



# **FEATURES INCLUDE:**

- Static and Dynamic Analysis
- Intuitive Analysis Model Creation
- Cutting-edge Graphics
- Design Tools and Wizards
- Load and View Plant Model
- Comprehensive Error Checking
- User-definable Reports
- Wind and Wave Analysis
- Seismic and Support Settlement Analysis
- International Piping Codes
- Extensive Material Databases
- Steel Databases and Modeling
- Expansion Joint and Hanger Databases
- Hanger Design
- Bi-directional Links to Intergraph CADWorx® Plant

# **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

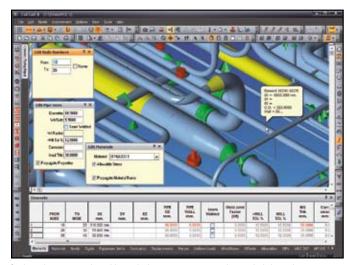
CAESAR II incorporates seamless, bi-directional links between plant design and engineering analysis. This allows the passing of design and analysis between these workgroups without data loss.

# **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



Cutting-edge, annotated graphics make it easy to access or review analysis input data.

# **ABOUT INTERGRAPH**

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides

enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

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