

Semiramis V-Zug, Zug

2022



In the Tech Cluster Zug stands the sculpture Semiramis, which stands as a symbol for the connection of high-tech and nature. TS3 made a significant contribution to the fact that today the complex wooden shells seem to float weightlessly at airy heights.

The project

For the Tech Cluster Zug, researchers from the group of ETH architecture professors built together with Müller Illien Landscape Architects, TS3 and other partners. a planted architectural sculpture. The 22.5 meter high structure consists of five geometrically complex wooden shells, which - slightly offset from each other - are supported by eight slender steel columns.

The construction

Always in sync, four suspended robot arms pick up their assigned assigned to them, perform a high-precision dance and finally place the panels in the panels in the room according to the computer design. Once the machines have placed their four panels next to each other and then bonded them together at the ends with the TS3 casting resin without pressing pressure. In this way, between 51 and 88 of such wooden panels are joined together to form a wooden shell. The TS3 system is mainly used for the construction of floor slabs, but also enables structures such as structures such as Semiramis.

The challenges

The slender and tall structure is lushly planted with large shrubs and trees, giving it a stately and thus has a considerable dead weight. At the same time, it provides a large attack surface for the wind. Thanks to the advantageous round shape of the shells, it is guided around the structure.



The hanging gardens of Zug



The wooden shells are supported by eight steel columns



The sculpture is lushly planted with trees and bushes

Construction data

- Gross floor area: m²
- Cross laminated timber: m³
- TS3 technology: linear meters

Architecture

- Matthias Kohler, Professor of Architecture and Digital Fabrication, ETH Zurich
- Müller Illien Landscape Architects, Zurich

Client

Urban Assets, Zug

Timber engineer

Timbatec Holzbauingenieur Schweiz AG, Zurich

Timber construction

Erne AG Holzbau, Laufenburg

Construction management

Steiner Architecture Ltd.

CLT manufacturer

Schilliger Holz AG, Küssnacht