Maximize Initial Yield

DELMIA’s Yield Engineering in Semiconductors solution for the High Tech Industry enables Integrated Device Manufacturers (IDM) and Foundry companies to optimize their shop floor processes and product quality.

DELMIA High Tech Yield Engineering in Semiconductors is an innovative solution for yield analysis, process optimization and Design of Experiments (DOE) for engineering and manufacturing communities in the semiconductor industry.

Rules explaining the reasons for yield excursions are extracted using a patented algorithm that can discover hidden relationships in production. Data can be intuitively analyzed. This information can be used to alert the production team and stop reproducing known defects.

With this solution, semiconductor companies are able to ramp up new products faster, optimize yield and capture best practices for equipment selection and parameter adjustments.
INDUSTRY CHALLENGES

• How to understand and prevent manufacturing defects and increase production yield?
• How to speed-up yield learning when introducing new products in the wafer fab?
• How to improve process understanding and capture manufacturing knowledge?

SOLUTION HIGHLIGHTS

• Extract rules for high and low yield from production data
• Evaluate and understand the influence of equipment selection and sequence
• Identify key process parameter reducing yield
• Develop and optimize the testing process and detect defect dies early
• Increase understanding of interactions between process parameters including machine routes, process measurements, PT and EWS electrical tests
• Define natural language rules

SOLUTION VALUES

• Troubleshoot yield excursions for products in production
• Maximize initial yield when introducing new products in the wafer fab
• Extract actionable information from production data and capture best practices

USERS

• Yield Engineer
Delivering Best-in-Class Products

Virtual Products

Model and Simulate our Planet

3D Design

Information Intelligence

Realistic Simulation

Dashboard Intelligence

Digital Manufacturing and Production

Social Innovation

Collaborative Innovation

3D Communication

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Europe/Middle East/Africa

Dassault Systèmes
10, rue Marcel Dassault
CS 40501
78946 Vélizy-Villacoublay Cedex
France

Asia-Pacific

Dassault Systèmes
Pier City Shibaura Bldg 10F
3-18-1 Kaigan, Minato-Ku
Tokyo 108-002
Japan

Americas

Dassault Systèmes
175 Wyman Street
Waltham, Massachusetts
02451-1223
USA

Visit us at

3DS.COM/DELMIA