

# The life of an Intern in the Dinex Group

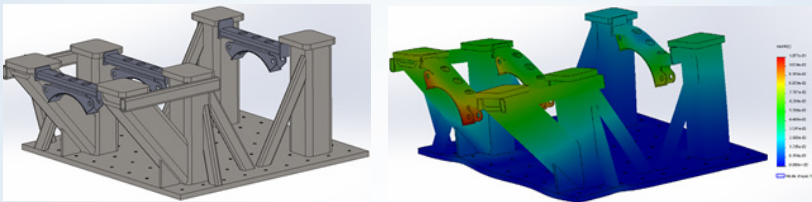


## Jonathan

Student: Mechanical engineer SDU  
Internship: Dinex Group  
Department: Engineering

### Modal analysis

A modal analysis finds a systems mode shapes, which is a representation of the natural frequency of the system. The modal analysis I did was to analyze the mode shapes of hot shaker fixture. Designing a shaker fixture means that you have to tune the system to not have natural frequencies/mode shapes in the frequency range that the test subject has to be tested in.

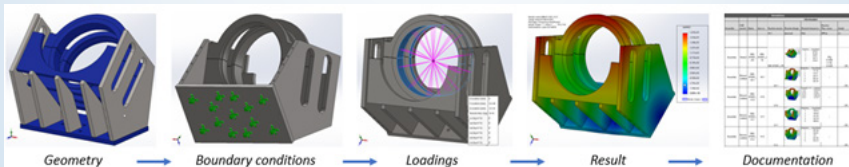


### Test center

When working as an engineer at Dinex, you get the possibility to work together with the in-house test center and workshop. Sparring with test engineers and production personal is very valuable and a good experience. The experience gave an insight into their view of a design, which is something I consider every time I design.

### Everyday workflow

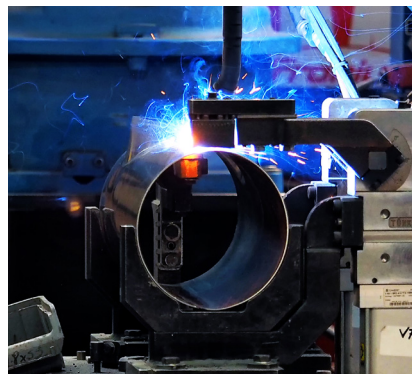
When working as an engineer you follow certain steps every time you want to validate a design.



The workflow ensures that the results can be compared, evaluated, and understood by others. It is important to only make minor changes between every simulation, as this ensure that the effects of the individual geometry change can be understood and evaluated.

### Responsibility from day one

During my first day I was set in charge of development of concepts for a new technology project. There were few limitations which meant I had a lot of design freedom, which resulted in a varied assortment of concepts. The concepts were further developed and later matured for simulation and production respectively.



### Projects and tasks

Some of the projects I have worked on during my internship here:

- Concept development of future technologies
- Maturation of concepts for production
- Preparing models for simulation
- CAD design and modal analysis of hot shaker fixture
- Making work drawings of own designed parts
- Making static structural analysis

### Being an engineer at Dinex

Being an engineer at Dinex means that you work within a very skilled and international team. You get to work with different nationalities with the department, but also with departments from all over the world. As an intern you become a part of the simulation team, where you get challenging projects and get treated as an engineer.

### Why choose Dinex?

I choose Dinex because of the change to work with CAD design and FEA simulations in a real-world situation. I started doing simulation from day one, which has been challenging and a learning process. The simulation team at Dinex is very skilled and eager their experience. The entire team is always ready with a helping hand, good advice, and constructive feedback.

My main take-aways are:

- Real world simulations and design
- Responsibility from day one
- Working in an international environment
- Working together with test engineers and production personal

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