



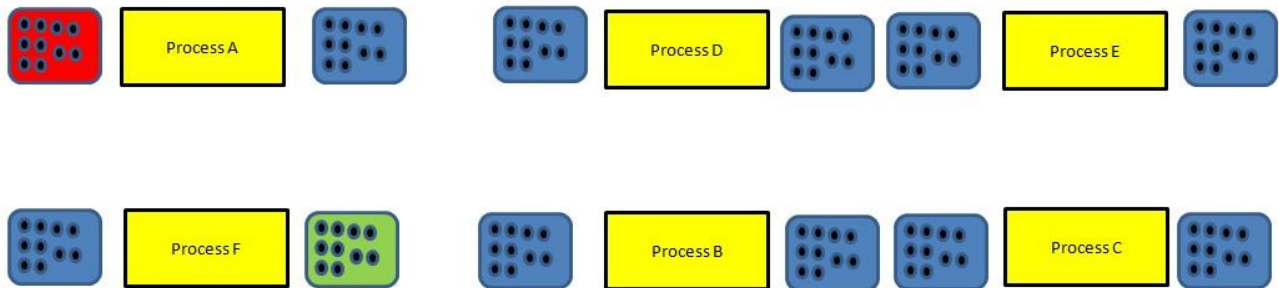
## What is One Piece Flow?

What is one piece flow? One Piece Flow is the Lean concept that shifts batch thinking to flow thinking. The concept is used to reduce production lead time to as near the total time the product is actually worked on as possible. The One Piece Flow concept is often applied as part of cellular layout improvements, which were revealed after Value Stream Mapping was undertaken.

### An Example:

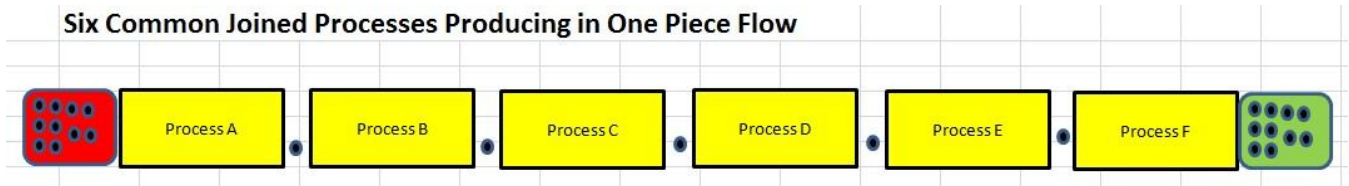
Batches

#### Six Common Disjoint Processes Producing in Batches of 10



### Example B One Piece Flow

#### Six Common Joined Processes Producing in One Piece Flow



In both examples each process takes 1 minute to complete 1 part.

In example A total time, without the buffer stock and handling included, for 10 items to be created from start to finish is 60 minutes. While in example B total time for ten items to be produced from the start is 15 minutes. If example A and B were both dry lines, the first item would take 51 minutes in A to be finished and 6 minutes in B. Additionally you will notice how One Piece Flow also reduces work in progress inventory.

Additional added benefits of One Piece Flow is the reduction in floor space, due to better layout and decreased inventory space requirements. Reduced inventory will increase Cash Flow, while reducing insurance costs, and inventory handling costs (less damage included). It will create a more visual workplace, and make other problems easier to identify.

Once One Piece Flow is achieved you can then apply other Lean concepts such as levelling production, SMED, and TPM.