

# Modeling techniques

## Articles

Program related articles:

General articles:

## Tutorials

Title	Description	Program
<a href="#">Cold-formed steel truss</a>	This tutorial demonstrates the modeling of a cold-formed steel truss system.	SAP2000
<a href="#">Locate center of mass</a>	Procedure for locating the center of mass for a structural system.	SAP2000
<a href="#">Modeling a pin connection between crossing members</a>	Modify joints and apply constraints such that a pin connection allows crossing members to translate freely.	SAP2000
<a href="#">Reinforced-concrete column and beam design</a>	Design reinforced-concrete columns and beams while considering combined performance measures and interaction-surface output.	SAP2000
<a href="#">Steel-frame pipe rack</a>	A detailed and extensive procedure which describes the modeling, analysis, and design of a 3D steel-frame pipe rack system.	SAP2000
<a href="#">Vibrating-machinery steel skid on piles</a>	This tutorial demonstrates the modeling of vibrating machinery and its connection to a steel-skid structural system.	SAP2000

## Test Problems

Title	Description	Program
<a href="#">Human-induced vibrations</a>	The modeling and analysis of human-induced vibrations due to footfalls or another type of impact.	SAP2000