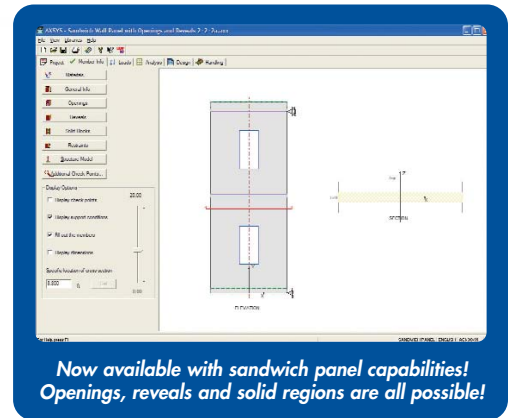




The Most Comprehensive Program Available for Precast Multistory Column and Wall Panel Analysis and Design

AXSYS® is a comprehensive program for the analysis and design of precast reinforced and prestressed multistory columns and wall panels in accordance with the ACI and CSA building codes. AXSYS is easy to operate and covers areas ranging from offset structure joints to the generation of interaction curves, making the program significantly more versatile and efficient than other general-purpose programs. Further, AXSYS is now fully integrated as a plug-in to Tekla® Structures, the first truly integrated 3D software for the structural engineering industry.

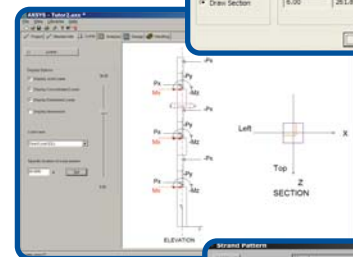
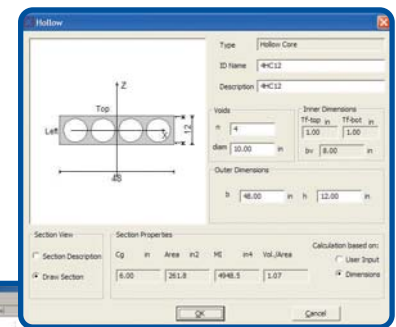


Now available with sandwich panel capabilities! Openings, reveals and solid regions are all possible!

New Features in AXSYS v 4.1.0

- AXSYS now incorporates an improved wall panel section library. The new wall panel library has a simplified section definition for rectangular, hollow core and double tee sections.
- Save settings for loads and load combinations in the settings file for easier use of program.
- Customize default load cases and load groups. Use this feature to set the load combinations as per ACI 318-05.
- Specify rebars in a wall panel with reference to left in addition to their distance from top face.
- When invoked from within Tekla Structures for column design, the first definition of the loads and other data is saved so if the same column is designed again, all the data defined in the first run is available in the second run. This data includes loads in all load cases, load combinations, allowable stress limits, analysis and design parameters.
- Specify rebars in a wall panel with reference to left in addition to their distance from top face.

Use provided libraries or create your own with ease using logical and friendly dialogs to quickly access wall panels, column sections, rebar and strands

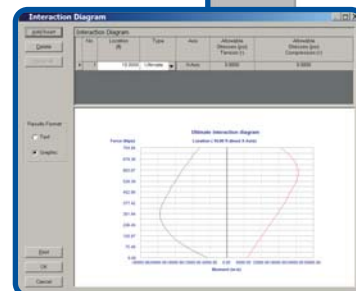


Real-time graphics let you correctly model a structure, apply loads, and interpret results

New Features in Axsys v 4.0.0

- AXSYS now incorporates ACI 318-05 as one of the design codes.
- As per ACI 318-05, prestressed concrete members are classified in any of the three classes, U / T / C (Uncracked/In Transition/Cracked) for service combinations.
- As per new code, AXSYS now classifies the member sections as Tension Controlled / In Transition / Compression Controlled Sections for ultimate combinations.
- As per ACI 318-05, members are now checked for crack control if the sections are classified as Cracked in service combinations.
- AXSYS can now do p-delta analysis for cracked sections (complex p-delta) in addition to doing p-delta for members with gross sections (simplified p-delta).

Evaluate stresses and ultimate capacity with strands and rebars placed anywhere in the cross section



Evaluate slenderness effects by moment magnification or P-Delta analysis and create interaction diagrams

“Being involved in the design of many precast, prestressed parking garages, I consider AXSYS to be the most advanced design software for columns and wall panels that exists. Having the flexibility to do multi-tier columns with biaxial bending is a must in these applications and AXSYS combines these features with simplicity of use that makes designing these components easy, fast and efficient.”

Helmuth Wilden, Emmas, PA

AXSYS Program Capabilities

General

- ACI 318-05, 318-89, 318-99, CSA-23.3
- US and SI (metric) units

Section Types

- Circular or rectangular columns
- DT, hollow-core, or custom
- Sandwich panels with two wythes
- Automatic section calculations
- Openings, reveals and solid regions

Frame Analysis Methods

- Plane frame for walls
- Space frame for columns
- Analysis by stiffness method
- Cracked section analysis

Slenderness Calculations

- P-Delta
- Moment magnification
- Automatic diagrams

Sandwich Composite Action

- Composite or non-composite
- Different action for handling than at final

Load Types

- Joint loads
- Member loads
- Distributed loads
- Load combinations

Loss Computation Methods

- PCI
- Manual entry

Reinforcement Libraries

- Easily modified
- Separate libraries for strand and rebar

Multiple Reinforcement Types

- Combination of strand, rebar, or mesh
- Transfer and development considered
- Mesh available for walls
- User-defined rebar end anchorage
- Variable strand pull at each level
- Tied or spiral column reinforcement

ACI 318-05 Specific

- Classify sections as U/T/C (Uncracked / In Transition / Cracked) for service
- Identify sections to be tension or compression controlled at ultimate

Interaction Diagrams

- Service
- Ultimate

Product Handling

- During stripping and erection
- During storage and shipping

Interface Features

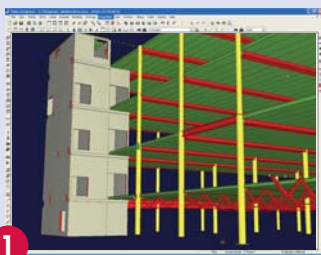
- User-friendly Windows® interface
- Tabbed dialog layout
- Live graphics for input and output interpretation
- Context-sensitive help
- Output to screen, printer, or file
- Electronic security
- Full online manual

AXSYS is now integrated with TEKLA Structures

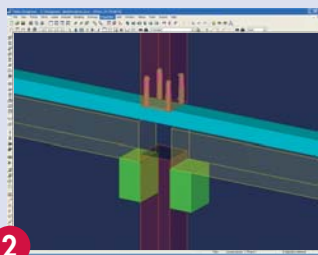
AXSYS can now be used from within Tekla® Structures to analyze and design columns. Tekla Structure's powerful features can detail the reinforcements, and AXSYS can either design or check to make sure that the reinforcement satisfies the design criteria. Through this integration, all engineering, detailing and

project management functions are integrated into one 3D model. Structural information – regardless of material or complexity – is managed throughout the project lifecycle, from concept to completion. The net benefits to you include reduced costs, reduced errors, and more efficient workflow.

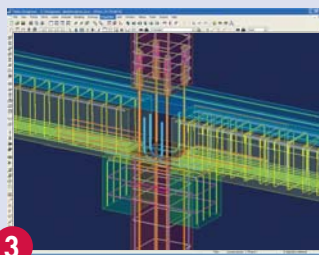
Let's take a closer look...



1 Create a framing model to visualize the project, share with the client as a sales model, identify problem spots, and estimate basic costs. Because Tekla Structures has a powerful modeling engine, complex structures can be assembled in rapid time.



2 In Tekla Structures, you can create and maintain a library of custom connections. These connections can be simple or complex, and can be saved for use in future projects. If changes are made, the model adjusts and shares those changes with all project team members.



3 At any point in the development of the model, you can begin to detail the reinforcement. You can even use LEAP Software's AXSYS® and PRESTO® applications from within Tekla Structures to design the reinforcement.



4 Use the Project Management configuration to visualize development over time, even before the ground is broken. Planning, inventory, transportation and erection schedules has never been easier.



Complex Structures. Concrete Solutions.

P.O. Box 16827 Tampa, FL 33687

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