The European XFEL will generate up to 27000 ultra short X-ray pulses per second with a brilliance that is a billion times higher than that of the best conventional X-ray radiation sources. The outstanding characteristics of the facility are unique worldwide. Starting in 2017, it will open up completely new research opportunities for scientists and industrial users.

This poster explains the steps from CAD Design of the photon beam transport system to tunnel installation.

The initial step is a 3D model of the tunnel with rough placeholders of the infrastructure and a nearly empty tunnel in 2013.

In a second step, a complete integration model is built up of the photon beam transport system for all components and beamline sections.

Finally workshop drawings are created for building up the beamline sections and components in the tunnel. Important information like coordinates of the drill holes, parts lists (separated in standard vacuum parts and general parts) and pallet list can be found on a single drawing.

References

www.xfel.eu