Continuous Flow

Overview of Module

When we talk about continuous flow we’re really describing a process that produces one piece at a time while passing each piece to the next process without delay. This is most commonly referred to as one piece flow - or make one, move one.

The opposite of continuous flow is mass or batch and queue production where material is pushed from one process to another no matter if the material is needed downstream or not.

In order to make value flow one piece at a time we must:

1. Become the “thing” in question.
2. Break through functional boundaries.
3. Keep the “thing” moving.

Once an organization commits to one piece flow they typically arrange their production areas using a concept called cellular design. This is in direct contrast with the way mass producers arrange their production areas where we typically find process “islands” throughout the factory.

Key Terms

- **Continuous Flow:** A production method whereby parts are produced one piece at a time while passing each piece to the next process without delay. This is most commonly referred to as “one piece flow” or “make one, move one.”
- **Batch Flow:** Sometimes referred to batch and queue or mass production. Batch flow occurs when individual processes are isolated from one another while only focused on their task and performance. As such, in many cases, batch producers “push” inventory from one station to the next no matter if the downstream process is ready for the work or not. The waste of overproduction is very common in batch flow processes.
- **Fake Flow:** Here we see people attempting to improve flow by lining up operators in a straight line which is better than being on process islands. Unfortunately, even though they are lined up the workers still produce to their own schedule while pushing inventory down the line.
- **Cellular Layout:** The production layout commonly used by companies working in a continuous flow manner. In many cases machines are located next to each in a U shaped manner while material flows though the line in a counter-clockwise manner (since most people are right handed).