

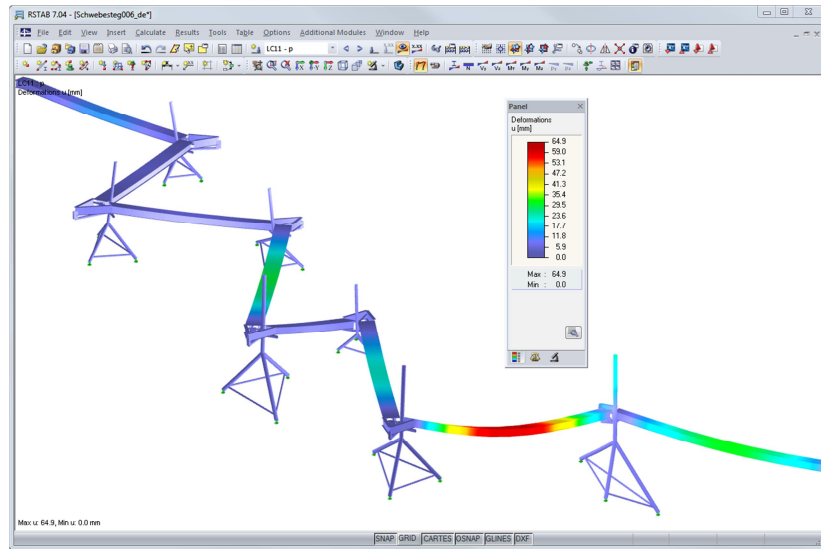
Designed with Dlubal Software...

Life and Science Park Carl-Alexander in Baesweiler

Baesweiler, a small German town near Aachen, decided to return to its citizens a burden dump that was used in the former mining industry but abandoned in 1975. Moreover, this project was meant to be the starting point for the development of a technology site. The result was an extraordinary construction challenge. The project was awarded with the German price for landscape architecture 2009.

Architectural Plan

The idea was to make the dump accessible on a discovery path leading "through the tree tops". The overlook at the west point offers a wide view over the surrounding landscape. The uphill walk starts at the "hill foyer" which is a building with the shape of a red skew cube. Passing its staircase visitors are crossing a "troughed bridge" and the "twin tower" where they reach the "floating walkway". The way is winding through the trees for 150 m and about 6 m above the ground. Beginning with the second half of the path visitors are walking on the "stairway to heaven" consisting of steel steps which are relatively close to the earth. Once the walkers arrive at the top they cross an arête walk to reach the "mountain plateau", a platform projecting beyond the dump edge.



Floating walkway supported by tetrapod construction in RSTAB (screen shot: Dlubal)

Supporting Structure

As the burden material was only heaped up in the past without compressing it, constructions needed to be statically determinate due to high settlement risks. Therefore, it was decided to use "tetrapods" for the supporting structure of the "floating way". They are immediately stable in themselves and thus can be assembled easily. In addition, they are resistant to settlements. Furthermore, one-span footbridges that are statically determinate were placed between these tetrapods. The site measurement was entered in RSTAB by structural engineers. Based on these coordinates, the supporting structure was finally designed like in a 3D CAD program.

Companies participating in construction:

Building owner

Town of Baesweiler, represented by Dipl.-Ing. Peter Strauch

Planning and landscape architecture

DTP Davids, Terfrüchte + Partner Essen, Germany

Planning and urban development

PASD Feldmeier · Wrede Architekten
BDA · Stadplaner SRL, Hagen, Germany

Structural planning

IFS – Beratende Ingenieure im Bauwesen Prof. Feyerabend · Schüller Partnergesellschaft, Hürth, Germany

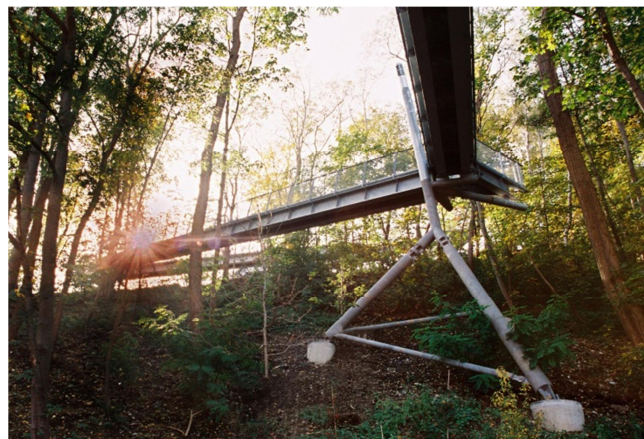
Software

Dlubal Engineering Software

www.dlubal.com



Viewing platform "mountain plateau"
(photos: Prof. Feyerabend, IFS)



Floating way on tetrapod construction