

Engineering Notebook

An engineering notebook is used to formally document, in chronological order, all of the work that a person performs related to a specific design project. It should be clear and complete so that someone unfamiliar with the work could take over the project without additional information.

Career Connections

An engineer's notebook is recognized as a legal document that can be used to obtain a patent. The engineer's notebook can be used to prove:

- Who originated an idea and when
- Careful and persistent work in turning the idea into a solution
- When an idea became a working solution

Sections of an Engineering Notebook

- Title page
- Table of contents
- Chronological entry pages
- References (list of sources cited)
- Contacts (name, position, contact information)



Start a New Page

Add a meaningful design title at the top of the page. If documentation of this design was started previously, then enter the latest page in the Continued From Page # box.

Engineering Notebook Best Practices

- Use a bound notebook
- Use ink pen (not pencil)
- Document all steps of the design process
- Include summaries of research and conversations
- Add periodic progress reports
 - Reflect on tasks accomplished
 - Reflect on future needs
- Follow specific entry page guidance

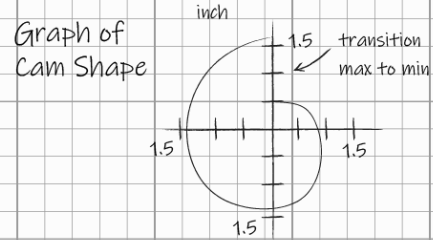
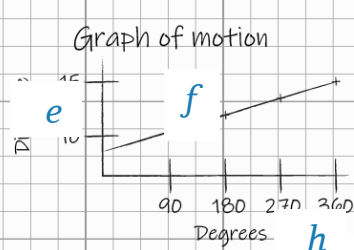
What content should I include in my engineering notebook?

Entry Page Guidance

Let's break this down to show why this engineering notebook is a good example to use for your own documentation. Explore the components of an engineering notebook entry page.

Title: Automata Challenge

I need to work with an assigned team to design an automata based on a hammer being slowly raised and the ^dly swung downward. The cycle time must be less than one strike per second.



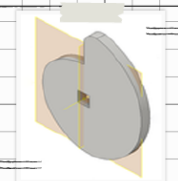
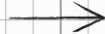
Simulate a comfortable cranking speed ^g
Test results: 18 turns in 10 seconds

$$\text{Cycles} = \frac{\text{Revolutions}}{\text{Time}}$$

$$= \frac{18 \text{ rev}}{10 \text{ seconds}}$$

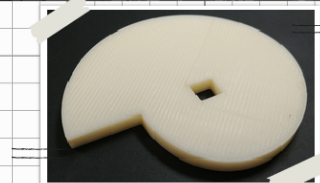
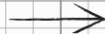
Cycles = 1.8 ^m therefore meets ⁿ criteria of $> 1 \text{ rps}$ ^{CD}

Model of cam with radius at transition maximum to minimum to allow motion constraint.

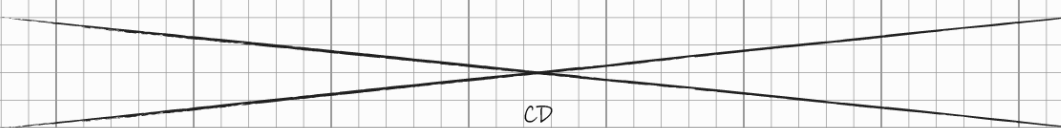


Cara Doe
3.4.18

Image of 3D printed part. Removed radius from model because follower moves past this transition in physical model.



Cara Doe
3.5.18



Signature: Cara Doe Date: 3.5.18

Team Members: Peter Smith
Bruce Tanner

Witness: John Allen Date: 3/5/2018

Continued From Page # 4

Continued On Page # 6

RESOURCES



[Engineering Notebook Infographic](#)



[Engineering Notebook Rubric](#)