

# ALMA International

## Component Standards Sub-Committee Meeting Minutes

### 2006 Winter Symposium

**Mission Statement:** To establish standard nomenclature, dimensions and tolerances, and methods of measurement, inspection, and qualification for loudspeaker components.

#### Sub-committee members and email addresses

- Updated 2006 member/email list.

#### Nomenclature Prints (NP's) updates

- NP-005 Padrings – Greg Seidel
- NP-006 Screens – Greg Seidel
- NP-007 Whizzers – Neal Baitcher

#### Dimensioning/Tolerancing Guidelines (DG's) updates

- DG-005 Padrings – Greg Seidel
- DG-006 Screens – Greg Seidel
- DG-007 Whizzers – Neal Baitcher

#### Measurement Guidelines (MG's) updates

- MG-005 Padrings – Greg Seidel
- MG-006 Screens – Greg Seidel
- MG-007 Whizzers – Neal Baitcher
- Preconditioning and measurement conditions – Neal Baitcher and Brian Sterling  
Brian Sterling summarized existing standards and prepared a recommendation for the sub-committee, which is posted on the website.

#### Test Methods (TM's) updates

Due to the large number of TM's required, we must first focus on completing the TM's for the critical characteristics of the currently DRAFT released MG's. There are currently 4 DRAFT released component MG's with a total of 17 critical characteristics. 1 of these (TM-100) is already released. There are proposals for 2 more (TM-324, TM-438). Of the remaining 14, 3 are for mass (TM-114, TM-138, TM-213) and perhaps can be commonized, 4 are for I.D. (TM-104, TM-204, TM-301, TM-406) and perhaps can be commonized, and 2 are for O.D. (TM-203, TM-319) and perhaps can be commonized. Thus, there are between 9 and 14 priority TM's that need to be drafted and proposed.

- TM-100 SERIES Diaphragms  
TM-100 Test Method for Measurement of the Lowest Resonance Frequency of Loudspeaker Cones is released and a link has been placed on the ALMA website. There is a call for comment to improve TM-100. These improvements may be incorporated by superceding TM-100 with IEC 100/999/NP. Comments should be directed to Brian Sterling, who will review and forward them to Bob True and Wolfgang Klippel and post them on the website if appropriate. Bob True's comments are posted on the website.

TM-104 Neck I.D. – George Wise  
TM-114 Body Mass, TM-138 Assembly Mass – Myra Stewart  
TM-123 Shoulder Height – John Stewart  
are priority.

- TM-200 SEIRES Dust Caps – Greg Seidel

TM-203 Neck O.D. Bottom, TM-204 Neck I.D. Top, and TM-213 Mass are priority.

- TM-300 SERIES Voice Coils – Jeff Guelzow  
TM-301 I.D., TM-315 Top of Winding, TM-316 Bottom of Winding, TM-319 Winding O.D., and TM-320 DC Resistance (DCR) are priority.

TM-324 Test Method for Voice Coil Maximum Operating Temperature ( $T_{MO}$ ) is proposed for DRAFT release and comment and is posted on the website.

- TM-400 SERIES Spiders – George Wise  
TM-406 Neck I.D. and TM-413 Corrugation Height are priority.

TM-438 Test Method for Stiffness of Loudspeaker Driver Suspension Components is proposed for release and is posted on the website. In the interests of time, generalizing Method B to include the full hysteresis stiffness will be addressed in a future update to the current proposal. Bob True will assist with this.

- TM-500 SERIES Padrings – Greg Seidel
- TM-600 SERIES Screens – Greg Seidel
- TM-700 SERIES Whizzers – Neal Baitcher
- Suspension Stiffness (dynamic) – refer to IEC 100/999/NP.

#### Other

- Can we post and/or link EIA RS-438 and ALMA TM-100 (AES 19-1992) to our website? Yes, the current version of ALMA TM-100 can and will be posted on the ALMA website. Dan Field will discuss the posting of EIA RS-438 with the CEA. In the meantime, links have been posted to the sites where the standards can be obtained.
- Website comments – direct link on homepage to standards documents?  
The sub-committee agreed that a direct link on the ALMA website homepage to the standards documents is a good idea. Brian Sterling will request this.
- There was request to document the general component standards process. The resolution was to form a new committee within the Standards Committee. Founding members are Scott Weinstein, Greg Seidel, and Brian Sterling. Following is current information regarding the component standards process:

Documents are numbered with their 2-letter abbreviations followed by a sequential 3-digit number. For example Dimensioning/Tolerancing Guidelines for Spiders is document number DG-004.

Revisions are indicated by date (consistent with other standards) on approved documents and by “DRAFT” on unapproved documents.

DRAFT documents can be released with the approval of the author(s) and the sub-committee chair only, while non-DRAFT documents must have sub-committee approval (i.e. at yearly meetings) for release.

The goal is to update DRAFT documents on the website every quarter.

The measurement device references in the MG's need to be clarified to indicate that these are minimum equipment requirements. Stu Lumsden volunteered to

provide the sub-committee (c/o Brian Sterling) general measurement equipment guidelines and/or references.

Gage Repeatability and Reproducibility (GRR) information, if known, should be listed at the end of each TM.

## **New Business**