



PERFORMANCE MANAGEMENT ASSOCIATES, INC.

*Reconnecting The Disconnect Between Strategy,
Operations & Finance*

Benefits:

100% improvement in on-time delivery performance

Effective 50% reduction in production lead times

Increased capacity with little investment

Reduced work in process inventory by 40%

Organized workplace

Enhanced decision-making

Unified management focus

Restored customer confidence

Improved profits and cash flow

Case Study



Jamestown Metal Products

Synchronous Flow Implementation

Client Profile:

Jamestown Metal Products, located in Jamestown, New York, is a manufacturer of high quality steel casework and fume hoods found in medical, educational, governmental and industrial applications world-wide. Their products have been installed in many of the most prestigious universities in the U.S. and abroad, in leading-edge research companies, and in government facilities from national research consortiums, to the White House kitchen.

The company has been in existence since 1940, employs 120 people in a union environment; its manufacturing operations are conducted in a facility consisting of approximately 175,000 square feet with 2 shifts. The company is privately held and has operated under its current ownership for 1 ½ years.

Situation:

Jamestown Metal Products recognized the need to dramatically improve their operations to support their strategic business plan and to differentiate themselves from the competition. While the industry is experiencing increased importing pressure from China, the company's two main competitors are large public companies with plenty of resources. Jamestown Metal Products manufacturing lead times were approximately 4 weeks; on-time delivery was only 45%; the shop floor was overflowing with work in process inventory; cash flow was tight; sales had previously fallen due to lack of customer confidence; and the company was under heavy pressure from the current ownership to financially improve the company in all aspects.



"The results of the synchronous flow implementation were customer orientated and significant. We improved our on-time delivery performance, reduced production lead time and corrected quality problems experienced in the field. The transition process challenged the way we think about our business and allowed us to see it from a cause and effect perspective. The main result however, is that it provided a central focus for our staff to positively change the way we operate, and to better position the company for the challenges we face in our market and strategic plan."

Jeff Christie, President

Case Study



Jamestown Metal Products

Jamestown Metal Products engaged Performance Management Associates, Inc. to boost its operations as part of a multi tier strategy to distinguish themselves with operational excellence and a customized product design that could be leveraged in the market.

Solution:

The management team of Jamestown Metal Products and the staff of Performance Management Associates, Inc. embarked on a holistic view to identify key points of focus that could leverage into global operational and financial performance. The objective was to synchronize the operations of Jamestown Metal Products, and align them with customer and or market demands. The outcome of this review identified three major initiatives that were implemented either in sequence or as parallel actions by team members consisting of Jamestown Metal Products employees and Performance Management Associates staff.

The initiatives were as follows:

- Improving manufacturing flow
- Creating a manufacturing cell for key products
- Assuring inventory availability through replenishment systems & procurement focus



"We now utilize our capacity to better support our sales efforts. One of the most noticeable differences on the shop floor is the rate that our products flow through the plant. When problems do arise, they are easily identified and dealt with in a timely fashion. Managing the flow has transitioned from not understanding the cause of our "traffic jams" due to the piles of work in process inventory, to that of the "traffic cop" who directs traffic in a real time manner. "

Ralph Wallace, Operations Manager

Case Study



Jamestown Metal Products

Improving Manufacturing Flow

Actions

It was determined that there was a manufacturing constraint in the company's Press Room, brake operation. A team was created to apply Theory of Constraints and Lean Enterprise initiatives to choke the release of materials to the floor, create FIFO lanes to the brakes, create a priority system according to due date performance, train and coach managers/supervisors for proper production flow decision-making, synchronize the parts through the press room to align with final assembly, and incorporate visual controls for improved shop floor communication.

Operational Results

Capacity was substantially increased with little additional expense. Products that were taking 2 ½ weeks through the press room were now taking 2-3 days. On-time delivery went from approximately 45% to 90% (100% improvement). Production lead time was effectively reduced from 6 weeks to 3 weeks (50% improvement) when considering the anticipated lead time on the new product mix after the start of the engagement. Work in process inventory has been reduced by 40%, decision-making on the floor improved and the results of decisions were immediately seen. Overtime was significantly reduced in assembly and the chaos to meet customer orders started to diminish.

Global Results



Jamestown Metal Products removed the manufacturing uncertainty of performing to customer demands and positioned the company to take on more business as called for in the strategic business plan.

The company was able to successfully take on a very large job that was very difficult to manufacture and consumed a large amount of manufacturing resources. The company would not have been able to take on this type of job without introducing a high amount of uncertainty in manufacturing and a high level of chaos in their operation; ultimately affecting customer satisfaction and performance. This job has been instrumental in the financial health of Jamestown Metal Products.

"We keep a high focus on cash flow, and have seen improvements in our working capital as a result of the large reductions in work in process inventory and raw materials. The over producing of inventory is no longer the norm and it has reduced the amount of scrap, lost parts and obsolescence."

Joanne Cowan, Vice President of Finance

Case Study



Jamestown Metal Products

Creating a Manufacturing Cell for Key Products

Actions

By applying a holistic view, it was determined that a manufacturing cell could relieve some of the work load in the Press Room. The selected products for the manufacturing cell either used a large amount of press room capacity and or were of high importance to select customers. A team was formed to create the manufacturing cell along with the operating rules to guide its use. Considerations included the cell layout, required machines and tooling, direction of the product flow and staffing, workplace organization (5S), visual controls, pull scheduling techniques and specific work release rules.

Operational Results

The manufacturing cell quickly reduced the backlog of a specific customer's orders whose due dates were previously difficult to meet. The cell was able to take on additional products, such as Fume Hoods and manufactured parts requiring rework, to help further alleviate the bottlenecks in the press room

Global Results

The company was able to regain one of its largest and most profitable customers with the performance of the new manufacturing cell.



“Due to our recent on-time delivery performance, we have started to regain the confidence of our customer base and dealer network . The renewed confidence has started to translate into more sales, and we expect this trend to continue giving us an advantage in a competitive market.”

Connie Bates, Customer Service Manager

Case Study



Jamestown Metal Products

Assuring Inventory Availability Through Replenishment Systems & Procurement Focus

Actions

A team was established to make sure that the right inventory was in the right place, at the right time. The objective was to insure that production was not delayed or disrupted due to unavailability of inventory, while at the same time insuring raw material and work in process inventory were not in excess. The action items were to establish kanbans, create controlled inventory storage locations, initiate workplace organization (5S), implement replenishment systems for consumable supplies and purchased parts, use visual identification for received parts, initiate more frequent purchases of materials in smaller quantities, establish better vendor communications, and not waste order lead time opportunities.

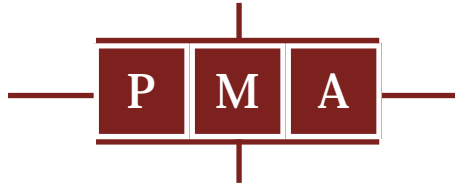
Operational Results

The frequency of unavailable parts was drastically reduced, which directly reduced the number of interruptions that extended production lead time. The systems that were established provided accountability and control on the shop floor for the manufactured and purchased parts; and raw material and work in process inventories substantially decreased.

Global Results

The company made better use of its resources to serve the customer, and increased capacity by not wasting order lead time and reducing the number manufacturing interruptions. The reduced inventory and better procurement techniques made better use of working capital and increased cash flow.

Contact Us



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