

PRODUCTION PREPARATION

PROCESS

Want a quantum leap in performance?

Production Preparation Process (3P) is often referred to as “design for manufacturability.” Starting with a clean development slate, 3P rapidly creates and validates potential production and process designs that require the least time, material, and capital resources. 3P typically results in products with less complexity, are easier to manufacture, and with built-in quality. 3P design processes that flow better and utilize simple right-sized equipment that better meets production needs. Organizations engaging in 3P select the best product or process design among multiple alternatives developed from lean techniques.



Manufacturers using 3P:

- improve performance of new and existing products and processes,
- design products and process right the first time,
- develop alternatives to design products and processes to meet core customer needs,
- minimize cost of product launch and life-cycle by incorporating lean thinking at the beginning of launch,
- reduce cost due to poor planning,
- report a 20% reduction in manufacturing costs,
- report a 30% - 40% reduction in capital spending,
- experience growth on an existing footprint,
- and grow within existing footprint with far less additional operating expense.

CURRICULUM

Overview

The MMTC overview introduces organization to the basic principles of 3P. Participants learn the importance of function and value analysis, using human intelligence to stop a line automatically when a defective part is detected, 7 unique alternatives, process mock-up, refinement, and early equipment management. Participants also learn how to calculate and use overall equipment effectiveness, the key metric for measuring equipment performance. This course emphasizes the importance of teamwork and integration between production personnel and the maintenance department.

3P Sessions

A 3P session uses a comprehensive set of practical and easily applied techniques to improve the effectiveness of a product launch while reducing the cost of new and existing products and processes. MMTC offers two types of on-site sessions which analyze multiple solutions and ultimately yield the most favorable results impacting safety, quality, delivery, and cost.

Manufacturers craft an actual product and process launch with integrated cost reduction strategy.

5 Session Curriculum

The 5 session curriculum targets existing and/or similar-type products. The workshop delivers a product and process with breakthrough results in capability, built-in quality, and flexibility. With 3P, the process is ready to launch at the lowest possible cost.

- Application of 7 unique alternatives
- Extensive analysis, mock-up, and refinement of the launch and process
- Standard work sequence with a plan for every part
- Fundamentals of early equipment management

8 Session Curriculum

Includes all of the material from the 5 session curriculum above plus a production function and value analysis as part of 3P placing emphasis on a new and redeveloped product. Function and value analysis uses techniques to eliminate unnecessary costs - those that do not enhance quality, use, life, appearance, or customer features.

- Eliminate design waste through product Function and Value Analysis
- Application of 7 unique alternatives
- Extensive analysis, mock-up, and refinement of the launch and process
- Standard work sequence with a plan for every part
- Fundamentals of early equipment management