
PROCESS & MANUFACTURING ENGINEERING



THE ASSEMBLY LINE



What is an Assembly Line?

- * Manufacturing process in which interchangeable parts are added to a product in a sequential manner.
- * The process is carefully planned to create a product much faster than handcrafted products.



Best Known Assembly Line

- * Moving assembly line (like in I Love Lucy clip).
- * Moving assembly line was instituted by the Ford Motor Company between 1908 and 1915.
- * The product moves to different stations. A piece of the product is installed at each station.



Benefits of Assembly Line

- * Products made faster...remember...
time = money!
- * Increased the affordability of products
- * Industries could pay their employees more



Chemical Engineering & how it relates...

- * Chemical engineers take a product and figure out how to make a lot of that one product, and ensure consistency
- * Chemist would make oil sample, chemical engineer would figure out how to make large batches of fuel available to everyone.



Chemical Engineering & how it relates...

- * Pop tarts example
- * Goldfish example



Wednesday's Activity

- * You will be divided into two cookie companies.
- * The cookie company A will have each person individually prepare a set list of cookies
- * The cookie company B will work as a team in an assembly line procedure and will all work to fill the order
- * At the end of the period, we will see if the assembly line produced more cookies.
- * REMEMBER - the assembly line team will have to work as a team and divide the tasks evenly and reasonably.
- * Everyone must work together and stay on task for this activity to work.
- * Yes, you will get to enjoy your cookies!