CUSTOMER CASE STUDY

DEMAND FORECASTING AND INVENTORY OPTIMIZATION LOWER TCO BY 12%

FERGUSON INDUSTRIAL



PROJECT OVERVIEW

CUSTOMER:
Multinational biopharmaceutical company

MARKET SECTOR:
Life Sciences

LOCATION:
New England

PRODUCT:
Integrated supply forecasting services

CHALLENGE:
Increased manufacturing ramp-up activities and expanded multi-drug production schedules created significant demand for critical spare parts supporting product changeover, posing a risk to production continuity and patient supply commitments amid pandemic-related supply chain volatility.

SOLUTION:
An integrated demand forecasting and inventory optimization approach that leveraged strategic sourcing, procurement governance, and supply chain best practices to improve pricing stability, strengthen supplier performance, and support consistent replenishment.

OUR ADVANTAGES:

- 12-15% reduction in Total Cost of Ownership (TCO)
- Mitigated 10-18% inflationary cost increases through 12-month fixed pricing agreements
- 30% reduction in inventory exposure levels
- 22% reduction in working capital costs
- 100% availability of critical chromatography column spare parts

BACKGROUND:

As manufacturing lot production increased to meet growing demand, a multinational biopharmaceutical manufacturer partnered with Ferguson to address emerging supply chain challenges affecting critical chromatography column components. The customer's traditional min-max inventory model struggled to keep pace with evolving production schedules, supply chain disruptions, and rising costs. Ferguson implemented a data-driven strategy focused on demand forecasting, inventory optimization, strategic sourcing, and supply chain resilience.

THE CHALLENGE:

Historically, column bed supports were ordered using static min-max inventory model. While this approach worked for existing manufacturing schedules, it created risk as run-rates were reduced and expanded multi-drug production capabilities increased. Because these specialized components carried long lead times and high unit costs, unpredictable demand spikes posed a significant risk. Any delay in material delivery could impact manufacturing, resulting in finished drug product delays and patient care concerns.

THE SOLUTION:

Ferguson replaced the outdated ordering model with a dynamic demand forecasting-based procurement strategy designed for a complex product changeover schedule. By establishing annual purchase orders (POs) with scheduled quarterly releases, we locked in material pricing and guaranteed reliable deliveries for the globally sourced parts, shielding the project from ongoing supply chain volatility.

THE PROCESS:

Our Ferguson on-site team partnered with the customer's engineering and manufacturing teams to analyze lot production schedules for the upcoming year. Utilizing our Automated Supply Program (ASP) software solution, we collaborated with the Original Product Manufacturer (OPM) to define service expectations and optimize release schedules, ensuring production continuity.

OUR RESULTS:

By forecasting the manufacturing parts needs and submitting scheduled-release POs, Ferguson assisted budget owners with more accurately forecasting parts costs for the upcoming year. This proactive strategy drove significant hard savings by locking in current-year material pricing and safeguarding against anticipated inflationary cost increases in the year ahead.

Furthermore, end-to-end visibility into delivery schedules enabled our on-site teams to efficiently receive, inventory, stage, and deploy materials on a just-in-time basis, minimizing clutter in classified manufacturing environments and reducing inventory loss or damage. Ultimately, Ferguson's comprehensive supply chain management approach and total cost of ownership (TCO) strategy kept the facility expansion on schedule and under budget.

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