performed so to force the correct completion of an operation. Such a concept was originated by Shigeo Shingo as part of the TPS.

Shop floor layout design

Relationship Chart is a tool you may use to evaluate the layout of the shop floor. Before using it you want to first define your objectives: Is travel distance critical? How about the frequency and communication? Do your workers need to travel between different sections with very light loading? This is important - if they are going to carry equipment/product all the time then distance would be a significant factor in your evaluation effort. Mert Altinkilinc has an excellent paper titled "SIMULATION-BASED LAYOUT PLANNING OF A PRODUCTION PLANT" on the design of job floor layout. You should download and read it. HIGHLY RECOMMENDED[1].

Process manufacturing

Process manufacturing involves producing products without discrete unit, such as liquids, fibers, gasses...etc. They are usually manufactured using recipes or formulas through two steps - mixing/blending and filling/packaging. Quantity may vary according to factors such as grade and potency. In batch processing, a process product is made in a standard run or lot size, which can all be determined by vessel size, line rate, or run length. In a continuous flow environment, production needs to rely on dedicated equipment that handles product lines with slight variations. Extensive record keeping of quality and tolerance values along the process is definitely needed for strict adherence to lot tracking.

[1] The download link as of June 2007 is http://www.informs-sim.org/wsc04papers/138.pdf