Ford Production System — At a Glance

The Ford Production System (FPS) was created to standardize and add stability to our existing manufacturing processes. As you familiarize yourself with this system, you will come to the conclusion that it simply asks for; zero defects and 100 percent-through put. More specifically, by utilizing policy deployment, visual management, process confirmation, and time and data management this process will deliver a more aligned and capable organization, one that will be continually improving and ultimately building the best manufacturing environments in the world. The image below is the revised Manufacturing Umbrella.

As depicted, the Ford Production System covers all of our cooperate operating systems, which have changed slightly from just a year ago (SQDCME). The new cadence is SQDCPME. The "P" has been implemented to reflect Ford's commitment to the people aspect of our business and "M" (formally morale) now covers maintenance.

The FPS Continuous Improvement Model is the foundation for all manufacturing operations. It is a ten step process that is aimed at continually improve our processes through standardization and andon recognition. The model looks to create stability to our inputs, normalize our processes, and seek change (if necessary) for our outputs. The ten FPS Continuous Improvement Model Processes are:

- Continuous Improvement Board
- Start-up Confirmation
- Results Process
- Support Process
- Time and Data Management
- Basic Administration
- Kaizen
- Standardized Work
- Star Points
Learning Process

FPS is a global manufacturing ideology for all Ford plants and the implementation process continuous here at Rawsonville. The Plant Leadership Team is committed to further developing our Work Teams and empower them to cultivate the health of our processes to ultimately reach zero defects and 100% through put. The following is a brief discussion of the ten FPS steps.

The Continuous Improvement Board is used to visually manage the review and follow-up of elevated issues of the work group. It is located in the start-up communication meeting room on the second floor of the TPS Center. Each manufacturing area is represented on the board. Problems that are not solved at the lowest levels are escalated to the Team Manager and continuous improvement (CI) cards are assigned to the appropriate support manager/team for resolution. There are two types of CI cards; yellow; solve issue in seven days and red; solve in 24 hours. CI cards are assigned a tracking number in the Web Action Matrix (WAM) and placed on the board for daily review.

Start-up Confirmation provides a time where the Team Leader makes sure that all operators are "ok" to start to build. If an operator identifies a problem, it is immediately solved, or escalated to the Supervisor. The Team Leader completes a start-up confirmation check sheet and reviews it with their Supervisor. It is imperative that first hours targets are achieved and problems are being corrected at the lowest levels. Team Managers report their areas status in the 8:30 a.m. Plant Start-up Meeting.

The Results Process and Support Process are working meetings to analyze and diagnose workstation and process results. The intention is to make problems evident and make improvements. These meetings are held from 1 p.m. to 2 p.m. daily and have a standard working cadence; Monday/safety, Tuesday/quality, Wednesday/delivery, Thursday/cost, and Friday/people. The meetings are chaired by the area MPS or Supervisor and audited by Team Managers or an OCM (Operating Committee Member). The team discusses a problem and seeks resolution. Support personal are pulled as needed. The final 30 minutes of the meeting is spent on the floor ("Go See"), conversing with operators and reviewing standards.

Time and Data Management is designed to assist the plant to identify and eliminate waste through improved planning and alignment. More simply put, T&DM establishes a specific time for specific meetings to accomplish specific goals. We have eliminated non-value added meetings by establishing a standard structure to address our SQDCPME objectives.
The FPS Global Team will roll out the Basic Administration phase of the model in the 1st quarter of 2012. Basic Administration is another tool to help reduce waste by clearly defining individual roles and responsibilities, allowing time to change culture and focus on the teaching and the coaching of the standards.

As problems are escalated to the Cl board and the solution is not readily evident, they can be further escalated into a Kaizen project. This is a DMAIC problem solving tool that employs Six Sigma methodology. A team of subject matter experts is created to deep dive the issues. They collect and analyze data to systematically reduce variation and ultimately resolve the issue.

Our proactive/non-punitive approach to review standards through coaching and teaching is known as, Standardized Work. A Periodic Job Observation (PJO) and Deep Knowledge Evaluation are conducted daily between a Supervisor and an Operator (complete one a day). The focus is on standard process adherence and creating an ideal workstation, process and method for each operation. This is a three phase process; PJO/observation, deep knowledge operator review, and identification and understanding of abnormal conditions. During the last two phases of this process the Team Leader will replace the Operator, who will have an in-depth discussion with the Supervisor off line to review the job standards. Through these conversations process improvements are noted and the working relationship is enhanced.

Star Points will be discussed in further FPS planning and established to further promote work team involvement.

The FPS Learning Process is a weekly meeting where the plant discusses the FPS process. This meeting is attended by plant leadership and reviews FPS implementation, process coaching/strengthening and alignment. Best practices are discussed and implemented where applicable.
ONE Manufacturing – Best in the World

Ford Production System

Best In The World
Policy Deployment • Visual Management • Process Confirmation • T&DM
Aligned & Capable Organization

Standardized Work
Manufacturing Engineering, Ford Land and Information Technology
Continuous Improvement
Governance

Safety • Quality • Delivery • Cost • People • Maintenance • Environment

SOS • QOS • DOS • COS • POS • MOS • EOS
Zero Fatality & Serious Injury • Zero MIS & CPU • Lean Material Flow & OTD • World Class Efficiency • Skilled & Motivated People • 100% Utilization • Green Enterprise

Continuous Improvement

Governance