

CASE STUDY

Tires and Wheels Manufacturer Profits From Rightsizing

A Global Manufacturer Takes the Rightsizing Approach and Sees Higher Quality, Less Scrap, More On-time Deliveries and Improved Inventory Turns

Client

Global manufacturer and distributor of specialty tires and wheels.

Challenge

After several years in growth mode, a significant drop in customer demand led to excess capacity, high inventory levels and cost issues. This drop, combined with inefficient manufacturing and distribution processes, limited planning and scheduling capabilities, resulted in the “perfect storm.” Productivity was low, quality was unacceptable and inventories grew.

Solution

TBM Consulting Group was engaged to help the client work more efficiently within a reduced footprint and drive down working capital, with a specific focus on finished goods and raw materials. The TBM team also focused on redesigning production and distribution processes, including planning and scheduling processes, to optimise and reduce finished goods inventory.

Results

In just 180 days, the client generated over \$8 million in annualised savings, resulting in over 20x ROI.

The client reduced its distribution and manufacturing footprint by consolidating distribution centers from 18 to 10 but needed assistance establishing an effective workflow within a smaller footprint.

We started by establishing quantifiable goals linking operational metrics to financial performance. We quickly assessed their production and distribution footprint and evaluated their manufacturing facilities to identify the root causes of low productivity, quality problems and rework. We also analysed planning/scheduling processes to align inventories and operations with true customer demand.

Aligned Production, New Cells And New Layout

Batch processing was identified as an easy target for improving productivity. With multiple stamping operations that fed into welding and paint areas prior to assembly and shipping, inventory was piling up between every process. So we focused on reducing setup times in the stamping and welding areas, created assembly cells to combine multiple operations into a single cell, and integrated a leak test operation at shipping prior to assembly. This reduced the work-in-process inventory significantly—leading to an overall quality improvement. We also aligned production to ensure the new cells and layout would enable one-piece flow throughout the operation.

- Decreased set-up times
- Created assembly cells to combine operations
- Dramatic reduction in WIP inventory
- Overall quality improvement

- Aligned production, new cells and new layout
- One-piece flow throughout system improves productivity

Then, we improved the planning and scheduling processes. Forecast accuracy was low and not aligned with true customer demand. We developed a collaborative planning and scheduling process for key customers, and adjusted the demand and supply planning processes used to plan resources, capacities and outside supply requirements. Supply is now based on actual usage.

Forecast-Based Production Model	Collaborative Planning & Scheduling With Key Customers	Demand-Based Production
Low accuracy not aligned with true customer demand	Adjusted demand and supply planning	<ul style="list-style-type: none"> Lower inventory and scrap Higher profitability Improved quality and productivity metrics

The manufacturing facility now produces a replacement immediately when a product ships. Profitability is up with sizeable improvements in quality, scrap, on-time-delivery, labor efficiency, and inventory turns.

Results

Metrics	Before	After
Inventory	\$30 M	\$21 M
Scrap (Percent of sales)	1.35%	0.5%
Distribution Costs (Percent of Sales)	4%	1%
Productivity (Units/person/hour)	5.75	6.83



Significant results. Fast.

Our rightsizing approach gives you the agility you need to adapt quickly to changing business conditions. Whether you're already embracing a lean approach, or just thinking about it, Rapid Rightsizing will drive immediate results that include:

- Rapidly reducing working capital
- Identifying and eliminating hidden costs that consume cash
- Improving liquidity by quickly converting assets into cash

How we do it.

We send in dedicated project-based SWAT teams for short-duration projects – usually six months or less. We focus on inventory, receivables, floor space, quality, and even energy consumption to find the cash you can't see. Most important, we make sure that we leave you competitively positioned for long-term achievements while meeting short-term objectives.

What results can you expect?

In most cases, we drive millions of dollars in annualised savings in six months or less. All our work is unconditionally guaranteed.

SPEED WINS EVERY TIME

TBM specialises in operations and supply chain consulting for manufacturers and distributors. We push the pedal down in your operations to make you more agile and help you accelerate business performance 3-5x faster than your peers.

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