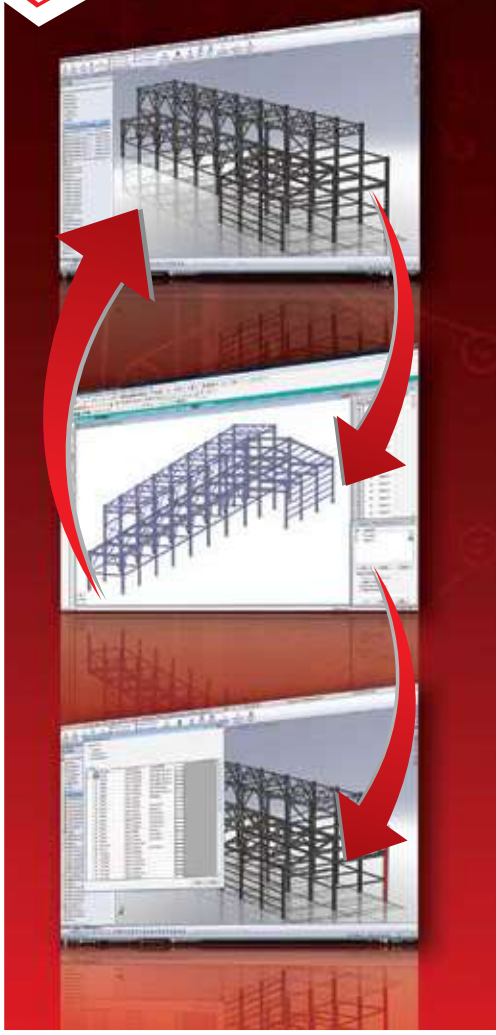
Analysis and Design

BuiltWorks as a software product was developed to meet the Architectural, Engineering, Construction (AEC) and Plant industries requirements for high performance flexible and versatile tools that include extended capabilities of integration with analysis and simulation software.



BuiltWorks ensures the seamless bi-directional integration between the **SolidWorks** environment and **SolidWorks** Simulation for the FE analysis of steel structure. In addition, bi-directional links are available to the leading third-party structural Analysis and Design software like STAAD.Pro and compatible systems, as well as SCAD Office, Lira, Matrix etc.

BuiltWorks automatically applies intelligent transformation of **SolidWorks** physical model to STAAD.Pro analysis reading and converting model geometry, cross-section data, housing all the true physical parameters and materials. Additional information, such as member orientation, connection offsets, grouping options, units system, parameters of preferred design code are read and evaluated.

Using **BuiltWorks** the STAAD.Pro analysis and design system is launched directly from the **SolidWorks** environment. After structural analysis and design of the model is performed, results for steel sections received during code check are transferred and automatically assigned to the elements of the structural model. The elements are updated in accordance with the parametric modelling.

Also **BuiltWorks** ensures alternative design workflow when the existing analysis model from STAAD.Pro compatible software is imported directly to the **SolidWorks** environment, automatically transforming wireframe analytical model to 3D solid model built from Weldment or **BuiltWorks** structural members for future modelling and detailing.

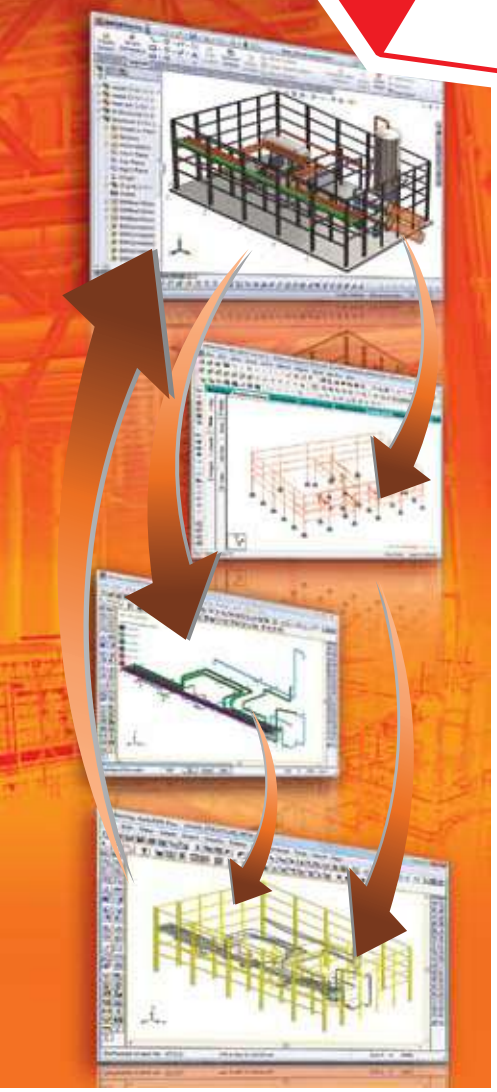
Support of CIS/2 (CIM steel Integration Standards) Analysis model in **BuiltWorks** allows link to even wider range of Structural A&D systems capable to handle CIS/2 format.

BuiltWorks enables vertical markets products to be linked to SolidWorks hence creating an open environment

BuiltWorks

SolidACE

SOLIDWORKS Solution Partner



Translators

BuiltWorks is flexible to enable external best of breed vertical market products from AEC and Plant industries to be linked to SolidWorks establishing communication chain within and between companies involved in the design, analysis, fabrication and construction of industrial facilities, buildings and structures.

BuiltWorks can read and save data in popular industrial formats – SDNF (Steel Detailing Neutral Format), and CIS/2 (CIM steel Integration Standards). Also BuiltWorks generates DSTV NC files directly from **SolidWorks** environment. This ensures seamless and integrated data information flow between **SolidWorks** and Industrial design systems including those for structural steel detailing, analysis and fabrication.

BuiltWorks fully supports the industry-standard SDNF format, published by INTERGRAPH Corp., which enables steel detailers to read your exported **SolidWorks** models. By importing SDNF files from 3rd party industrial systems, such as INTERGRAPH PDS, AVEVA PDMS, etc., BuiltWorks allows managing data transfer and provides user a high degree of control over mapping options to determine which members are imported thus enabling complete, round-trip data exchanges.

BuiltWorks supports CIS/2 Design model, the product model and electronic data exchange file format for structural steel project information. CIS/2 export and import capabilities are intended to create a seamless and integrated information flow between **SolidWorks** and many steel design, analysis, engineering, fabrication, and construction software packages, such as from different Industries. As an example, it can link **SolidWorks** structural model with INTERGRAPH SmartPlat 3D SystemTekla Structures, Bentley ProSteel and other systems capable to handle CIS/2 format.

BuiltWorks supports DSTV NC file format, widely-used in digital machine-tool control applications, which allows steel manufacturers to use models or drawings generated with **SolidWorks** CAD system, communicating design information to CNC machines used for structural steel component fabrication.

Built Works

BuiltWorks enables vertical markets products to be linked to SolidWorks hence creating an open environment