PDF/SOLUTIONS™

Manufacturing Analytics

End-to-End Analytics to Accelerate Yield Ramp and Reach Volume Production Faster

Overview

Manufacturing Analytics (M-A) is one of four primary modules in the Exensio® Analytics Platform.

The M-A module enables IDMs, foundries and fabless semiconductor companies to achieve fast product yield ramp and reach volume production as quickly as possible.

Focus on solving problems, not managing data

In many cases, 80% of the effort involved in an analytics project is just getting your data ready for analysis. The M-A module removes the need for engineers to deal with data wrangling, integration, and alignment, effectively increasing analytics bandwidth by up to 5x.

The M-A module is the foundation of a true end-to-end big data environment for the semiconductor and electronics industries. Data can be collected from FDC, characterization, test, and assembly, and is then integrated into a semantic data model that is immediately ready for analysis.

Online and offline rules

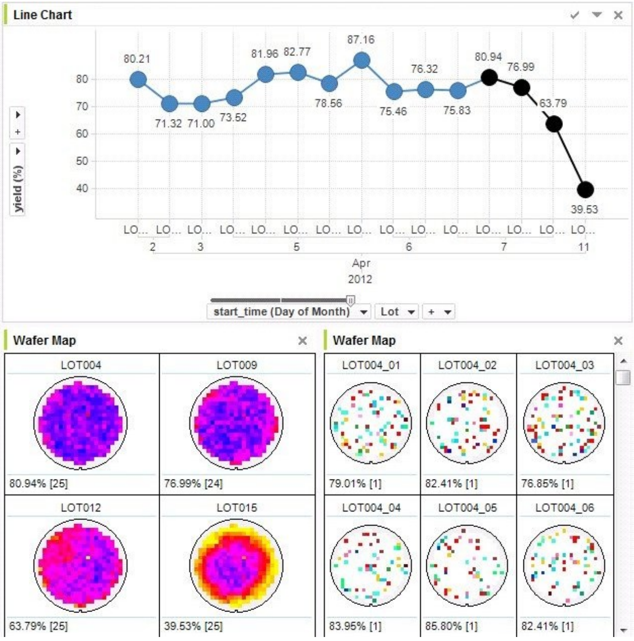
The M-A module supports both online and offline rules to look for data signatures that could impact product yield. Examples of rules include monitoring for process issues, outliers, parametric test triggers and statistical rules for bins and yield. In addition to many built-in rules, M-A includes the flexibility to build customized rules using R for maximum control and visibility into your product yield.

Product Highlights

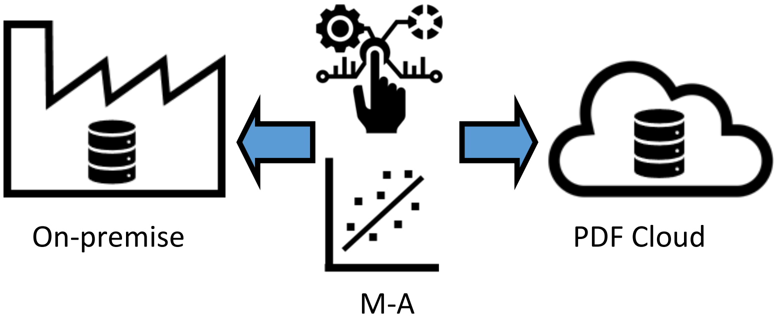
- Fast, high-volume, and scalable yield management environment
- Automatically collects and cleans more than 50 different semiconductor data types
- Reduces data wrangling by up to 80%
- Increases analytics capacity by up to 5x
- Available on-prem or on the PDF Cloud
- Complete lot and wafer genealogy
- Automatically mine historical data
- Defect source analysis (optional)
- Physical failure analysis (optional)
- Guided analytics (optional)

Manufacturing Analytics

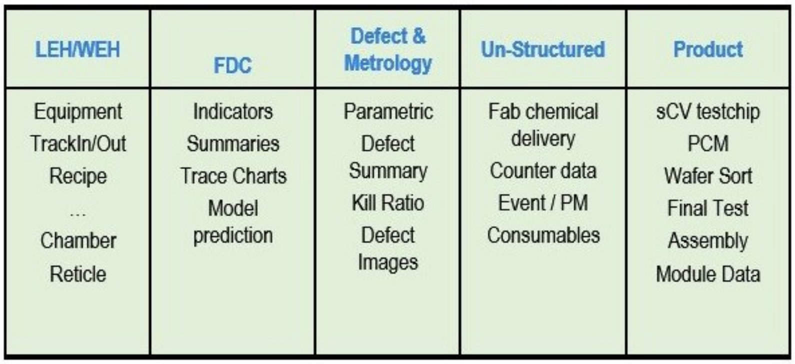
Fast and intuitive visualizations of your data



M-A is available on the PDF Cloud or on-prem



Support for any data type, structured or not, from any facility across your supply chain



LEH/WEH	FDC	Defect & Metrology	Un-Structured	Product
Equipment TrackIn/Out Recipe … Chamber Reticle	Indicators Summaries Trace Charts Model prediction	Parametric Defect Summary Kill Ratio Defect Images	Fab chemical delivery Counter data Event / PM Consumables	sCV testchip PCM Wafer Sort Final Test Assembly Module Data

Additional Sub-Modules for M-A

- **Advanced Analytics**
- **Guided Analytics**
- **Big Data Analytics:**
- **NPI (New Product Introduction)**
- **Automation and Reporting**

For more information about these additional sub-modules, contact your local sales representative

Exensio visualizations Powered by TIBCO®

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