Success Stories: Energy Efficiency In Manufacturing Plants

Green Urban Manufacturing Initiative Roundtable September 23, 2010





CMTC is committed to improving the competitiveness of So. California's manufacturers

□ Non-profit consulting organization

□ Serve 600 manufacturers per year

□ All projects are surveyed by a 3rd party

□ Provided energy services since 2003



CMTC uses a continuous improvement approach

Process improvement reduces energy intensity

- ► Applies VeSMTM to reduce energy consumption (7+ years)
- ► Uses Lean & 6 Sigma principles for efficiency gains

□ Change Management addresses culture change

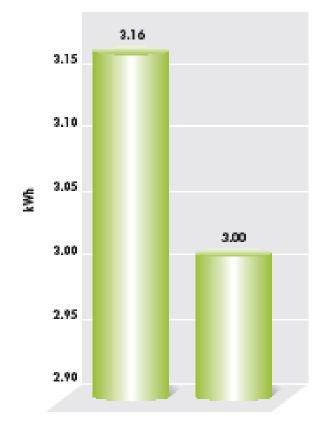
- Assures commitment to sustain energy savings
- Builds foundations for continuous improvement



"CMTC has done an excellent job of helping us reduce energy costs and improve quality"

CEO/President

Manufacturer of clay roof tile products for building industry



60 Employee Company

- Identified causes for tile production variances in coating & heating processes
- Upgraded equipment controls to improve tile forming and glazing processes
- Reduction in product defects and energy intensity with an increase in production

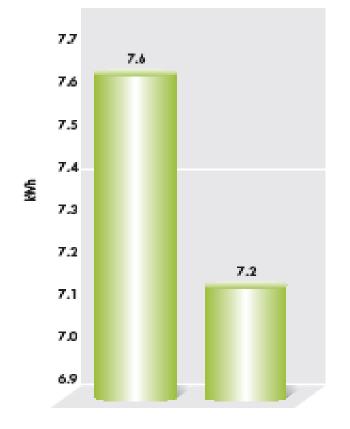
Saved 161,000 kWh



"We were pleased to discover how implementing lean could reduce our energy requirements"

Plant Manager

Manufacturer of rubber products for the construction industry



150 Employee Company

- Redesigned processes to improve access to materials
- Reduced equipment changeover by improving mold loading process
- Improved changeover time reduced equipment run time per mold cycle

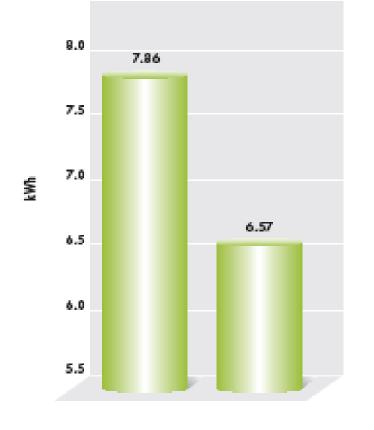
Saved 473,000 kWh



"With CMTC consulting support, we saved 1.2M kWh with the same amount of production"

Manager Manufacturing Technology

Manufacturer of Marine, RV and Utility Vehicle Batteries



300 Employee Company

- Reorganized work processes at 2 plant locations, improved line balancing & reduced defects
- Improved equipment operating controls, change over time and product quality
- Reduced equipment idle time Increased production capacity

Saved 1,200,000 kWh