

How a top garment manufacturer in India achieved faster ramp-up, improving productivity, revenues and profitability.

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THE CLIENT

One of India's largest garment manufacturer and exporter, the company manufactures 3M pieces of high-quality wovens and knits per month. With several marquee clients across the US and Europe, the company clocks USD 500M in revenues. The shift in the garment market towards 'fast fashion' put the firm under pressure to work on shorter cycle times and smaller batches.

TOC SOLUTION IMPLEMENTED

The solution direction focused on reducing the cycle time to improve the firm's revenues and profitability. This necessitated reducing the WIP of styles on the floor, reducing ramp-up losses, improving peak productivity of the line, and improving resource-pooling across lines.

TOC Solutions

- Faster ramp-up: Exploiting management attention as a constraint
 - Stagger the new item setup on lines handled by the same floor in charge and add a time buffer
 - Create a dedicated Changeover Team (COT) to manage the new item setup
 - Cut the WIP of scheduled orders by half, i.e. double the lines per item
 - Lower WIP on production lines
- Exploiting the bottleneck
 - Identify the bottleneck on each line. Exploit by creating stock and manpower buffers.
 - Subordinate to the Constraint
 - Release material at the pace of bottleneck rate of production.
 - Maintenance
 - Organizing fabric

AT A GLANCE

Business Challenges

- Long ramp-up time
- Resource non-availability (Mechanics, operators, machines) affects production
- Long cycle time
- Daily fire fighting
- Constant changes in priorities
- Lack of fabric, trims during order execution
- Product complexity

Solution Elements

- Focus management attention in ramp-up
 - Less WIP of active items on the floor
 - Staggered line loading
- Improving the Flow
 - Low WIP on the lines
 - Bottleneck management process
- Full Kit

TOC Implementation Results

- Faster ramp-up
- Improvement in productivity

Implementation: Causing the Change

- Solution co-creation with the team
- Set in place new SOPs to support implementation
- Train line supervisors, floor managers, core team
- Measurement dashboards on the shop floor

IMPLEMENTATION RESULTS

Faster Ramp Up

- Budgeted efficiency achieved on Day 3 as against Day 6 (pre-TOC)
- Faster changeover resulting in 1st piece out of the line in 10 hours as against 16 hours (pre-TOC)

Improved Reliability & Customer ROI

- 8% improvement in actual efficiency against the target
- Output in first 2 hours of the shift clocked close to 90% of the Full Day Average Output
- Reduction in OT hours by ~50%
- Supervisors go home earlier