Materials Committee Meeting Summary and Minutes

SEMICON Europa October 9, 2013 Dresden, Germany

Next Committee Meeting

March 13, 2013 - Berlin, in conjunction with PV FMF. Check www.semi.org/standards for the latest update.

Table 1 Meeting Attendees

Co-Chairs: Peter Wagner / Hubert Aulich

SEMI Staff: Yann Guillou

Company	Last	First	Company	Last	First
Hennecke systems	Hermann	Klaus	Semilab	Tallian	Miklos
Hi Pure Tech	Burkhart	Marty	Hennecke Systems	Grosser	Jurgen
Hennecke Systems	Schroll	Philip	Peter Wagner consulting	Wagner	Peter
BayTech Group	Baylies	Winthrop	Jacobs University	Bergholz	Werner

Table 2 Ballot Results

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

Failed ballots and line items were returned to the originating task forces for re-work and re-balloting.

Document #	Document Title	Committee Action	
5333	Test Method for In-Line Measurement of Waviness of PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments	Passed as ballotted	

Table 3 Authorized Activities

#	Туре	SC/TF/WG	Details
5531	SNARF		Line item revision to PV40, Test Method for In-Line Measurement of Saw Marks on PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments
5530	SNARF	Silicon Materials	New Standard: Specification for Orientation Fiducials for PV Silicon Wafers
5430A	SNARF		Revision to SEMI M73-0309: Test Methods for extracting Relevant Characteristics from Measured Wafer Edge Profiles

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

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

Table 4 Old Action Items

Item #	Assigned to	Details
0613-01	James Amano	Confirm Lars Wende received the information about #5332A ballot – OPEN
0613-02	James Amano	#5334A: Comments received will be shared with TF leaders - CLOSED





Table 5 New Action Items

Item #	Assigned to	Details
1009-01	Yann Guillou	Clarify #5382 and PV22. Shall 5382 be included in PV22?
1009-02	Yann Guillou	Inform China about IEC 61646 that may have a very similar scope than #5478
1009-03	Yann Guillou	Check sponsor of SNARF #5429
1009-04	Yann Guillou	Check status of #4833
1009-05	Peter Wagner	Send a mail to Jason Lin to inform Taiwan committee there is an on-going activity on Wafer Measurement Methods

1 Welcome, Reminders, and Introductions

Peter Wagner called the meeting to order at 1.30pm. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion: Approve the minutes as written By / 2nd: Peter Wagner / Marty Burkhart

Discussion: None

Vote: 6 / 0 - PASSED

3 Liaison Reports

3.1 Japan PV Materials Committee

Yann Guillou gave the liaison report.

Attachment: 01, JA PV TC

3.2 Taiwan PV Material Committee

Yann Guillou gave this liaison report. Slides are enclosed to the minutes.

Attachment: 02, Taiwan PV_Liaison_20120619

3.3 China PV Materials Committee:

Yann Guillou gave this liaison report. Slides are enclosed to the minutes.

Attachment: 03, China Photovoltaic Committee Liaison Report20120906





3.4 North America PV Materials Committee:

Report was given by Win Baylies. Marty Burkhart gave additional information about PV Chemicals and Gases Purity TF. Slides are enclosed to the minutes.

Attachment: 04, NA PV Materials 20120926

3.5 SEMI Staff Report

Yann Guillou gave the SEMI Staff Report. Slides are enclosed

Attachment: 05, SEMI Staff Report SEMICON Europa Oct 2012 v2

4 Ballot Review

4.1 Document # 5333, New Standard: Test Method for In-Line Measurement of Waviness of PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments

Document passed technical review and is being forwarded to the ISC A&R Subcommittee for procedural review. See attachment below for details of ballot adjudication

Attachment: 06, A&R5333

5 Subcommittee & Task Force Reports

5.1 Silicon Materials TF

5.1.1 Ballot Review:

Document # 5333, New Standard: Test Method for In-Line Measurement of Waviness of PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments

Motion: Document to be approved as balloted and forwarded to ISC A&R subcommittee for procedural review

By / 2nd: Peter Wagner / Werner Bergholz

Discussion: None

Vote:

5 / 0 - PASSED

5.1.2 SNARF

5.1.1.1 Doc. 5331, Line item revision to PV40, Test Method for In-Line Measurement of Saw Marks on PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments

Motion: To approve SNARF

By / 2nd: Peter Wagner / Klaus Hermann

Discussion: None

1. Vote: 5/0

5.1.1.2 Doc. 5430A, Revision to SEMI M73-0309: Test Methods for extracting Relevant Characteristics from Measured Wafer Edge Profiles

Motion: To approve SNARF

By / 2nd: Peter Wagner / Philip Schroll





3. Discussion: 4. None

5. Vote: 6. 6/0

5.1.1.3 Doc 5330, New Standard: Specification for Orientation Fiducials for PV Silicon Wafers

Motion: To approve SNARF

By / 2nd: Win Baylies / Werner Bergholz

Discussion: None **Vote:** 5/0

5.2 Ribbon TF:

No meeting from the Ribbon TF in conjunction with SEMICON Europa. No activity to report.

6 Action Item Review

6.1 New Action Items

Yann Guillou (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

7 Next Meeting and Adjournment

Next PV Materials meeting will occur in conjunction with PV Fab Manager Forum in Berlin (10th-12th March, 2013). PV standard meetings are planned on the 12th and 13th 2013.

For more information about SEMI Standard meeting during PV Fab Manager Forum, please visit: $\underline{\text{http://www.pvgroup.org/Events/p040664}}$

Adjournment of the meeting was held at 3.10pm.

Minutes respectfully submitted by:

Yann Guillou Business Development and Standard Manager

SEMI Europe

Phone: +33 4 38 78 39 71 Email: yguillou@semi.org

Minutes approved by:

Peter Wagner, Wagner Consulting, Co-chair	<date approved=""></date>
Hubert Aulich, PV Crystalox, Co-chair	<date approved=""></date>

#	Title	
1	JA PV TC	
2	Taiwan PV_Liaison_20120619	
3	China Photovoltaic Committee Liaison Report20120906	





4	NA PV Materials 20120926	
5	SEMI Staff Report SEMICON Europa Oct 2012 v2	
6	06, A&R5333	

^{#1} 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 [SEMI Staff Name] at the contact information above.