

STANLEY BLACK & DECKER – CRIBMASTER

A SMART FACTORY SOLUTION

Student Team:

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Project Sponsors:

Larry James — Director of Operations, CribMaster
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CribMaster, a business unit of Stanley Black & Decker, is a global leader in inventory and asset management solutions for industrial environments. For example, CribMaster provides leading aerospace companies with an RFID-enabled positive tool control solution that lets them know when an item is taken, who takes it, and when it is returned. Building on their existing expertise, CribMaster developed a smart factory solution that enables real-time tracking of assets and installed it as a proof of concept within their Marietta, GA, build center.

The Tauber team was brought in to accomplish two distinct goals: 1) utilize the smart factory deployment for lean transformation at CribMaster's Marietta site, and 2) help define the value proposition and commercialization approach to bring this solution to market.

To accomplish the first goal, the Tauber team conducted a Rapid Plant Assessment to determine the major opportunities to improve operations within CribMaster. The team then designed and conducted three events to address these opportunities, which consisted of a kaizen for the scheduling process, a development focus group for manufacturing execution features and needs within CribMaster, and a full site value stream mapping activity. Based on these events, the Tauber team recommended that CribMaster implement a mixed model line, which will result in a 3% reduction in direct labor spend, a gain of \$400K in working capital, and a lead time reduction of 50%. CribMaster plans to complete full implementation of the Tauber recommendations by 2018.

For the second goal, the Tauber team worked with the CribMaster Development and Marketing teams to analyze the technical capabilities of the smart factory solution, understand customer needs, evaluate the market potential, and understand competitive threats. Ultimately, the Tauber team recommended a focused approach for commercialization, initially geared towards maintenance, repair, and overhaul (MRO) assets tracking within the aviation and naval industries. Over the course of the project, CribMaster was awarded a multi-million dollar contract to deploy this solution with a customer in the aviation MRO space, therefore validating the Tauber recommendation. Based on CribMaster's pre-commercialization success, as well as the Tauber market evaluation, the Tauber team believes that this solution could ultimately deliver over \$100M in annual revenue for CribMaster, which will significantly alter their growth trajectory, as well as deliver tens of millions of dollars in savings to their customers.