CASE STUDY

Production Chemicals and Services

cGMP*Assurance of Supply Services

Reducing lead time, delivering >99.5% OTIF

Situation

A mid-size Contract Development Manufacturing Organization (CDMO) was confronted with the potential requirement for capital expenditures to expand their direct raw material warehouse needed to support customer portfolio growth. High volumes of safety stock inventory were necessary to address variability in critical raw material lead time and supplier On Time In Full (OTIF) performance, resulting in a sub-optimal working capital position.

Management was anxious about the ability to expand and validate a new warehouse in time to enable required inventory growth. They estimated the need for a 15,000 ft² expansion to meet business objectives. Options to reduce the need for capital expenditures were a high priority.

Solution

To better assess the customer's needs, Thermo Fisher Scientific:

 Assessed raw material inventory levels required for production, by product SKU, to evaluate supply availability based on the unique interplay between the customer's forecasted demand and the supplier's lead time.

Key observations and findings during the engagement included:

- Variable and poor OTIF from direct suppliers
- Lengthy lead time from direct suppliers, up to 85 days for some raw materials
- Excessive safety stock inventory to overcome supplier lead times
- Frequent manufacturing interruptions and campaign changes
- Frequent need to expedite shipments
- Warehouse at >95% capacity

To address the business challenges observed, Thermo Fisher proposed that the customer put critical and routine chemicals into a stocking agreement, with the material held at a local Thermo Fisher current Good Manufacturing Practices (cGMP) warehouse and leveraging the Assurance of Supply Services offered by the company. This solution included:

- Analysis and documentation of critical material lead time and OTIF performance.
- Alignment of customer's forecasted demand and material lead times entered in the customer's Enterprise Resource Planning (ERP).
- Calculation of required safety stock to be held at Thermo Fisher cGMP warehouse to ensure 1-day lead time and eliminate expedited shipping fees.
- Execution of defined safety stock agreement between Thermo Fisher and the customer.
- Thermo Fisher to order and hold safety stock for customer for Just In Time (JIT) delivery.

Results













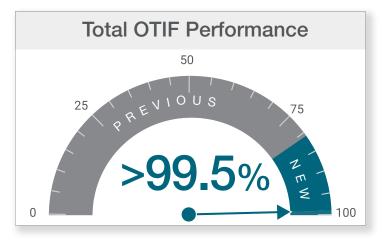
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Result

By taking advantage of the Assurance of Supplier Services offered by Thermo Fisher, including the safety stock agreement and use of the Thermo Fisher warehouse to hold inventory, the customer reduced the capital requirement for inventory and warehouse expansion, significantly reduced the need for on-site warehouse capacity (and range of requirements for cGMP, H3/H4, etc.), significantly reduced material lead times, and improved OTIF performance to >99.5%. Secondary benefits included reduction in safety stock storage resulting in warehouse space utilization and Full Time Equivalent (FTE) time savings for material handling. Overall, the customer's human and financial resources could now be more effectively dedicated towards managing the increasing portfolio growth.

As a result, the customer experienced:

- \$2.5M savings in one-time capital expenses due to cost avoidance for new warehouse expansion
- >99.5% OTIF resulting in 17% improvement
- \$359K annual savings in warehouse operating expenses to support material storage and handling
- \$120K annual savings in inventory carrying costs
- \$120K annual savings due to elimination of expedite fees







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Find out more at: thermofisher.com/assurancesupply

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