

From An Uncertain Future To A Jewel In The Crown

Electrolux Refrigeration Plant Orange NSW, Australia

BACKGROUND

Products: Domestic Refrigeration and Chest freezers

- Exports to Asia and parts of Europe
- Plant Workforce = more than 580
- Site = 11 Hectares

Revenue >\$200m

Profitability = poor

Previous improvement initiatives:

- Invested >\$20m in new plant and equipment
- Fully installed Lean Manufacturing practices.

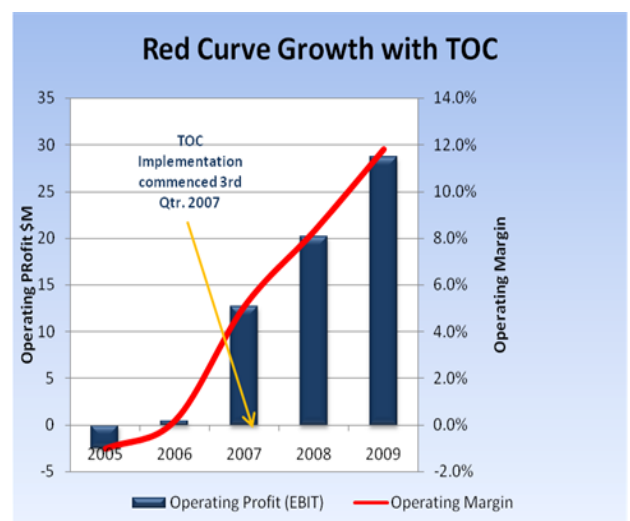
“TOC is the best method for building common understanding and agreement that I have seen in over 2 decades in industry that has taken me around the world”
Jason Furness, GM, Electrolux Refrigeration

MAIN ISSUES

- Unable to give the market what it wants when it wants it
- Too much cash tied up in the system

SOLUTION – On site TOC Implementation program

- Installed “Make to Availability” Production Scheduling and Replenishment Solution
- Installed Critical Chain Project Management in Engineering for Product Cost Reduction, Facilities Management and New Product Development
- Implemented Throughput Accounting and new Measurements
- Series of TOC Education Workshops and the Management Skills Program
- Installed DBR Production Scheduling and Buffer Management
- The solution also required a high degree of leadership and commitment that was provided by the new GM Jason Furness.



Main Plant	Before	After 12 months	Percentage Change or Comment
Finished Goods Inventory	40 days stock Aug 07	12 days stock Jun 09. Replenishing daily to meet daily market demand	48% reduction in FG inventory
Cash invested in FG inventory	Not to be disclosed	Achieved a reduction of \$20m in 18 months Releasing cash back into the system	Simultaneously increased service rates to customers leading to increased sales
Production Capacity	Maximum 1100 units per day	Maximum 1550 units per day (after 2 yrs)	30% increase in capacity
Back Orders	Average 20 Days	Average 2 – 4 days	>50% improvement to customer service
Production Flexibility	Make to 3 month forecast	Make to actual sales 2 - 3 days turnaround. Highly flexible.	Highly responsive to market opportunities
Cost Reduction	Budgeted \$2.5m in direct materials	Achieved \$4.1m	Achieved additional \$1.6m in savings
Operating Margin	5.1% in 2007	11.8% in 2009	During Global financial Crisis Double the Group Average!
Exports		50% increase in 2008	Zero investment AUD at 92c USD
Chest Freezers	Before	After 3 weeks	
Output	Between 140 – 170 Units/day - majority small capacity units	Between 220 – 250 Units /day Better mix with larger capacity units + higher margin	Greater than 30% increase in capacity
Profitability	Poor	Dramatic improvement	Profitability increased >50%
People	Low Morale	Much happier	Discretionary effort increased

Other Results

- Profit increased by \$15.969m, over two years. Up by 42.6% during the worst economic conditions since the Great Depression in 2009.
- Sales Volume went up by 6.5%, with no capital investment in capacity.
- 50% increase in exports 2008 with zero investment and \$AU 1.00 at \$US 92 cents
- Brought production for a product back into Australia from low cost country
- All new model projects on time, on budget and on quality (30% less time required than previously)
- Quality continues to improve with 85% new SKU's, Exported product to China, Bank of hardy perennial problems being resolved very quickly using TOC thinking tools, Stable workforce and increasing in number as the company grows, Skills now inbound, General Manager gets a lot of thinking time to work on the business.
- Won back \$14.1m in sales for Sept 09 qtr yielding \$2m extra in cash for a \$30,000 investment
- Warranty call rate down by 50% to 4.75% on 2 years ago. The lowest it has ever been. Electrolux are setting records in this area and continues to improve with new SKU's on 85% rating (first trial builds).
- Hardy perennial problems being solved systematically
- Workforce is stable (and happy by and large)
- Numbers employed are increasing because we need more people. Skills are now transferred into the company. People are approaching the company to work here. 18 months prior we struggled to attract people.
- Regarded very highly within the region as an employer of choice (see local press feature article). 2007 receiving poor media reports, 2009 Electrolux success being publicised in the region through local media.