

Web enabled semiconductor equipment support

An equipment supplier's perspective



Our Goal

Create an On-line Integrated information
management system for field support
of TEL tools



Data required for OEE

- Tool-to-tool comparative data
 - common performance and productivity metrics across our installed base
 - within a tool type
 - within a use context
- OEE data set
 - Prioritize tool productivity improvement activity



Data required for e-diagnostics

- Tool state data
- Tool history data
- Process state data
- Auto calibration or remote calibration data
- Correlation of above to:
 - normalized e-test data
 - metrology data
 - electrical characterization data



Online Support Needs

- Global communications
- Allow remote engineering access
- Enable local access (user and/or supplier)
- Enable concurrent support engineering sessions “On-line coaching”
- Interactive online documentation
- Intelligent fault detection/prediction
- Extendable to meet future system changes



Potential Customer Benefits

- Hard data on Machine Reliability/Productivity
- Quicker Response To Customer Problems
- Faster ramp for new fab or new process
- Better Reporting
- Foundation for collaborative productivity improvement activities
- Better Parts Availability Information
 - Parts Usage History Information For Stocking
 - Right part at the right time



Challenges for Online Support

- Common connectivity methodology all fabs
- Upgrade tools for data collection and analysis capability
 - legacy tool set
 - new generations of tools
- Reliable, secure connectivity
- Data controls for customer
- Prevent data leakage to competitors
- Cost / benefit sharing proposition

