



Production Preparation Process (3P)

Quantum Leaps 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 product 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 designs processes that flow better and utilize simple-right sized equipment that better meet production needs. Organizations engaging in 3P select the best product or process design among multiple alternatives developed from lean techniques.



UNIQUE ALTERNATIVES

Fact: 3P requires minimal organizational change and can yield immediate bottom-line results.

Manufacturers using 3P...

- Improve performance of new and existing products and processes
- Design products & processes 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
- Grow within existing footprint with far less additional operating expense

MMTC 3P TRAINING AND IMPLEMENTATION

4-HOUR OVERVIEW

The MMTC 4-hour overview introduces organizations to the basic principles of the 3P. Participants learn the importance of function and value analysis, autonomation, 7 unique alternatives, process mock-up, refinement, and early equipment management.

Definition: Autonomation (aka. Jidoka) has several meanings. Automation with human intelligence or stopping a line automatically when a defective part is detected.



3P WORKSHOPS

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

5-DAY WORKSHOP (PHASED OVER 2 WEEKS)

5-Day Workshop 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.

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

8-DAY WORKSHOP (PHASED OVER 3 WEEKS)

(5-Day 3P Workshop + 3 days of Function and Value Analysis)

Includes product function and value analysis as part of 3P placing emphasis on a **new and redeveloped** product. Function and Value Analysis uses specific techniques to eliminate unnecessary costs --- those that do not enhance quality, use, life, appearance or customer features.

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

For additional information, contact MMTC West at 616-771-0561 or email at mmtcwest@rightplace.org.