CYPE presents its StruBIM Steel program for structural steel detailing at the NASCC Conference in the U.S.

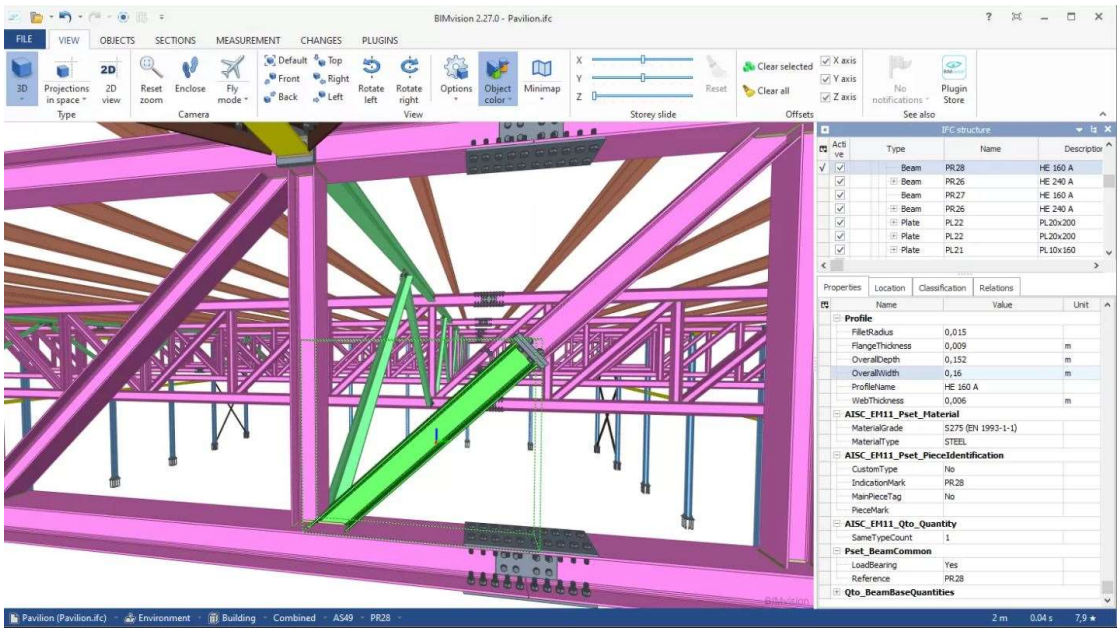
- The program, which allows users to create and maintain BIM models for steel structure detailing in accordance with AISC 360-16 (LRFD) standards, also creates structural steel detailing drawings
- The program exports jobs to the IFC EM.11 format (MVD - Model View Definition), the specific output developed for the U.S. market by AISC in collaboration with GeorgiaTech
- The connection to the CYPE Connect program allows analyzing and detailing connections in steel structures by means of finite elements with the OpenSees analysis engine

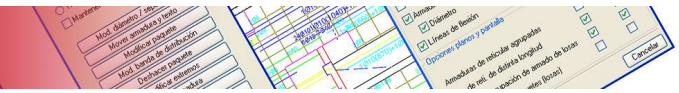
The architectural, engineering and construction software company CYPE will present its StruBIM Steel program for creating and maintaining BIM models of steel structures at the NASCC conference in the U.S. From April 12-14, 2023, CYPE experts will provide U.S. steel building specialists with an overview of the program's adaptability to the American market, as well as its capabilities for **producing structural steel detailing drawings, exporting them to IFC EM.11 format**, and sending the files to workshops and structural steel fabricators for ad hoc production. StruBIM Steel allows the detailing of steel structures to be performed and offers different solutions for modeling or importing a BIM model. With this tool, construction professionals can precisely define all the elements required for the detailing, such as sections, plates, bolts, welds and anchors.

In addition, **StruBIM Steel** users can directly generate graphical information of the structure, creating part sheets (sections and plates), assembly sheets, joint sheets and sheets with the general views of the model. This way, the program **generates all structure drawings for fabrication in a single click**, allowing users to revise and update fabrication and assembly drawings on an ongoing basis.

Export to IFC EM.11 format (MVD -Model View Definition)

Both the inclusion of the **AISC 360-16 (LRFD)** standard into StruBIM Steel and the ability to export to the **"EM.11" (IFC - MVD) format** mean this program meets the requirements of U.S. professionals. Both structural designers and fabrication shops, since the "EM.11" format is the standard used in the United States by CNC machines. It is worth noting that this **"EM.11" (IFC - MVD) format** was developed for the U.S. market by AISC in collaboration with GeorgiaTech.





StruBIM Steel, like all other CYPE applications, has implemented the OpenSees (Open System for Earthquake Engineering Simulation) analysis engine for both linear and non-linear analysis of structures. The use of this analysis engine, which is developed by Frank McKenna, Gregory L. Fenves and Filip C. Filippou from the University of California, Berkeley, is well established around the world and is widely used as a reference analysis engine by academia and professional experts in advanced structural analysis.

Detailing and connections of steel structures

StruBIM Steel is part of the ecosystem of solutions CYPE is developing for steel structures to **integrate all phases of the project without losing information**. CYPE tools include the design, analysis, verification, representation and fabrication of all the elements of the structure.

As a result, structural specialists can also work with other additional solutions such as **CYPE Connect** for detailing and analyzing steel structure connections using finite elements. With these two programs, steel structure fabricators can easily carry out the detailing and analysis of the connections in the project, and also create and tag elements, and generate files with detailing drawings for fabrication and for exporting the detailed model of the structure in DSTV and STEP format.

Other codes included in the program

In addition to the AISC 360-16 (LRFD) steel standard for the U.S. market, the following standards are also included in the program:

Steel:

- ABNT NBR 8800:2008
- AISC 360-16 (LRFD)
- BS 5950-1:2000
- Código Estructural
- EAE 2011
- Eurocode EN 1993
- IS 800:2007

Concrete:

- Eurocode EN 1992
- ACI 318M-19