

## MASTER'S THESIS WORK –Dynamic piping analysis

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### BACKGROUND

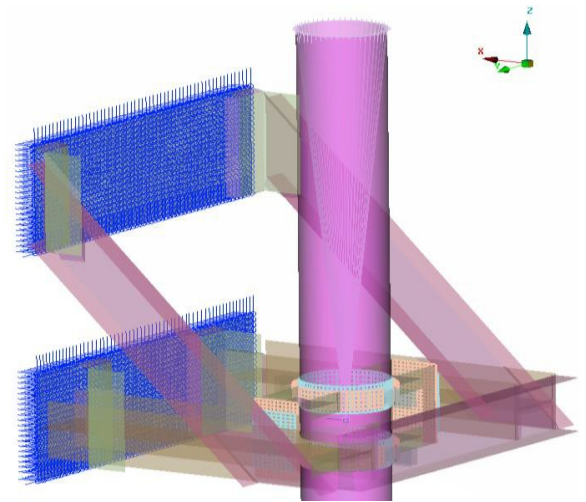
FS Dynamics is an independent consulting engineering company group specialized in advanced simulations and analysis of fluid- and structural dynamics. The company employs more than 100 consultants in Sweden.

### THESIS OBJECTIVES

The goal of the project is to define how to perform a sound dynamic analysis of a piping system. Through numerous projects and tests it has become clear that this is challenging.

The input to a dynamic analysis is based on a several parameters that are hard to determine.

In order to guide engineers to perform an accurate analysis a sensitivity study of these parameters shall be performed. These parameters mostly are related to supports (stiffness, gaps and non-linearity's), boundary conditions and loads. The work shall be performed in ANSYS where the analysis can be performed with different analysis methods as well with non-linear behavior. ANSYS is a commercial software package and when looking for work knowledge of this software is highly appreciated in the industry.



### STUDENT PROFILE

We are searching for students doing their master thesis within the field of FEM, for instance students from solid and mechanics or structural engineering. All consultants in FS Dynamics are holders of a Master degree and about 25% are holders of a Ph.D. exam.

### APPLICATION

Send your application to:

Magnus Ohlson

FS Dynamics

031 - 720 7127

[magnus.ohlson@fsdynamics.se](mailto:magnus.ohlson@fsdynamics.se)

Visit our web page [fsdynamics.se](http://fsdynamics.se) for more information