Unleashing the Power of Software: Revolutionizing Factories for Future Success
What is more expensive?
Overall Equipment Effectiveness

(Availability x Performance x Quality)
All Time

Planned Production Time

Run Time

Net Run Time

Fully Productive Time

Schedule Loss

Availability Loss

Performance Loss

Quality Loss
Software dependency

100% Perfect
85% World Class
60% Typical
40% Low

OEE
Waste

HIGH
LOW

MES & Industry 4.0
International Summit
www.mesi40-summit.com
Minimized setup effort through efficient planning:
- Import production orders straight from the ERP system
- Automatic clustering of products for optimized line balancing
- One complete side with constant tables
- Results are immediately available in the preparation area
- Material transactions reduced by 60%

KPI improvements at other ASM customers
- 20% Performance improvements
- 12% Improvements in line availability
- 17% Reduction in material inventories
Zero downtime during New Product Introductions (NPIs)

- Offline generation of printing and placement programs
- Virtual printing and placement before production
- Automatic transfer of programs to the line
- Expert system for autonomous process optimization

KPI improvements at other ASM customers

- Reduction in design and optimization costs: 70%
- Reduction in setup times: 60%
- Reduction in material costs: 20%
Stabilize the print process to maximize throughput
- DFM HealthCheck before production starts
- Recommended parameters stabilize the process
- Automatic offset correction and wipe cycle optimization
- Autonomous DOE's to improve results
- SMT line is four times faster than before
- 90% yield improvement

KPI improvements at other ASM customers

- 60% Reduction in operator assists
- 20% Increases in yield
- 40% Increase in throughput
Reduce actions on the line to maximize line utilization

- Board ID’s with automatic program download
- Expert systems stabilize the print process
- Dual lane configuration for batch size one production
- Line output increased by 200% (same line configuration)
- Reduction of line staff from 9 to 3 operators per shift

KPI improvements at other ASM customers

- 25% Increase in productivity
- 50% Increase in line utilization
- 30% Increase in quality
Highly efficient setup preparations process

- One operator handles offline setups for 3 SMT lines
- LEDs and target track guidance for fast and easy setup preparation
- Significantly reduced material transactions
- 30% time savings when moving materials to/from storage
- 30% space savings thanks to automatic storage systems
- Twice as fast in the setup preparation area
Increase transparency to optimize material flow

- Transparent, paperless material management
- Optimized material flow with automated line side stock
- Reduction of material-related line stops and setup errors
- Operators per line reduced from 5 to 3 (target is 1)
- 70% increase in throughput (same line configuration)
- 1,300 spliced reels per shift

KPI improvements at other ASM customers

- 25% Reduction in material procurement effort
- 10% Less line downtime
- 40% Reduction in material inventories
Increase productivity with real time monitoring of production data
- Monitors above the line provide guidance for the operators
  - Digital documents at all workstations, always up-to-date
  - Live display/drill-down of KPIs on factory monitors
  - Producing twice as many products with 10% more throughput (same line configuration and staff)

KPI improvements at other ASM customers

- Increase in productivity: 20%
- Increase in equipment utilization: 30%
- Reduction in material inventories: 17%
Comprehensive automation through factory integration

- Two highly automated SMT lines with a downstream robot-supported line for final assembly, testing and packaging
- All equipment is fully integrated and controlled by CIG cloud
- Line staff reduced from 63 to 13 operators per shift
- First-pass yield improved by 2%
- Lead time reduced from 5 to 2 days

Reduction in operator assists: 21%
Increases in yield: 2%
Reduction in lead time: 40%
The integrated smart factory
When MES meets “specific applications”
The integrated smart factory
When MES meets “specific applications”

Combination of both strengths will create great value to the industry!
THANK YOU!

Your email

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