

Contamination Control Sub-Committee Activity & Plan Report

Chairperson : Takayuki YAMAMOTO / Toshiba
Co-chairperson: Tetsuya OHTAKI/Hitachi GST
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Activities : July,2008- June, 2009

Meetings: (1) Oct 22, '08(2) Feb.27, '08 (3) May 13, '09 , (4)
Jun.17,'09

Discussed Items:

1. Revision of Standards for Micro-contamination

- M11-99: General Outgas Test Procedure by Dynamic Headspace Analysis: **Finished to revise**
- M12-99: Measurement of Extractable/Leachable Cation Contamination Levels on Drive Components by Ion Chromatography : **On ballot**
- M13-99: Measurement of Extractable/Leachable Anion Contamination Levels on Drive Components by Ion Chromatography: **On ballot**

2. Work shop

We had three work shops in our meetings. Eight topics on the chemical analysis and the contamination control were presented and discussed.

1. We will review all standards for Micro-contamination

M1-98: Terms and Definitions for Micro-contamination

M2-98: Materials Used in Hard Disk Drives

M3-98: Effects of Contamination in Disk Drives

M4-98: Recommended Practice: Disk Drive Industry Default Reporting Units for Contamination

M5-98: Contaminant Transport Mechanisms in Hard Disk Drives: Terminology

M6-98: Environmental Testing for Corrosion Resistance and for Media Compatibility

M7-98: Organic Contamination as Nonvolatile Residue (NVR)

M8-98: Determination of Volatile Organic Compounds (VOC) by Static Headspace GC/MS

M9-98: Particulate Contamination Test Methods for Hard Disk Drive Components

M10-98: Special Cations Analysis

M11-99: General Outgas Test Procedure by Dynamic Headspace Analysis

M12-99: Measurement of Extractable/Leachable Cation Contamination Levels on Drive Components by Ion Chromatography

M13-99: Measurement of Extractable/Leachable Anion Contamination Levels on Drive Components by Ion Chromatography

2. We will have the work shop on the chemical analysis, the clean process and the tribology for HDI.