



Production & Operations Improvement

Project Overview

A multi-billion dollar client needed assistance achieving its 2015 build plan for a building construction product line that called for a 200% daily production increase. To achieve this, the client and CGN Global launched a Zone Offense, bringing critical functions together to jointly identify root causes, develop robust solutions, execute and eliminate constraints under strong governance and collaboration. The emphasis started on quick fixes and data collection and accuracy. Once initial stability was achieved, focus shifted to more extensive, longer-term projects aimed at sustainable process and performance improvement with high velocity implementation and measurable results.

Business Objectives

The overarching objective was to meet the 2015 build plan requirements, ramping up excavator production from an actual 20 per day average to a 60 per day average. To complete this task CGN Global needed to reduce cycle time, improve quality, increase inventory turns, and manage warehouse utilization and mining machines awaiting rework and repair.

Unique Challenges

- The facility was still in start-up mode, needing major improvements to reach full production capacity
- A substantial number of POU hits caused significant downtime
- Employee turnover resulted in personnel being appointed to positions with very little understanding and the necessity for extensive training
- Reducing warehouse utilization while facility production increased 40%

CGN's Approach

The challenges CGN faced, resulted in the following approach:

- Running a Zone Offense, composed of assembly, fabrications, quality, Plan for Every Part, supply chain, and logistics functions
- Addressing the top defect issues - cover alignment, decal defects, and missing torque/torque marks

- Focusing efforts on more than 30 supply chain projects; with an emphasis on available material, buffer sizing, package and quantity alignment, lead time reduction, Kit vs. Kanban design, re-pack reduction, and line side capacity

Results & Conclusions

- A 160% increase in average production from January to September
- Product defects dropped by 49% from May to September
- Client achieved its defect reduction target by July
- Overall inventory savings of 20% - 33%
- Component inventory turns increased by 40% from April to September
- Warehouse profiles above 85% target utilization decreased from 5 in April to 1 in September, despite a 40% increase in production

Our Expertise

The Problem Solving methodology we use at CGN is a proven approach toward improving operational performance. Our 20+ years of Problem Solving experience enables us to quickly and accurately identify key problems, detect the causes at the most foundational level, and provide/implement the solution to improve overall organizational effectiveness.

CGN Global's Problem Solving Service is based upon 4 fundamental constructs that must fit within any problem solving process. These constructs have been defined and forged through years of practical experience and thought leadership:

- Problem Definition
- Fault Isolation
- Root Cause Analysis
- Corrective Action and Error Proofing

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