

CSiPlant™ Version 5.0.0 Release Notes

© Copyright Computers and Structures, Inc., 2019

Notice Date: 2019-03-04

CSiPlant v5.0.0 is a new software product for the analysis and design of integrated piping and structural systems.

For future releases of CSiPlant, the Release Notes will be used to document changes to the software from the previous version.

Enhancements Implemented

| * | Incident | Description |
|---|----------|---|
| | 18266 | <p>A new software product has been created for the analysis and design of integrated piping and structural systems. Features include:</p> <ul style="list-style-type: none"> • Graphical user interface for modeling and display of results • CAD-like drawing and editing of piping and structural systems • Libraries of materials, pipe sections, structural sections, and components • Straight pipes, elbows, tees, concentric and eccentric reducers, flanges, and valves • Automatic generation of elbows, tees, and reducers while drawing pipelines • Automatic pipe labeling according to a fully customizable alpha-numeric scheme • Pipe supports include anchors, guides, line and vertical stops, rod hangers, snubbers, and spring hangers • Frame elements for modeling beams, columns, braces and other structural components • Link elements for nonlinear behavior, including custom supports and dampers • Joint constraints and rigid diaphragms • Linear and nonlinear analysis • Thermal and pressure loading • Temperature-dependent material behavior • Wind and seismic loading • Nonlinear load sequencing • Nonlinear time-history analysis • Geometric nonlinearity, including P-delta and large deflections • Modal and response-spectrum analysis • Buckling analysis • Design for ASME B31.1, B31.3, and B31.J • Spring-hanger sizing • Import of SAP2000 structural models for integrated analysis • Automatic connection of pipe supports to imported structural model • Export of piping support forces to SAP2000 for independent structural analysis • Import of geometry from C2 (*.CII) neutral files • Tabular display of model definition, analysis and design results • Export of tabular data to Excel and xml formats • User defined groups to control modeling and output • Detailed design reports |