



IMA Purpose

- Promote the use of Advanced Process Control (APC) and IM for semiconductor manufacturing
 - Helping to create cooperative solutions among technology providers
 - Lowering barriers for implementation of the solutions
- APC
 - Model Based Process Control (MBPC)
 - Includes R2R Control
 - Fault Detection and Classification
 - Including e-diagnostics

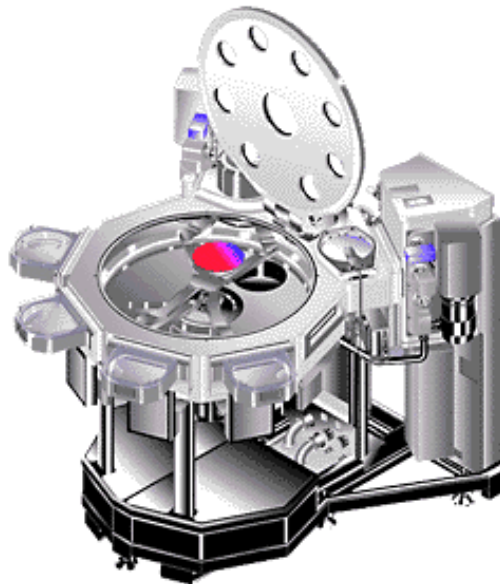


IMA Membership

**Integrated Metrology
And Sensor Suppliers**

**APC and EES
Providers**

Users



Universities



IMA Membership

- AMD
- Francis LLC
- Fraunhofer
- International Sematech
- KLA Tencor
- MKS
- Nanophotonics
- OMRON Corporation
- Portland State University
- Si Automation
- Tel/Timbre/Tokyo Electron
- Tevet Process Control Technologies
- Square D Company, Schneider Electric
- UC Berkeley
- Univ. of Michigan
- Verity Instruments
- Yokogawa Electric



Benefits to IMA Members

- Forum for Input as a Larger Voice to
 - IM/APC Standards
 - User Community (Tool suppliers and Fabs)
 - Input to ITRS so a larger community sees the needs and the benefits of APC/IM
- Learn more about the IM Industry
 - Surveys, analysis, etc.
 - Members-only area on web page
 - Forum for communications and consensus building
- Leverage IM Resources
 - Publications, meetings
- Newsletter, that is widely distributed, for members' technical articles
- Benefit area is a focus item for IMA BoD



IMA Focus

- Standards for IM and APC
- Integrated Metrology Roadmap
- ITRS inputs
- ROI Studies
 - Benefits of IM and APC
- Education
 - Papers, Seminars, Web Site, etc.



SEMI Standards, ITRS and the IMA

- 2001: Reporting Endpoint Detection over Sensor Bus (E-54)
- 2003 – Present: Integrated Measurement Module Communication Task Force - E127
- 2002 – Present: Equipment Control System Task Force – E126 EQIP
- 2004 – Present: Sensor Bus for Vacuum Equipment
- Support and presenting the E127 standard at 2004 SEMICOM West STEP
- Assisting in development of SEMI STEP for SEMICON West 2005 on PCS (E133) including ECS (E126)
- Leadership in IM TF, ECS TF, DQ TF, PCS TF and membership in other TFs
- Provided inputs to the IM section for ITRS, accepted and published
- Working on FI section of ITRS now



Seminars/Meetings

- Usually conducted several times / year in conjunction with:
 - AEC/APC Conferences (U.S., Europe, and Asia(?))
- Selected Topics, Invited, or Workshop Style Meetings
- IMA reports their activities at the I&CC SEMI Standards meetings