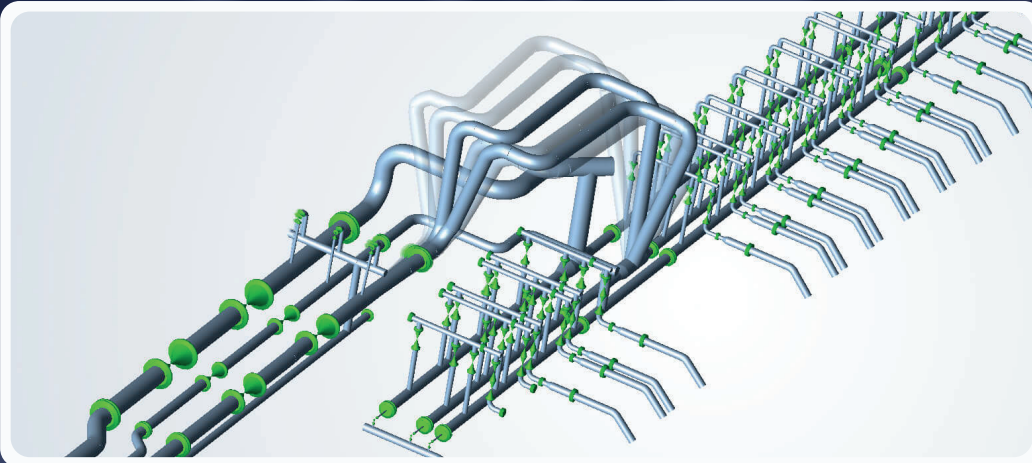








Dynamic Stress Analysis of Industrial Piping Systems

Online Course



-  Self-paced
-  4 modules
-  4 hours
-  English
-  1-yr access
-  SPC131



Learn from home
100% online training



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Available 24/7
1-year unlimited access



Personal Certificate
to prove your knowledge





Course Objective

"To give pipe stress engineers a solid understanding of the methods and backgrounds involved with dynamic assessment of piping systems."

Program

Module 1	Understanding Vibrations in Piping Systems	53 min
Module 2	Dynamic Pipe Stress Theory	1hr 13 min
Module 3	Modal, Harmonic, Spectrum and Time History	1hr 7min
Module 4	Further examples and method comparison	42 min

Results

-  Understand the different dynamic analysis techniques used by pipe stress software
-  Have seen numerous examples of how these techniques are applied to assess pipe vibrations
-  Are familiar with the theory and concepts behind modal analysis, time history analysis, harmonic analysis and spectrum analysis
-  Are able to judge which technique is most suitable for your situation

Dynamic Stress Analysis of Industrial Piping Systems

Online Course

Provided by



Wijnand Schoemakers, MSc

Project Engineer, Dynaflow Research group

Mechanical, Piping, FEA, Flow

DYNAFLOW
RESEARCH
GROUP.

Dynaflow Research Group specializes in the advanced end of the engineering spectrum. Their work often requires a multi-disciplinary approach: encompassing the static and dynamic analysis of both fluids and gases, and mechanical components.

They are at their best when creative thinking and a practical approach are required to tackle a problem.

Course Summary

This course teaches you all the fundamentals of dynamic stress assessments of piping systems.

By means of presentations, demonstrations and discussions of cases you will learn the theory, physics and computational methods applied in modern day pipe stress assessments of dynamic phenomena.

Topics such as model analysis, Dynamic Load Factor (DLF), spectrum analysis and time history analysis are discussed in detail. Comparisons are made between the different techniques that allow you to judge which one is most suitable for your situation.

The course consists of 4 online modules based on video content. You receive 1-year unlimited access to the course and the discussions forum. This allows you to perform modules again when you need to refresh knowledge for your work projects.

Who should attend this course

- Pipe stress engineers that want to understand dynamic stress assessment for piping systems
- Users of CaesarII and other pipe stress software that have experience with static analysis
- Pipe stress engineers that want to expand their knowledge into dynamic assessments
- Those conducting dynamic stress assessments that want to deepen their understanding

Prerequisites

- Basic understanding of static pipe stress analysis is required.

Level Advanced