

Project work or bachelor thesis – Development of a filling system for detectors

Are you enthusiastic about mechanical engineering and enjoy developing new technical processes? Then you've come to the right place!

As part of this project, you will work on redesigning a filling system for detectors that ensures a defined and controlled atmosphere. You will gain deep insight into a real development project and have the opportunity to contribute with your own ideas.

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Your tasks

- Understanding the process flow of the currently used filling system
- Analysis of existing sources of error and derivation of optimization potential
- Creation of concept sketches for improving the existing system or developing alternative solutions
- Design of components using a CAD program
- Performing design simulations, e.g.
 - Finite element analyses
 - Investigating the mechanics/dynamics of the system
- Creating technical drawings in accordance with current standards

What you bring

- An ongoing study in mechanical engineering or comparable field
- Interest in optimizing technical processes
- Careful, structured, and reliable way of working
- Motivation to familiarize yourself with new topics and challenges
- Excitement about constructive and creative development work

Desirable

- Knowledge of CAD design
- Initial experience with simulation tools in the CAD environment
- Basics of 3D printing (e.g., for prototyping)

What we offer

Whether you are looking for a project work or bachelor's thesis, we will work with you to flexibly design the scope of work. You can expect an exciting development project with plenty of creative freedom and practical work.

Interested?

If we have piqued your curiosity and you would like to learn more about the project, please contact me with the subject line "Project or bachelor thesis filling system":
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