



## Description

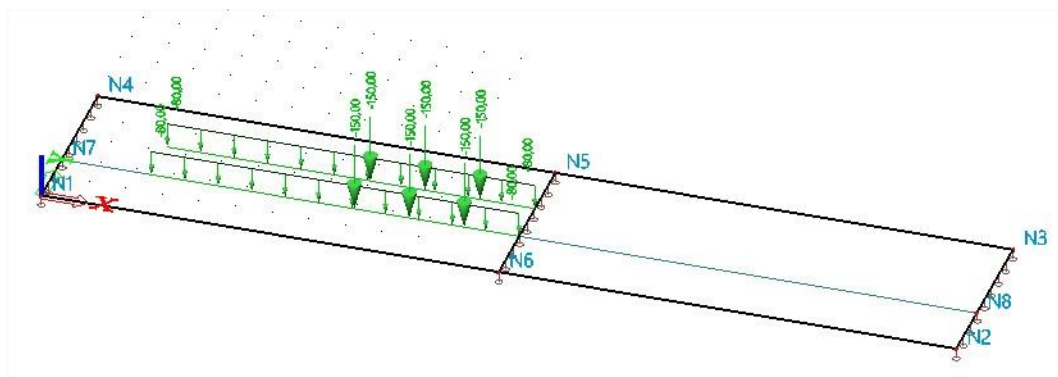
During this course of half a day, the principles of the provision and use of available **load generators** in SCIA Engineer are explained in detail. This will be done on the basis of **practical examples** that are interesting for both **new and experienced users**, who can convert the tricks immediately into practice in current projects.

## What knowledge will you obtain?

**A process of clear and precise handling will be treated for a more effective and efficient use of each of the studied functionalities.**

The training will provide an answer to all your questions regarding the by the software generated loads and more specifically:

- Which options should be ticked to activate the desired functionalities?
- What method is used to generate the loads? Is it a general method or a method related to the code / national annex? What are the limitations by the usage of these methods?
- Where can the user check what the software has taken into account and how this is calculated?
- In which load cases will the load be generated? How do these load cases have to be combined?
- In which direction are the loads applied? How to select the elements that have to carry the loads?
- What parameters are accessible to the user and what is the influence on the results?
- Can the generated loads still be adjusted? What happens if the geometry of the structure is changed?
- What is the difference between the various methods in the software to generate climate loads, mobile loads or the repetition of surface loads?
- How can the results of the generated loads be displayed in a practical way using influence lines? Which graphical representation of the results can be displayed?





# TRAINING

# SCIAENGINEER

## Program

The following functionalities will be discussed in detail:

- **Wind – and snow generators 2D / 3D**

All possible methods within SCIA Engineer will be explained: 2D, 3D, according to parameters specified in the code / national annexes or with the usage of coefficients entered by the user ...

- **Plane generator**

A simple and efficient way to carry out surface loads on the supporting beams.

- **Free loads**

Very powerful method to define point and surface loads, completely free in relation to the geometry of the structure: no need to attach to a node of the structure, the edge of an element, an internal node or edge and openings are automatically taken into account. Using free loads, hydrostatic pressure or ground pressure can be applied in a very quick way, or multiple building floors can be loaded at once.

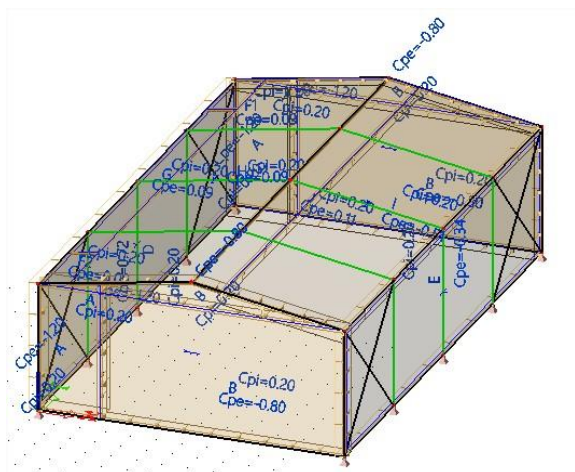
- **Load panels**

Besides generating surface loads, this tool can distribute surface loads to the supporting beams in several ways (choice of transfer direction, to be loaded beams, ...).

This technology simulates the load distribution by plates. When using load panels, no surface finite elements are generated.

### **Mobile loads / train loads**

This training will shed a light on the different stages of defining a path and using the results of train loads (simple and advanced mobile loads and train loads). The software also provides a method to calculate the critical positions on the basis of influence lines. The course describes in detail the used method and the way to utilize the results.





# TRAINING

# SCIAENGINEER

## Working method

The training is provided by an experienced engineer from the Customer Service Department of SCIA. To guarantee the interaction between the participants and the trainer, the course is given for a small group of up to 8 people.

Each **participant will use the software** and will put the different topics of the course immediately into practice, under the supervision of the trainer. At the end of the training you will have the necessary knowledge to **use the parts discussed in an autonomous and efficient way**.

At the beginning of the training, each participant will receive a **syllabus**. This includes a detailed explanation of the different functionalities and treated examples.

After the training, the companies who do not have the ability to use all the features discussed in the license of the software, will have the opportunity to request a free try-out license which is valid for 30 days.

## Prerequisites

A basic knowledge of the principles of SCIA Engineer is recommended.

## Certificate

Each participant will receive an official SCIA Engineer "Load generators" certificate at the end of the training, signed by the trainer.

**Disclaimer:** *The content of the training may be modified without notification (11/2015).*