AUDERE PARTNERS

CHEMICALS

Global Specialty & Intermediate Chemical Company **Upgraded Supply Chain, Saving $16.8M**

3.6:1
Return on Investment

CHALLENGE

Upgrades in unit cost & operating practices

A global, family-owned speciality and intermediate chemical manufacturer, which has served a broad range of industries for over 88 years, recognized that the current North American supply chain needed significant upgrades in unit cost and operating practices. The first target for improvement was their, flagship 400-person plant site in North America

OUR FINDINGS

Identified **7 items for improvement**

- Commercial and Supply Chain teams did not have clear communication lines on key upcoming demand and supply issues, which led to asset underutilization and missed customer expectations. S&OP was poor
- The manufacturing organizational design lacked a clear connection to business strategy and fostered silos, resulting in inefficiencies, inconsistent roles, and accountability. The overall structure was “tall” with excess supervisory layers and narrow spans of control, clouding lines of authority
- The flagship site lacked both a standardized meeting cadence and balanced scorecards for every level, slowing reaction to deteriorating performance.
- Production lines did not have a comprehensive Production Loss Accounting System that accounted for asset availability 24/7
- Shop floor operator knowledge and expertise was under leveraged, thus allowing waste and bottlenecks
- Utilization of maintenance resources was very low due to an ineffective Work Management System (WMS), poor supervisory skills and unplanned delays. Maintenance wrench time was 27% vs. 60% world-class.
- Maintenance backlog averaged 68 weeks given current resources

SECTOR
Specialty Chemicals

REFERENCE
23-CP

IMPLEMENTATION

We focused on 12 areas of impact **to upgrade the Supply Chain**

- Implemented a comprehensive S&OP system via four monthly control modules in the areas of (1) Supply, (2) Demand, (3) Financial Integration and (4) Executive Signoff - to align customer expectations with our client's financial goals and current manufacturing & logistical capacity
- Established a standardized cadence of meetings and visual management dashboards to optimize process constraints across the key departments: Operations, Quality, Maintenance & Reliability, Engineering and EHS
- Eliminated manufacturing silo's and standardized layers and positions
- Arranged supervisory "footprint" in clusters for the efficiency of asset oversight
- Designed roles and responsibilities with clear accountabilities and KPI criteria to stabilize performance
- Created a prioritization matrix on the hourly contribution margin of each production line so that each support function could prioritize its work accordingly
- Conducted Kaizen events in the most profitable production lines and engaged operators, supervisors, engineers, R&D, quality and maintenance to agree on short-term improvements to increase capacity
- Established expectations for shop floor and engineering resources to manage hourly and daily performance issues collected through a new Production Loss Accounting System
- Implemented Work Order Prioritization rules for Emergency, Urgent and Anytime Work Orders
- Developed and executed a backlog reduction plan based on ROI priority for each manufacturing line
- Designed and installed a Contractor Management Process, including a planning process for contractor work and integration into Maintenance/Production

> *It is evident how much collaboration has been sparked at our flagship facility through this improvement effort – we could not have done it without the constant push from Audere to keep us focused.*
>
> *– Chief Operating Officer*

> *We could not have achieved this level of improvement on our own... Audere assembled critical mass and drove our focus to achieve success even in a pandemic."*
>
> *– VP North America Plant Operations*

RESULTS

All delivered at a 3.6:1 client ROI

Annualized savings	**$16.8M**
Reduction in total salary/ benefit expense, and 16% in total FTE reduction	**13%**
Improvement in the personal care active ingredient manufacturing	**20%**
Improvement in household and industrial cleaning production line	**28%**
Sustainable production improvements in the six months after project closure	**15%**
Improvement of PM Comple- tion rate (from 15% to 80%)	**433%**
Reactive work reduced	**20%**
Schedule Attainment increased from 45%	**72%**
Improvement in Wrench Time from 27% to 43%	**53%**
Reduction of Backlog (from 68 to 35 weeks)	**67%**
Reduction in sample Turnaround Time (TAT) (from 2.02 hours to 1 hour)	**50%**
Increased number of tests handled	**19%**
Reduction in late samples (from 1/day to 0)	**100%**
Reduction in Quality Overtime expenditures	**10%**