

## Project description

### Consulting on high-voltage issues

SEFRAG AG needed advice and support for its development teams in the areas of high-voltage and control.

Evaluating new design proposals for their high-voltage suitability and, in some cases, developing alternatives have been a large part of my consulting work.

I performed parametric FEM simulations for the high-voltage team. This made it possible to determine which measures can increase the efficiency of the high-voltage process and to what degree. From the results of the simulations, I developed a strategy to increase efficiency.

The analysis of error cases in customer plants was another task of this mandate. I was able to quickly isolate the errors through suitable tests and thus propose reliable solutions.

In order to provide good support to the development teams of SELFRAG AG even after my mandate, I have written a detailed design guide.

### Targets and key figures



- ✓ Core process examined with over 30 simulations
- ✓ Strategy for lower energy losses defined
- ✓ Faults in customer installations analysed in a short time and solutions worked out
- ✓ Comparable life tests enabled
- ✓ Comprehensive design guide written



September 2018 - December 2019



Budget CHF 100,000



Cooperation with three employees



Mechanical and electrical engineering industry

### Testimonial

«Very competent advice on high-voltage issues. Work packages were always delivered as agreed regarding function and deadline.»

Stephan Drittenbass, Team Leader HSE - SELFRAG AG

