







Performing Vibration Measurements for Pipe Stress Assessment

Online Course



-  Self-paced
-  4 modules
-  2.5 hours
-  English
-  1-yr access
-  SPC130



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100% online training



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Available 24/7
1-year unlimited access



Personal Certificate
to prove your knowledge


Course Objective

"To give piping professionals a solid understanding of the **concepts and practicalities** involved with **investigating piping vibrations.**"

Program

Module 1	Vibration Theory	34 min
Module 2	Vibration Assessment	23 min
Module 3	Performing Vibration Measurements	56 min
Module 4	Case Study	36 min

Results

-  Have a basic understanding of different excitation mechanisms for piping systems
-  Understand measurement techniques and data-processing steps
-  Are able to use rules of thumb for piping systems at hand
-  Can perform direct assessments techniques
-  Are introduced to detailed mechanical analysis methods and its concepts
-  Understand different mitigation techniques

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Provided by



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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 required for performing vibration measurements for pipe stress assessment. It includes discussions of the mechanics involved in piping vibrations, their potential causes, but also guidelines for estimated the severity and detailed analysis techniques. By means of real-life cases, typical mitigation techniques are presented.

The course provides a toolbox to understand and investigate piping vibrations. You will be able to quickly assess whether a piping vibration might be an issue for the integrity of the system and can plan a more detailed analysis based on this assessment. It starts with an overview of important concepts such as potential sources of vibrations and existing rules of thumb for assessment. It also includes a detailed discussion of the information required for a detailed dynamic stress assessment in pipe stress software and the associated considerations.

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

- Those involved in assessing piping vibration issues
- People required to read and understand technical reports on vibration issues
- Engineers interested in understanding piping vibrations

Prerequisites

- Basic understanding of piping systems is beneficial

Level Intermediate