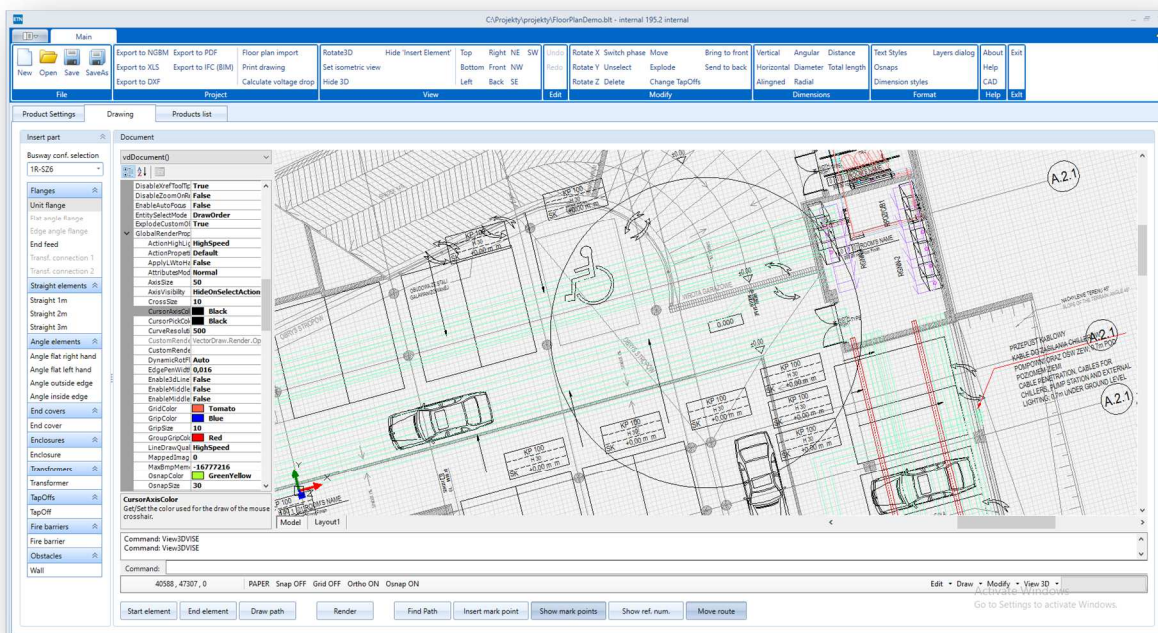


Case Study

BUSBAR LAYOUT TOOL

Examining the busbar market in the Electrotechnical industry focusing on the preparation of the offer and the project documentation, we concluded that a significant time is spent on the preparation of technical drawings showing how busbars should be laid based on the design guidelines for the specific structure.

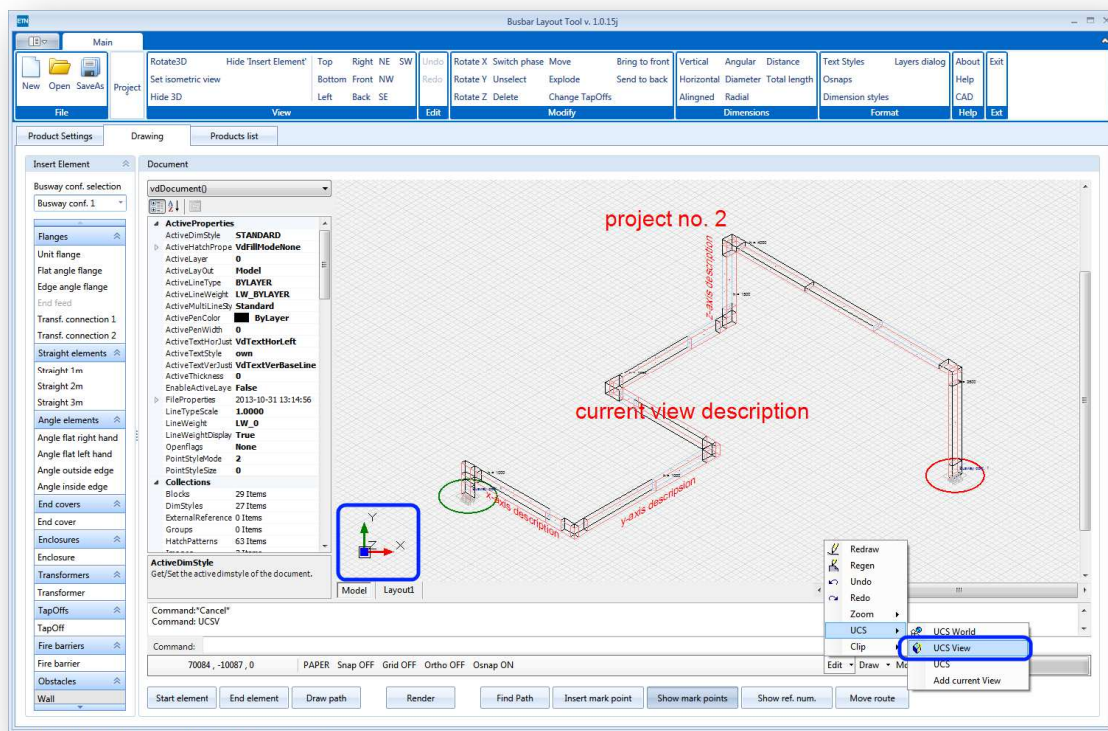


Most programs available on the market support the busbar layout design element by element, usually as add-ins to CAD applications. To meet requirements and focus on **Eaton Electric** products, we had to design a program that allows a **fast and effective** way to generate a busbar layout based on the **simple line drawing (path)**, through which it is to be driven.

REQUIREMENTS



- ✓ Develop a program to help design the busbars layouts with user-drawn lines in three dimensions
- ✓ Create a stand-alone program with a **built-in CAD** environment
- ✓ Make it easier for user to select products by generating a final list of materials
- ✓ Allow designers to work on building underlays
- ✓ Allow modification of the proposed solution defined by customer needs
- ✓ Validate and control the correctness of a selected statement
- ✓ Generation of procurement documents or project documentation
- ✓ **Data exchange and integration** with other client programs

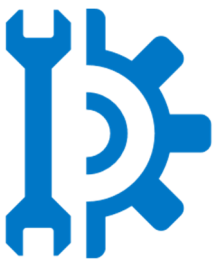


CHALLENGES

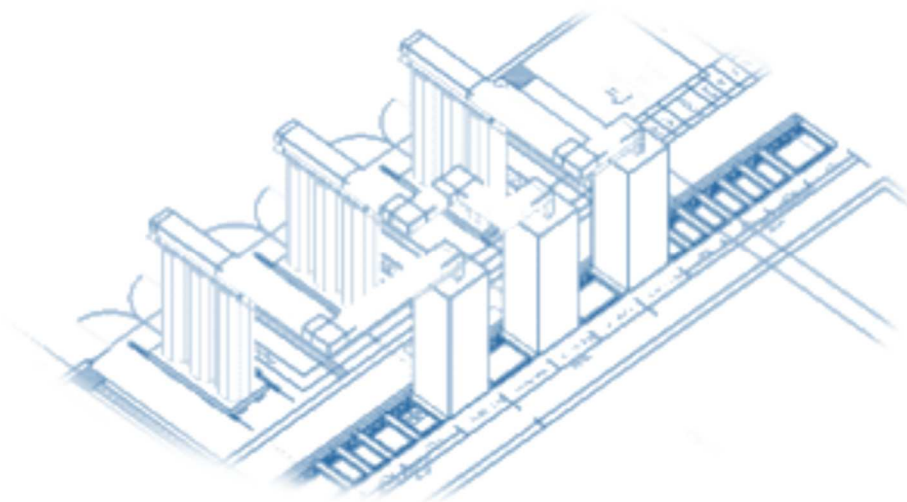


- ✓ Customer need analysis in the field of busbar layout design
- ✓ Describe and implements configuration rules to automate item selection, streamline and shorten user work time
- ✓ Design User Interface that would give proper User Experience
- ✓ Develop 3D CAD drawings (views of generated busbars)

PROCESS



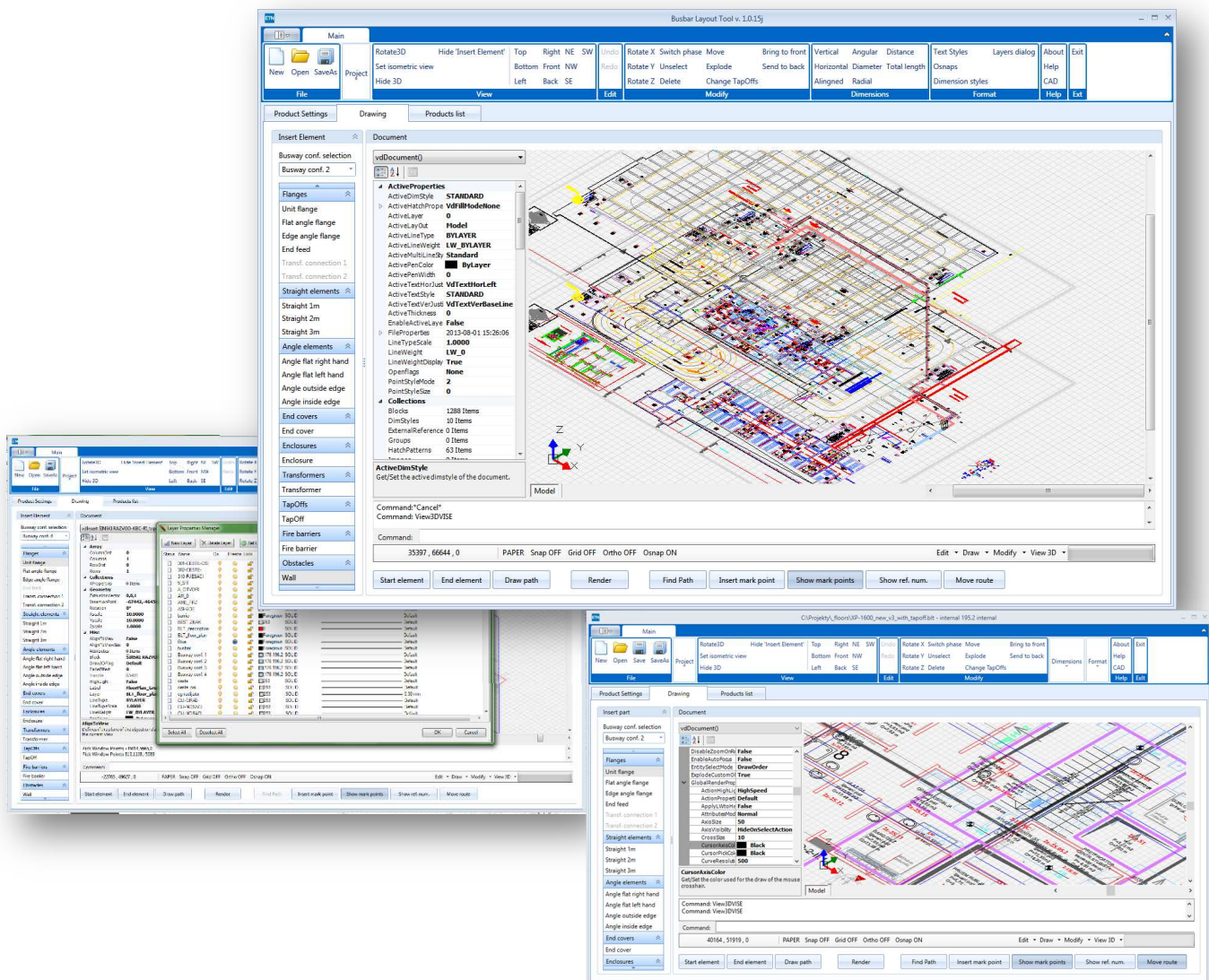
- ✓ Database design and parameterization of approximately **6,000 products**
- ✓ Create over **300 parameterized 3D CAD drawings**
- ✓ Develop simplified module for voltage drop calculations



EFFECTS



- ✓ Time needed for design and prepare documentation **was shorten several times**
- ✓ Elimination and minimalization of ordering errors
- ✓ Free and easy user control over selected assortment
- ✓ Smarter, more efficient and easier design analysis, quicker modifications and improvement process



ABOUT CLIENT



Eaton Corporation located in Poland has three manufacturing plants and two sales branches. Eaton is global leader in electrical, hydraulic and mechanic system and solutions. Globally hiring over 96 000 people in more than 175 countries.

ABOUT XERGO



Xergo is based in Wrocław engineering software development company. Offered services include software development, like CAE applications, configuration tools (with different level of complexity). We focus on engineering domain and are able to provide, high detail Revit families block development (RFA) and Revit Add-ins.

