

Training & Certification Program in **Piping Stress Analysis**

Overview:

- The interface with detailed piping system designs.
- Identification of stress critical lines.
- Fundamentals of Static & Dynamic Analysis.
- Manual calculations.
- Types and functions of various supports & restraints.
- Overview of piping system modeling.
- Piping component stress intensification factors.
- Design and modeling considerations.
- Interface between piping analysis and detailed design.
- Sample problems and exercises. (Included where appropriate).

Module Details

Analysis Codes and Standards

- Piping
- Wind Loading
- Seismic
- Flange Evaluation
- Equipment Loading
- Nozzle Flexibilities and Stresses
- Extensive Material Databases

System Modeling

- Context-sensitive Input Screens
- Interactive Graphics
- Extensive Restraint Types
- Structural Steel Modeling
- Interactive Global Editing
- FRP (Fiberglass) Pipe Modeling
- Automatic Expansion Joint Modeling ➤
Buried Pipe Modeling

Static Analysis

- Comprehensive Load Case Options
- Interactive Error Checking
- Extensive Spring Hanger Options
- Wind Load Calculations
- Nozzle Flexibilities and Stresses
- Equipment Load Checks
- Flange Leakage and Stress Checks

- Fatigue and Cumulative Usage Analysis

Dynamic Analysis

- Mode Shape and Natural Frequency Calculations
- Harmonic Displacement and Force Analysis
- Shock Spectrum Analysis and Independent Support Motion ➤
Force Spectrum Analysis
- Modal Time History Analysis
- Animation of Dynamic Response
- Missing Mass/Force Corrections
- Static/Dynamic Load Combinations ➤
Relief Valve Load Synthesis
- Data Interfaces

Output

- Customizable Reports
- Graphic Review of Analytical Results ➤
Automatic Pipe Stress Isometrics ➤ ODBC
Database Export

Bi-directional Links to Design

- CADWorx Plant

Third-party Import Links

- Third-party Import Interfaces
- Neutral File Import

Application Procedure

Submit Dully filled attached Admission Query Form, along with your updated CV at our office or mail it to "info@smartbrains.in".

Admission would be given only to shortlisted candidates. Please confirm your admission on allotted dates.

Documents Required

- 2 PP Size Photograph.
- 1Photo ID Proof, 1 Address Proof.
- 1 Photo stat of qualifying exam certificate
- 1 hard copy of your CV.

For further Information and Admissions Contact:

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