



# Process Raised by the Power of People

## FAST FACTS ABOUT P<sup>2</sup>

### Fulfilling a Market Need

From a sluggish economy to increased global competition to customer expectations of faster, cheaper product with greater service, the packaging market has seen numerous market conditions over the past decade. Today, companies may make a better widget, but they can't charge more for it. In the end, the industry has been searching for ways to keep the costs of manufacturing down while keeping their customers happy.

This is where P<sup>2</sup> (read P- squared) fits into the picture - helping manufacturing companies implement lean manufacturing strategies. Packaging companies are re-thinking traditional definitions of productivity. It's not enough to simply produce more product - all elements from machine availability to performance and quality must be in sync in order to achieve the greatest return on investment (ROI). They need to get more cost effective quickly or their customers will vanish. With many years in the packaging industry in the area of process improvement, Dr. Scott Ellis and Leslie Pickering recognized the need to create and implement processes that manufacturing companies could own and execute. Through P<sup>2</sup>'s unique approach, clients are able to employ methods that maximize availability, performance and quality of manufacturing processes that keep costs low and yield the greatest return on investment. P<sup>2</sup> identifies bottlenecks in the manufacturing process and implements the right methods to lower the overall cost of manufacturing.

### Differing from the Pack

P<sup>2</sup> is not about clipboards and stopwatches - they analyze, teach and implement manufacturing processes that lower the cost of manufacturing. They measure the process and speak with data to identify and implement the most appropriate lean tool. As facilitators, P<sup>2</sup> draws out the best thinking of the people in the company. By working with the people that manage the company's processes, they can identify and address bottlenecks, whether that problem is generated by the behavior of people, the culture in which they work, or the way they use their machines. The result is a customized, robust and flexible system allowing employees and management to obtain lasting results.

### Assembling a Veteran Team

The success of any team hinges on the quality and depth of leadership. The P<sup>2</sup> management team is led by Dr. Ellis and Mr. Pickering, who together bring a wealth of unique industry experience to the company. Combining skills in organizational development and engineering, they are equipped to deal with a broad spectrum of challenges. Together, they have more than 40 years experience working with some of the most widely recognized names in the packaging industry. They provide thoughtful and wise leadership for success with their clients and they share the vision of creating success and increasing productivity by striking a balance between people and process.

### Focus on Today and Tomorrow

Lasting results are the goal of P<sup>2</sup>. The company strives to create customized programs that become a part of the company culture today and tomorrow. Through P<sup>2</sup>'s customized Compass and Mission Aligned People and Process (MAPP) analysis, clients learn to identify the bottlenecks that reduce productivity today.

## How it works

**P<sup>2</sup>** provides analysis, training and implementation of lean manufacturing strategies to batch manufacturing including glass, plastic and paper/packaging. Using time-tested tools, **P<sup>2</sup>**'s Compass analysis directs companies to the area of most profitable improvement and their MAPP analysis ensures that the improvements will bring real and lasting change to the corporate culture.

In order to help manufacturers see the process, a measurement is taken to determine where improvement is needed. Measurement serves two primary goals: it allows the people in the process to see how they are progressing and it allows companies to measure their processes against benchmarks within similar businesses.

A challenge of conventional measurement is that the types of work being processed can differ in areas such as run length, complexity and mix. This makes accurate comparisons of similar process difficult and dissimilar processes impossible. To prevent these issues, **P<sup>2</sup>** uses several tools for process measurement. The primary tool to measure productivity is Overall Equipment Effectiveness (OEE). Three elements are measured to determine OEE - Availability, Performance and Quality.

### Availability

Availability is the time that the process is staffed and available to produce product.

### Performance

Performance is the ratio of average speed versus the maximum speed of the process. It is important to use the maximum speed to allow you to measure dissimilar processes.

### Quality

Quality is the measurement of good product produced in relation to the total amount produced.

**OEE** shows clients the process in a manner that points them to the area of most profitable improvement. This allows the company to allocate the most appropriate resource for the most improvement and allows them to measure dissimilar processes fairly.

## 7S and its role in productivity

**P<sup>2</sup>** has helped companies increase their OEE numbers above the industry standard by as much as 144%. **P<sup>2</sup>**'s hands-on implementation has helped manufacturers to take the best practices they have learned and apply them on the spot.

**P<sup>2</sup>** employs the latest concepts on workplace organization, the 7S System to help companies see their workplace, identify waste and then organize them for success. With this foundation in place, **P<sup>2</sup>** bases its actions on the premise that in order to have increases in machine availability, performance and quality (all measured by the OEE number) the workplace must be organized. **P<sup>2</sup>** brings 7S to the forefront and uses it as a basis for change.

## Visual Workplace

**P<sup>2</sup>**'s Compass analysis locates the tools that provide effective and profitable change. The development of a Visual Workplace is the foundation for process improvement. OEE is then utilized as a balanced measurement of a plant's processes. **P<sup>2</sup>** uses OEE to isolate which of the six big losses of productivity (breakdowns, startup losses, set-up and adjustment, idling and minor losses, speed losses, and quality defects and rework) should be the focus of improvement efforts. Guesswork is eliminated and production numbers are used to guide and measure the improvement. Based on direction provided by the

Compass analysis, the appropriate interventions are chosen for the identified loss.

### **Waste is your only competition**

Waste is normally associated with a product, but there are other classifications of waste that P<sup>2</sup> helps to eliminate including: excess production, waiting (time), conveyance, processing, inventory, motion, processing failures, administration, abuse of technology, creativity and space.

P<sup>2</sup> helps eliminate waste by eliminating bottlenecks in manufacturing processes and creating or re-aligning the processes for maximum efficiency. P<sup>2</sup>'s Compass analysis directs companies to the area of most profitable improvement and their MAPP analysis ensures that the improvements will bring real and lasting change to the corporate culture. Customized plans ensure that ownership of process improvements is transferred to those who run and maintain the target processes. The result is lasting change.

### **What customers are saying**

"P<sup>2</sup>'s process of building a Visual Workplace and managing the machine centers utilizing OEE numbers has brought the morale up in our plant, increased our overall productivity and delivered a showcase for our customers to visit. In the end, we wanted a program that would stay with us for the long-haul and because of P<sup>2</sup>'s methods, we were able to give employees what they needed to get the job done and increase the quality of our product. They also trained a champion [here at Bay Cities] to give the program long lasting legs. This is something you never hear about consultants doing, they always want to come back for that next billing dollar."

— **Greg Tucker, President, Bay Cities Container Corporation**

"Because the methods P<sup>2</sup> uses incorporate lasting change within the organization, everyone - from my office to line mangers and shift supervisors - have become evangelists about the process. We now have prospective customers ask us to come and talk to them about how they can make change within their organization in order to get the same results we have."

— **Barry Johnson, Mark Container**

"Working with P<sup>2</sup> is not a contrived experience. They don't build programs outside of the plant and then come back in and say, 'here try it'. I have seen them on the floor with grease up to their elbows next to two crews cleaning a machine down to the bare bones and then building it back up again. This method of leading by example gets people involved in the process and has a greater chance of becoming part of the company culture rather than a consultant that just comes in and drops off a 'how to' manual."

— **Wayne Millage - General Manager, AllPak Container**

