SupplyVelocity®

314.406.4962 | supplyvelocity.com
PO Box 665, Chesterfield, MO, 63006-0665

CASE STUDY

Lean System Design

Hardin

PROBLEM / CHALLENGE

A growing generator packaging company had an 18-month backlog and struggled to consistently and accurately meet customer demand due to increasing project complexity, supply chain disruptions, customer delays, and operational challenges.

LEAN APPROACH

We followed the Lean System Design framework to support greater operational efficiency:

- Plan – To balance sales and capacity
- Source – In time for production needs
- Make – Eliminate non-value-added work
- Store – Design working-ahead strategically
- Deliver – Clear customer communication
- Return – Successful recovery from disruptions

IMPLEMENTATION OVERVIEW:

- **Developed a capacity tool using pricing output data and available labor hours by department.**
- **Improved the accuracy and flexibility of the pricing tool to match sales needs.**
- **Facilitated a monthly S&OP Lite process to facilitate matching the sales strategy to the available production capacity.**
- **Identified common project disruptions and worked with the team to develop identification and contingency strategies especially related to procurement, engineering design, customer supplied parts, and customer driven changes.**
- **Used the capacity tool to identify opportunities for increased throughput and create more stable production needs through re-sequencing and outsourcing.**
- **Supported the development of SOPs for project kickoff, release, and production.**

IMPROVED SCHEDULING AND PLANS

- Scheduling process includes weekly input from Engineering, Production, Procurement, and Project Managers to ensure plan reflects full complexity and timeline needs of each job.
- Monthly adjustments as customer needs change and sales team closes additional business to ensure predictable and controlled revenue growth including sales identifying opportunities to fill in demand in non-bottleneck departments.

DIFFICULTIES ENCOUNTERED

- **Custom manufacturing industry means each job is unique and often brings significant complexity.**
- **Lead times both for customer supplied components and job-specific parts may be long and may experience delays.**
- **End customers are multiple levels removed, often leading to late-arriving requirements and changes.**
- **Each project is both physically large and takes weeks of production time, leading to high inventory and labor costs with limited visibility to efficiency issues.**

OPERATIONAL IMPROVEMENTS

- Create consistent flow by balancing complexity and variety of in-progress jobs.
- Expanded capacity of bottleneck departments in strategic ways, enabling strong growth, but without sacrificing margin.
- Weekly triage of operational issues for process improvement opportunities.

RESULTS

- **Release-to-delivery time cut in half (~9 months from release to shipment instead of 18+ months)**
- **Production efficiency increased 21%**
- **Resilient Lean System leading to greater trust from customers.**

Reference: Becki Salmon, CEO
bsalmon@hardinindustries.com