

Semiconductor Manufacturer #1



Executive Summary

- ❑ Leading producer of static memory devices
- ❑ Strong reputation for product innovation

Challenges

- ❑ Relentless global competitive price pressures drives need for substantial year over year cost improvements
- ❑ Desire to provide customers improved service levels while achieving improved return on assets

Results

- ❑ Reduced order to delivery cycle time by 57%
- ❑ Improved time to market cycle time by 79%
- ❑ Reduced inventory by 52%
- ❑ Increased productivity by 87%
- ❑ Boosted revenue by 43%
- ❑ Improved return on assets by 304%

“Something that would kill three-quarters of our competitors just gives us a bad cold” –CEO

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Results

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- ❑ Reduced inventory by 52%
- ❑ Increased productivity by 87%

How Achieved

- ❑ Established hierarchical measurement set from business level to daily drumbeat metrics by operation group—ec, photo, etch
- ❑ Formed cross-functional teams for key operations—fab, probe, packaging, test and production control
- ❑ Trained supervisors to dynamically adjust operator schedules throughout shift to balance wip across multiple processes, equipment groups and masking layers
- ❑ Paretos and root cause identification of defects in fab yield and defect densities
- ❑ Assistance in process characterization, process capabilities and process controls
- ❑ Reduced photo rework to zero
- ❑ Provided skills training for equipment maintenance organization increasing overall uptime from 70% to 85%
- ❑ Improved furnace utilization by 30%
- ❑ Guided the internalization of PVM methodology and established an environment of continual process improvement throughout the organization