MANUFACTURING FACTS

1. The manufacturing field consists of men and women of various skilled backgrounds coming together to produce a product.

2. Manufacturing enables our everyday lives.

3. Think about the car or bus that brought you to school it was manufactured.

4. Manufactured products include bikes, kitchen appliances, airplanes, TVs, gaming systems, cell phones, toys, furniture, clothing, computers, construction equipment, food processing machines and many more.

5. Manufacturing drives our economy. Every dollar spent creates money for the US economy.

6. Manufacturing supports more than 18.5 million US jobs.

7. Manufacturing offers career opportunities for everyone.
   welders, human resources, engineers, operation managers, designers, sales & marketing professionals, **assemblers**, electricians, machinists, researchers, fabricators, computer programmers, and many more

8. Manufacturing pays well, 60 thousand dollars is the annual salary for entry level manufacturing engineers. 77K is the annual salary of a manufacturing worker here in the United States.

ASSEMBLY LINE FACTS

First, we need to learn something about **the process of ASSEMBLY.**

1. The origins of the assembly line can be traced back to miners during medieval times who used bucket elevators.

2. The shipbuilders of the fourteenth century also used the process - a moving line of parts.

3. By the 1900's the assembly line was used by many industries (shipbuilding, canning, milling, meat-packing, etc.), but was most successful in the automobile industry.

4. Henry Ford created the Model T automobile in 1908.

5. The car was simple so owners could fix it themselves.

6. It was also sturdy and cheap.

7. Soon, the Ford Motor Company started receiving so many orders for Model T's that they couldn't build them quickly enough.

8. To speed up production, Ford changed the way the Model T was built.

9. Instead of several groups of workers each building a complete car from the ground up, workers stayed in one spot and added parts to cars as they moved past them.

10. Parts were delivered to the employees by conveyor belts.

11. Ford even managed to time the delivery of a part so that it would get to a worker only when it was needed.

12. By 1913, Ford had a complete assembly line functioning.

13. This method of production was rapidly adopted by many industries when they discovered that mass production on assembly lines sped up manufacturing time and lowered costs.

14. **Optional:** Ford used an approach for his assembly line that we call just-in-time (JIT) manufacturing today. This approach lets manufacturers purchase and receive components just before they're needed on the assembly line.

    As a consequence, it relieves manufacturers of the cost and burden of housing and managing idle parts. The basic elements of JIT were developed by Toyota in the 1950's and were well-established in many Japanese factories by the early 1970's.

    JIT began to be adopted in the U.S. in the 1980's (General Electric was an early adopter), and is now widely accepted and used.