

Plastics - A Challenging Material

Due to their complex material behavior depending on many different factors, plastics require a special know-how and experience for the simulation of parts. There are various application areas:

Analysis in Case of Damages

Via Finite-Element-simulation we reconstruct the damage origin, display weak spots and are then able to develop improvements.

Determining of Material Data

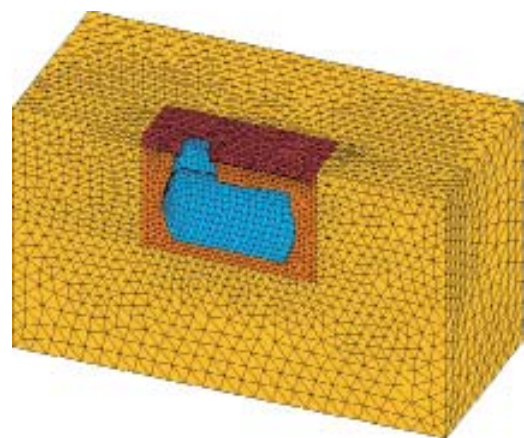
If the material data required for the simulation are not available, we are able provide these data by means of our own test-based facilities.

Analysis for Permission Purposes

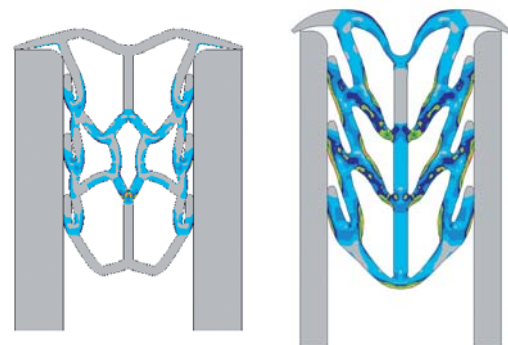
With regard to the areas of civil and plant engineering safety-related plastic parts require an inspection and certification. The therefore necessary analyses can be carried out by Wölfel. Our close cooperation with inspection and permission granting authorities facilitates the permission procedure.

Typical Load Cases for Plastic Components

- Dead load
- Internal pressure
- Temperature
- Live load
- Earth thrust
- Ground water
- Chemical effects
- Wind and snow



Plastic container embedded in earth



Join-simulation and optimization of a silicon sealing