

NILU Stahlbau GmbH

Upgraded statics with top tools from HiCAD

NILU Stahlbau GmbH, founded in 2005, offers a diversified scope of steel construction expertise, including stairways and staircases, railings, hall constructions, balconies and lift shafts. One of the company's main focuses is on architectural steel and supporting structures under the roofs of Vienna.

"Many of the projects we manage are under monument protection", explains Anton Ilic, project manager of the Austrian company. "It is necessary to stabilise the porous foundation in order to ensure the bearing capacity of a building for additional loads." As a vivid reference for a constructive challenge he refers to



REFERENCE REPORT



the Palais Schottenring and the Technical Museum in Vienna. "For the technical museum, for example, we had to incorporate a steel column and additional steel girders into the protected building and into the roof construction against high-pressure deadlines and with careful and precise handling to reliably distribute the high tensile forces of the cable and the cabin statically."

Construction: automated and 2-D/3-D associative

As the creation of complex steel constructions requires not only precision but also professional time management, the question of the CAD software to be used must be addressed. "In 2017 we first encountered ISD Group and have been using HiCAD ever since," explains the young man. "We are currently working with the latest version and particularly appreciate HiCAD tools such as automatic BOMs and drawing derivations". Different mounting conditions also require extensive standard parts libraries and standard beams, which the EN 1090-certified company uses to meet specific demands: "The Palais Schottenring was, in addition to the Technical Museum, also one of those projects requiring a combination of both practicality and aesthetics," explains Anton Ilic.

"Most of the exclusive penthouses on the attic floor had to be equipped with their own outdoor pools. In order to warrant a proper load-bearing capacity, the protected building was statically reinforced from its foundation up to the roof with steel constructions carefully inserted into

the historical building fabric. In the next step, we mounted the extremely complex steel construction of the roof truss, under which luxuriously equipped City Residences in dimensions of 77 to 781 square meters and an impressive room height of up to 5.2 meters were built."

HiCAD provided support for such and many other NILU GmbH projects with production-oriented dimensioning, individual annotations and detailed cuts. "Whether glass, wood or other materials - whether curved or other bent steel girders are to be mounted later on - changes must be convenient to implement," says Anton Ilic. "The main advantage for our construction team was storing customized civil engineering functions of the panel joints." This was not always the case, as the company used to work more time-consuming without automatic parts lists and only in 2-D. When asked about the 2-D/3-D associativity of CAD software as HiCAD, Anton Ilic answers with "indispensable", as expected.

Data transfer: quick and safe via IFC

Also indispensable is the use of software like HiCAD for quick export and import of IFC files. "It is good that one can select all IFC classes that are to be omitted from the import via the "Filter" option and that one can follow the loss-free data exchange via the menu screen", says Anton Ilic. As in other companies working with HiCAD, NILU GmbH also automatically transfers 2-D plans into DXF or DWG files and subsequently generates 3-D data via the IFC interface. "The NC output format such as

"HiCAD supports our construction team particularly by storing customized civil engineering functions - such as panel joints."

Anton Ilic, director NILU Stahlbau GmbH



Profitable ISD Support

A well-known bon mot from transformation management is that "the person who sells it is more important than the product". The ISD Group has also left nothing to be desired for Anton Ilic as far as support and training measures are concerned: "The past and current cooperation is going very well. We have achieved our objectives".

In brief:

- » NILU Stahlbau GmbH
- > Industry: Steel Engineering
- Software: HiCAD, Prostahl, AutoCAD
- Services: Steel constructions, lift shafts, balconies, railings, canopies
- > www.nilu-stahlbau.at





Success requires a strong partner

Check out our portfolio of software solutions. We will be delighted to demonstrate the advantages offered by our products in a personalized presentation or a free one-to-one consultation. Do not hesitate to contact us – we'll be pleased to help you.

ISD Software und Systeme GmbH

Tel.: +49-(0)231-9793-0 Mail: info@isdgroup.de Web: www.isdgroup.com