

Design4Practice (D4P) Program

To: Dr. Trevas

From: Yanchu Du

Due: 8/30/2020

Re: Individual Memo - Self Learning Report






This memorandum summarizes the process, achievements and application of autonomous learning. I believe that my self-study achievements will play a certain role in the design of vertical agriculture in the future.

My self-study content is geometric dimensioning & tolerancing, mainly about some basic knowledge columns of GD & T, such as basic rules and symbols, how to develop, comparison and application with traditional methods, etc. I believe that I can create advanced drawings based on GD & T principles after learning, which can provide more and more accurate information for drawings in my capstone project and in my future career as an engineer, better describe what our part and assembly are like, and will not doubt the manufacturers in production.






The process of learning GD & T principles is very simple. First, there is a recommended tutorial in LinkedIn, introduction to geometric dimensioning and tolerancing by Kipp Bradford. I watched the whole video and finished quiz, and finally got my certificate. Then I read section 17: adding general annotations and section 18: assembly drawings in SolidWorks 2019 essential training on LinkedIn learning course and completed quiz. I cut a picture to prove that I did.



17. Adding General Annotations ▾

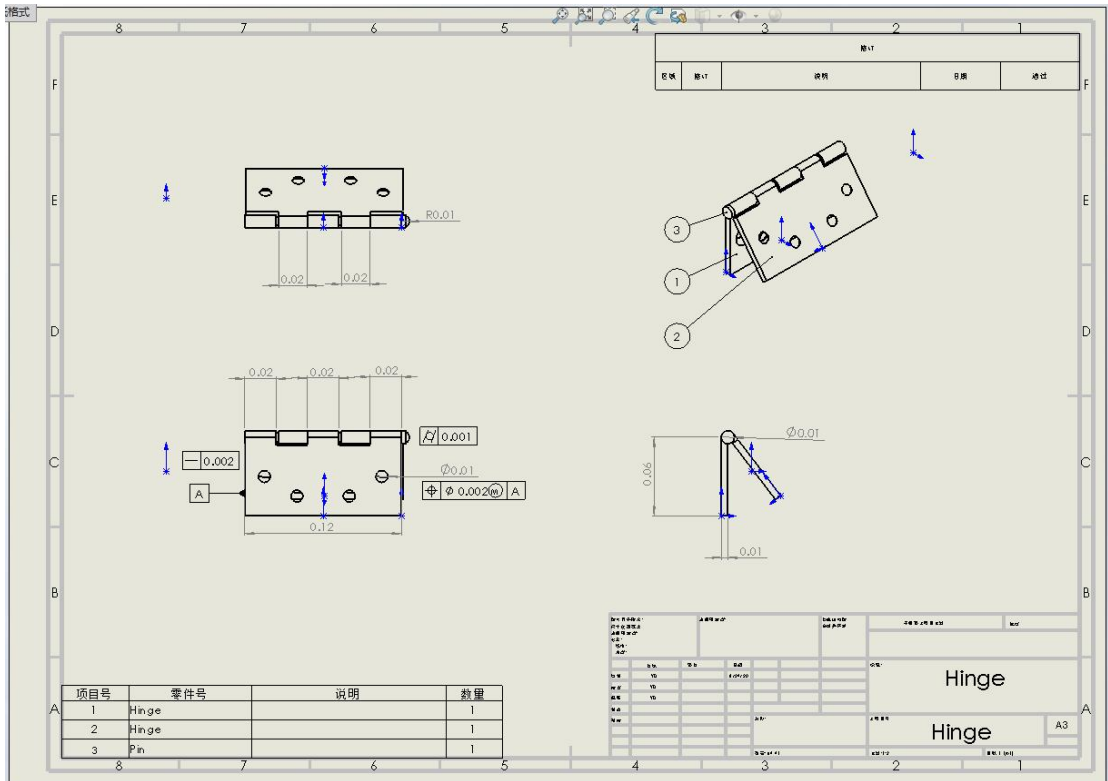
- ✓ Adding annotations 10 分钟 38 秒 
- ✓ Adding views to your drawing 6 分钟 57 秒 
- ✓ Adding custom properties 4 分钟 46 秒 
- ✓ Linking drawing notes 2 分钟 39 秒 
- ✓ Using the design library 2 分钟 13 秒 
- ✓ 单元测验 2 道题

18. Assembly Drawings ▾

- ✓ Adding assemblies to drawings 2 分钟 37 秒 
- ✓ Including a bill of materials 3 分钟 39 秒 
- ✓ Adding balloons on an assembly drawing 4 分钟 3 秒 
- ✓ Making an exploded view 5 分钟 8 秒 
- ✓ Adding in custom properties and revision 3 分钟 52 秒 
- ✓ 单元测验 2 道题

Conclusion >

Finally, I applied it according to what I learned. Because there are still some details in the CAD model of my capstone project, I used a CAD model I made before to draw drawings. Because the model itself is not complex, the diagram looks a bit empty, but it can be clearly seen that I used geometric dimensioning & tolerancing for further details, standardizing flatness and other information. Because GD & T is an important thing for engineers, I will further study and practice how to draw in the future.



Reference:

Gabriel Corbett, SOLIDWORKS 2019 Essential Training, Oct. 31, 2018. Accessed on: Oct 31, 2018. [Streaming video]. Available:

<https://www.linkedin.com/learning/solidworks-2019-essential-training/adding-annotations>

Kipp Bradford, Introduction to Geometric Dimensioning and Tolerancing, Nov. 16, 2018. Accessed on: Nov. 16, 2018. [Streaming video]. Available:

<https://www.linkedin.com/learning/introduction-to-geometric-dimensioning-and-tolerancing/faster-cheaper-better-parts>