CAESAR II®

Intergraph® CAESAR II® evaluates the structural responses and stresses of piping systems to international codes and standards. It is the pipe stress analysis standard against which all others are measured.

Data Input
CAESAR II makes it easy to input and display all the data needed to accurately define a piping system analysis model. You can access or modify input on an element-by-element basis, or select datasets to make global changes.

Cutting-Edge Graphics
The CAESAR II input graphics module makes quick work of developing analysis models while clearly indicating areas of concern and providing an excellent idea of the piping system’s flexibility. Color-coded stress models and animated displacements for any stress load case are available.

Design Tools and Wizards
Tools and wizards for tasks such as creating expansion loops or viewing plant models in the analysis space help bridge the gap between knowledge and experience. Such tools take the guesswork out of producing accurate analysis and recommending practical design changes.

Analysis Options
Besides the evaluation of a piping system’s response to thermal, deadweight, and pressure loads, CAESAR II analyzes the effects of wind, support settlement, seismic loads, and wave loads. Nonlinear effects such as support lift off, gap closure, and friction are also included. CAESAR II also selects the proper springs for supporting systems with large vertical deflections. Dynamic analysis capabilities include modal, harmonic, response spectrum, and time history analysis.

Error Checking and Reports
The CAESAR II program includes an integrated error checker. This error checker analyzes the user input and checks for consistency from both a “finite element” and “piping” point of view. Reports are clear, accurate, concise, and fully user-definable.

Material and Assemblies Databases
CAESAR II incorporates table look-ups for piping materials and components, plus expansion joints, structural steel sections, spring hangers, and material properties, including allowable stress. This ensures correct datasets are used for each analysis. CAESAR II comes complete with major international piping codes.
Bi-Directional Interface with Design
CAESAR II incorporates seamless, bi-directional links between plant design and engineering analysis. This allows the passing of design and analysis between these workgroups without data loss.

Technical Specs
- Microsoft® Windows® XP Pro or Windows Vista Ultimate (minimum)

Application Areas
- Architectural
- Beverage
- Brewing
- Building Services
- Chemical
- Equipment
- Food
- Offshore
- Petrochemical
- Pharmaceutical
- Piping
- Power
- Process and Plant Design
- Shipbuilding
- Steelwork
- Water Treatment