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# Manufacturing Equipment



Summarize each video in the space provided.

1:40



## History of Manufacturing Technology

<https://youtu.be/9oq5zKm-Cs>

2:56



## Factory of the Future

<https://youtu.be/QmDR29YNKqc>

5:57



## Nissan Factory Life: How Cars are Built

<https://youtu.be/Ewtjgpsd2Nc>

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# Manufacturing Equipment



**Summarize your understanding of each paragraph.**

Equipment used in the manufacturing process has significantly changed over the years and decades. Technology improvements have increased the rate of change in manufacturing equipment.

The topic of “manufacturing equipment” is very big. This introductory topic can not realistically cover all the aspects of the full topic. Even so, its important to understand some of the concepts.

One of the benefits that good manufacturing equipment provides to companies that “make things” – is in the consistency and quality of the products they make.

Also, good manufacturing equipment can decrease the amount of time required to create (or make) a product. Car manufacturing has been using equipment to improve the care-making process.

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# Read Manufacturing Topic



1. Read the passage. (Manufacturing)
2. Underline key expressions in each sentence.
3. Re-write each word (or expression) you underlined.
4. Summarize the passage.

*Read this. Underline key words.*

Provocative Business Change™ John A. Honeycutt 2005 ©

Manufacturing is the transformation of raw materials into finished goods for sale, or intermediate processes involving the production or finishing of semi-manufactures.

Manufacturing is the value-added production of merchandise for use or sale using labor and machines, tools, chemical and biological processing, or formulation.

An original equipment manufacturer (OEM) is a company that makes a part or subsystem that is used in another company's end product.

1  
2

*Re-write words you underlined*

---



---

3

*Using a complete sentence, summarize or rephrase the passage*

4

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# Getting a Manufacturing Job

## **Tip 1: Get educated and show initiative**

The single most important thing that will improve your chances of getting a job in manufacturing is work experience. Academic study is golden and will sharpen up your knowledge in all sectors, but nothing will prepare you for working life. Nothing, that is, except work experience.

Of course, you'll hit the age-old stumbling block of '*to get experience you need experience*' however once you get your foot in the door, there's no stopping you. This will put you in good stead when looking for long-term placements after graduation.

And don't forget, showing initiative doesn't just come from work experience. There are several ways you can showcase your practical side that will stand out to employers including social clubs, sports teams, part time jobs and charity work.

## **Tip 2: Don't take a back seat – aim high!**

And don't let your diploma or degree restrict you from exploring alternative sectors that may interest you. The great thing about a manufacturing degree is that it provides you with various transferable skills that can lead you down all sorts of careers paths.

## **Tip 3: Don't be afraid to ask questions**

Think of questions you could ask your potential employer. There's nothing worse than saying "no" if they ask you whether there is anything you would like to know at the end of an interview.

Do your research and ask questions that are specifically related to the business and sector you are applying for. This will demonstrate that not only do you know your stuff but are interested in learning more.

<https://www.theengineer.co.uk/3-top-tips-on-landing-your-first-role-in-manufacturing/>

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# Draw the Illustration



Copy and Label the Illustration in the Space Provided

<https://thumbs.dreamstime.com/z/manufacturing-process-15811926.jpg>



**Draw (Copy) the Illustration Here**

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# Interpret a Graph



Write the title of the graph \_\_\_\_\_

Circle the type of chart this represents

*Bar Chart   Line Chart   Pie Chart   Other*

If applicable,

What does the X-axis represent \_\_\_\_\_

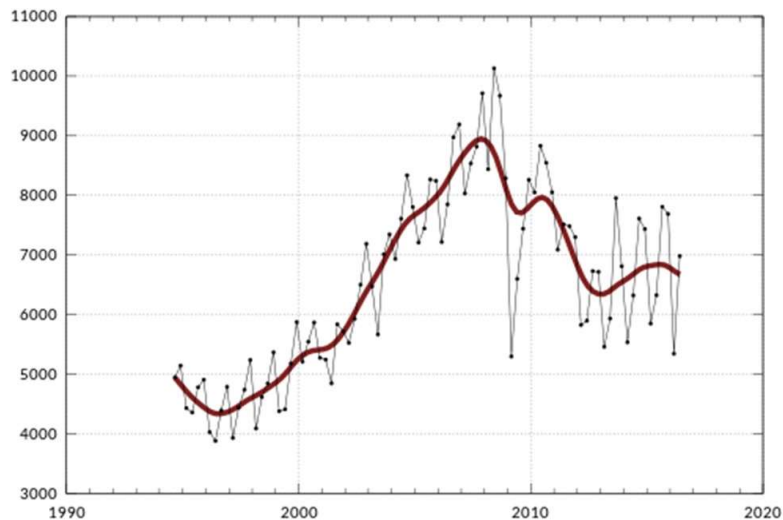
What does the Y-axis represent \_\_\_\_\_

Summarize what this graph represents or conveys

\_\_\_\_\_

## Manufacturing in Australia - Wikipedia

Quarterly gross operating profits (\$millions) in the manufacturing industry since 1994



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# Show-Off Your Smarts!



## Instructions

- Assemble into a small group assigned by the instructor.
- As a group, review the questions below.
- As a group, select one of the questions to discuss.
- Discuss your ideas/answers/responses as a group.
- Select one person to present your response to the class.

**Q1. How can this information be applied to a young-person's life?**

**Q2. Why might this information be important to a business person?**

**Q3. What type of businesses must apply this information and why?**

**Q4. As a business owner, how would you apply this information?**

**Q5. How might this information make you a better employee?**

*Information covered in this topic ...*

Industrial Revolution  
Quality  
Getting a Job

Robotics  
3-D Printing

Manufacturing Process  
Equipment Types  
Trends

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# Review Your Understanding



**Based on the previous text and illustrations,  
answer these (T/F)**

3-D Printing is actually used today in some businesses. T / F

Manufacturing has been around only about 60 years. T / F

Equipment for manufacturing today is the same as 10 years ago. T / F

Manufacturing jobs are an important part of the American economy. T / F

Quality is a key goal for manufacturing companies. T / F



Robotics play an increasingly important part in the manufacturing of automobiles. T / F

Equipment used at a manufacturing facility must also be well-maintained. T / F

Purchasing manufacturing equipment requires capital investments (money). T / F

Manufacturing companies are the exact same thing as a service company. T / F

The expression OEM means "Original Equipment Manufacturer." T / F

Self-Check. Don't Peek: T F F T T \* T T T F T

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## R.A.C.E.

*Use this hypothetical business situation to complete your R.A.C.E. page.*



Assume you are the manager of a small industrial manufacturing shop. You recently attended a trade-show and saw a demonstration of a robotic-controlled metal-bender.

Using the metal-bending robot might improve the quality of your manufactured products. But, the robot is expensive to purchase. Also, the robot might replace some of the workers you supervise.

**How would you respond to the situation?**

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# Manufacturing Equipment



**Rephrase. Answer. Citation. Example.**

**Rephrase** the instructor's question regarding the topic.

**Answer** the question above in three ways. Use your notes from the videos, the summarized paragraphs, or the discussion.

1

2

3

**Cite** the source (video/paragraph) you used in your answers.

1 *Your source:*

2 *Your source:*

3 *Your source:*

**Example** write an example situation related to the topic.

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