

CHEMICAL PROCESSES



De-bottlenecking Product and People Processes to Boost Volume at a Coatings & Pigments Manufacturer

Situation

A manufacturer in the coatings and pigments industry needed to increase volume to off-set high fixed costs and improve profits. They had been in firefighting mode for the prior 6 months, missing volume targets and not fully satisfying customers. Demand was strong (and increasing) while inventory levels were down. Volume levels were also negatively impacted by a long product cycle time, most of which was spent as WIP.

Due to a lack of a mature S&OP process, there was a disconnect between the planning and customer demand which led to a large backlog of orders. With equipment underutilized but also able to be used to produce many different products, the site was trying to balance customer priorities while minimizing changeovers.

Additionally, labor continued to be a challenge with low headcount and strong competitors in the local labor market impacting hiring. Turnover was high, and compensation incentives & training initiatives were unsuccessful.

ARGO-EFESO's Actions

ARGO-EFESO went to work evaluating the production and S&OP processes. A capacity analysis was performed of the process to understand production bottlenecks. Additionally, time studies were completed to evaluate value-added and non-value-added activities.

The first task was de-bottlenecking the process which was approached with a three-prong strategy.

1. Implement a Command Center for short interval control of production, downtime and hiring targets.
2. Develop a Production Loss Accounting register and implement in the two production departments to understand production short stops, misses and inefficiencies and drive actions to prevent recurrence.
3. Analyze batch data information to curate the ideal "Golden Batch" to reduce cycle times and free up equipment capacity.



RESULTS AT A
GLANCE

+8%
Process Area 1
Capacity

+6%
Process Area 2
Capacity

ARGO-EFESO's Actions

With losses clearly identified and a target time for batches defined, the team could drive to a unified goal.

The next task was to define and eliminate non-value-added work that was being done. Argo completed cycle time studies in the facility, following people and products. This would help define where WIP was being held up and ensure that the limited headcount employed were being fully utilized.

The ARGO-EFESO team followed the flow of people and products within the facility to understand and optimize all processes. This helped to effectively define actual required headcount (to compare to what the site stated was needed), manage WIP and reduce working capital.

Lastly, the team worked with the site planner to define and implement a clear S&OP process to close the gap on customer demand, lockdown the production schedule and chip away at the order backlog.

Results

- With focus on process flow improvements, equipment uptime and less emphasis on labor, capacity improvements were uncovered in both process areas.
- The annual capacity improvement in process areas were 8%; the other was 6%.



ARGO-EFESO is an operations improvement consulting firm that breaks through the traditional barriers of the consultant-client relationship. We are hands-on consultants who deliver real results and no excuses.