



BLACK SHEEP TURNAROUND

Coca-Cola Supply Chain Management Company (SCMC) was established by the major bottling companies in China to manufacture and supply non-carbonated products for the Chinese and some regional export markets.



- Mechanical efficiency (ME) increased by 10%, 16% and 20% (pilot line) on the three production lines in the first year
- Water usage per litre of beverage improved by 49%
- Electricity consumption per litre of beverage has declined by 35%, while fuel consumption per litre dropped 41%



The company operates through a supply location network of 17 plants, of which Dongguan plant in Guangdong province, some three hours' drive from Hong Kong, is the largest site. It operates four beverage lines with both hot and aseptic filling technology. Using DigiTRACC, Dongguan was the first to implement best practices at the beginning of 2005.

Early stage challenges

With the odds seemingly stacked against success in the early stages, the Kronos hot fill line was chosen for the TRACC pilot implementation. Challenges included:

- language - TRACC hadn't been translated into Mandarin and few personnel could speak or understand English
- a skills shortage
- high staff turnover (more than 25% a year)
- extraordinary production pressures because of erratic machine performance

Implementation on the pilot line started with Foundation Best Practices. Despite the challenges, the changes rapidly started yielding impressive results.

Implementation highlights

Mechanical efficiency (ME) increased by 10%, 16% and 20% (pilot line) on the three production lines in the first year. ME improvements have since been sustained year-on-year. Improvements over the starting baseline are 13%, 17.5%, 37% (pilot line) and 49% (new production line).

Unplanned downtime has dropped by more than 50% since the project started while the order fulfillment rate is up from the low 90s to 98%.

Production volumes keep growing exponentially and several all-time production records were shattered this year. In January - traditionally a low-season production month - Dongguan matched the 2004 equivalent of five months' production (when the programme started).

Material yields were consistently up by leaps and bounds reducing the yield losses by between 21% and 79% in the first few years. The Dongguan factory now leads the field in the supply network yield benchmarks. Most impressive are the energy and water usage savings since the start of the WCM programme. Water usage per liter of beverage improved by 49%. Electricity consumption per liter of beverage has declined by 35%, while fuel consumption per liter dropped 41%.

Many implementations slow down after the pilot implementation stage. Dongguan started with one task force in 2005, but now the current five task forces are all driving the WCM implementation in their own areas. WCM implementation also is being rolled out to non-core operation areas.

Profit improvement projects constitute a significant part of the improvement drive. Operators and supervisors were trained in the DMAIC problem-solving methodology and are solving problems that rival any Six Sigma black belt project.

I'm often asked what sets the Dongguan implementation apart. The answer is simple: Dongguan's site management has taken on WCM with a dogged determination and it's now an integral part of SCMC's corporate philosophy. And group HR manager Wendy Ruan said, "All plant managers know there's no career progression for managers who aren't WCM literate."

SCMC is entering an exciting new phase as the WCM process is being rolled out to the Suzhou, Beijing and Xiamen sites. While early implementation challenges at Dongguan have been overcome, each site will no doubt present its own. Fortunately we've established a strong team in Dongguan, as well as a forceful culture of sharing knowledge.

Ainsley Mann, SCMC CEO, summarised the extraordinary progress made since 2005, "As the black sheep in the family Dongguan was spurned widely for its poor performance. It's hard to believe that it's now being visited regularly by industry peers as a reference factory."

