



## Supplier Performance Improvement

### Production System Improvement

#### Project Overview

A large steel castings supplier for a major manufacturing company was challenged with a history of lagging, poor shipping performance metrics, and Parts Per Million metrics. These challenges were amplified by new employees who possessed little tenure and no Standard Work. The supplier was manufacturing a wide range of steel castings for a major manufacturing company and their assembly plants worldwide. Future demand was projecting that the supplier needed to ship approximately 1,500 tons per month, to upwards of 3,500 tons per month.

#### Business Objectives

CGN was tasked with creating Standard Work for the supplier's Non Standard Value Stream Transformation engagement. CGN used Supplier Collaboration expertise to restart and strengthen the relationship between the large industrial manufacturer and the supplier. In order to do so, CGN first needed to understand the capacity at the supplier facilities and then determine the constraints based on current and future demand. From here, CGN could determine and validate standard times for product families for a plant-wide incentive plan.

#### Business Challenges

- Identify resources to train supplier in lean tools
- Gather data to create visibility for supplier at a process level
- Develop a culture of root cause identification and problem solving
- Communications and data exchange from supplier and manufacturer
- Production System and workshop deployment was not optimal
- New technology process introduction
- Scheduling and lack of communication between shared resources & facilities

#### CGN Global's Approach

CGN engaged the supplier leadership and workforce to build a positive working relationship in order to create a good foundation for building trust and improving collaboration. CGN determined capacity constraints based on a current state VSM and predicted future demand. CGN then conducted time studies for all product families in order to help the supplier implement the plant-wide incentive plan and create the needed structure of continuous improvement processes. CGN applied the Production Systems Improvement methodology to identify resources for training the supplier workforce in lean tools for deployment and sustainability. CGN gathered the necessary data which created visibility for the supplier at a process level, and boosted a culture among the supplier that supported root cause identification and problem solving in their daily routine.

In order to optimize Production System deployment, CGN conducted workshops and tool implementation sessions. CGN recommended participation in monthly sales and operations planning (S&OP) calls, and designated Supply Chain Manager roles and responsibilities to solve scheduling and collaborative issues between shared resources & facilities.

#### Business Results

- Supplier was able to understand capacity and respond faster to customer demand
- Trained over 24 employees in Quick Change Over Simulations
- Designed, launched and implemented After Action Review tool
- Designed, implemented and trained employees in the use of lean tools, Hour by Hour boards, First In First Out to assist in scheduling, flow, workplace organization, and visual management
- Process Mapping of all internal/external manufacturing systems
- 93% reduction of Past Due pieces
- Improved shipping performance from 4% to 98% in less than 6 months
- Accelerated the deployment of employee incentive plan 6 months ahead of schedule

#### Our Expertise

CGN Global Production Systems Improvement service utilizes Lean Manufacturing methods to eliminate waste. Waste shows itself through employee time spent on lengthy processes, excess material used, excessive scrap/rework, wasted inventory and in nearly all areas of the production process. Waste within a Production Systems has a ripple effect throughout the process. By minimizing excess resources, cost of production and throughput is reduced while quality is increased, ultimately creating improved customer value. These elements create a sustainable competitive advantage that rings throughout the organization.

As CGN's bread-and-butter, our 20+ years experience in Production Systems Improvement has yielded the following high-level steps to creating a truly efficient Production System:

1. **Define Process Constraints and Bottlenecks**
2. **Define Value Add/Non-Value Add Processes**
3. **Document the Current State and the Desired Future State**
4. **Implement and Validate the Future State**

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