

MANUFACTURING

Water Meter Manufacturer Avoids \$15MM Capital Cost

4:1

*Return on
Investment*

CHALLENGE

To avoid building expansion costs

Multimillion-dollar manufacturer of water meters for residential & commercial applications that are supplied to major utility companies has rapid business growth that requires the need for space for new products and increased customer volumes.

The client engaged Audere Partners to:

- Avoid \$15MM building expansion to accommodate new product & customer growth
- Reduce current manufacturing footprint by minimum 25%
- Increase throughput by 20% on current assets
- Achieve \$7MM annualized savings
- Increase Finished Goods Inventory Turns from 5.6 to 8
- Reduce WIP & Finished Goods Warehouse footprint

OUR FINDINGS

Identified 9 items for improvement

- Batch Process driving sub optimization – no linkage to assembly
- Daily Execution problematic
- Production Schedule not based on customer demand
- No root cause understanding of systemic repeating issues – poor quality results
- Production output inconsistent with no standard work
- Daily firefighting
- Poor linkage between leadership plans and daily results
- Excessive and long changeovers
- Poor maintenance management

REFERENCE
06-MP

SECTOR
Lean Manufacturing

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IMPLEMENTATION

We focused on areas of impact to reduce costs and optimize performance

- Redesigned plant layout to link machining with assembly (moved 60 machining centers and 4 assembly lines)
- Redesigned assembly cells layout and implemented one-piece flow
- Created Pull system to assembly from machining
- Identified and triaged key bottlenecks
- Improved scheduling process and visibility to floor
- Developed and installed management operating system and KPI dashboard
- Created standard work and training in all areas
- Installed and trained employees in OEE
- Installed robust planning and reduction in changeovers
- Implemented I-Kanban with supply base



“ I never imagined that we would make improvements like this in a 10-month period. It proves that if leadership clearly articulates a vision with expectations, provides tools and support, our employees will deliver!

Executive Vice President

RESULTS

All delivered at a 4:1 client ROI

Annualized savings **\$14MM**

Capital Cost avoidance **\$15MM**

Increased daily throughput through debottlenecking **30%**

Improvement of OTIF at the end of the project (from 75 to 95%) **27%**

Floor spaced reduced (136k sqft to 69k) **51%**

Reduction in WIP **75%**

Reduction in changeover times (360 to 25mins) **93%**

Improvement of quality (from 89 to 98%) **10%**

Increased inventory turns (5.6 to 10.5) **87%**

Reduction of inventory value **47%**