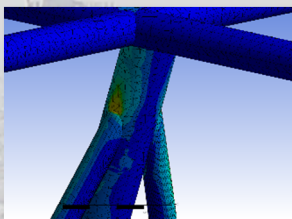




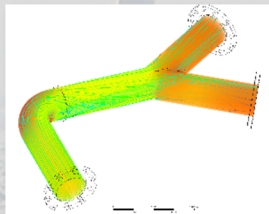
VIZIONZ

Bold Engineering in Air, Steel and Water

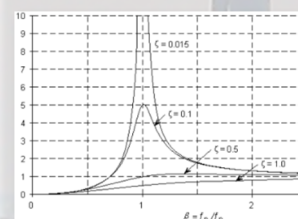
1. STRUCTURAL



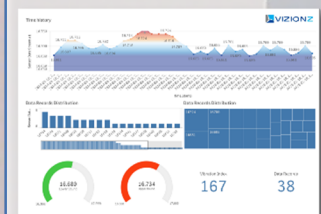
2. FLUID



3. DYNAMICS



4. DATA



1. STRUCTURAL ENGINEERING

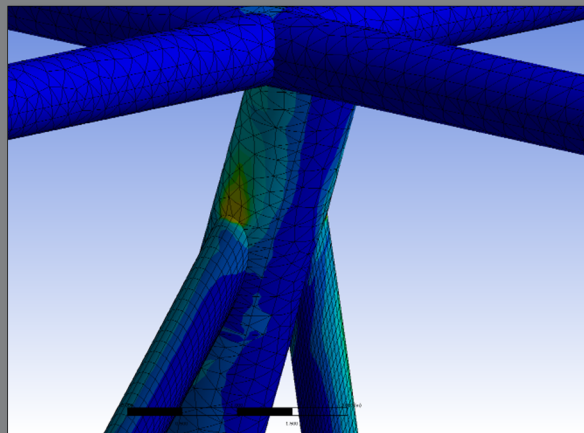


We offer design and engineering services for the **offshore wind** and **oil & gas** industries or **special structures**, specializing in complex steel structures and foundations subject to wave, wind and/or mechanical loading. We deliver results from concept design to detailed design and documentation, but also redesign and evaluate existing installations.

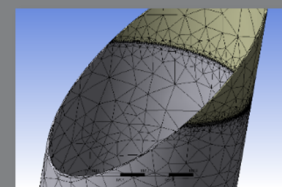
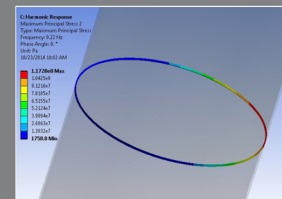
Design and engineering of (offshore) structures

- All necessary global structural analysis (static and dynamic)
- Detail calculations (static and dynamic)
- Lifting, transport, on bottom stability, ship collision, collapse (dropped object)
- Stability (barge loading), sea fastening
- Blast calculations (for walls, containers and living quarters)
- Helideck calculations (emergency landing etc.)
- Pre-stressed structures, welds (global, local)

Strength & Stability



Weld evaluations



VizionZ Engineering calculates special structures (large/slender) with large deflections for the offshore industry, but also **cranes** and **bridges**. Including integrated calculations with **hydro-and electro-driving** and mechanical detail calculations of **cylinders, shafts** etc.

For **cable laying ships**, VizionZ Engineering provides calculations of the deck/ship integrity strength of the equipment structures.



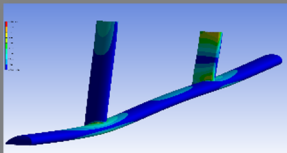
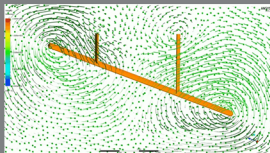
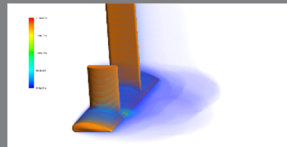
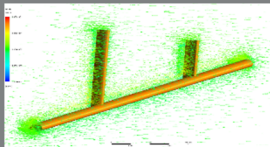
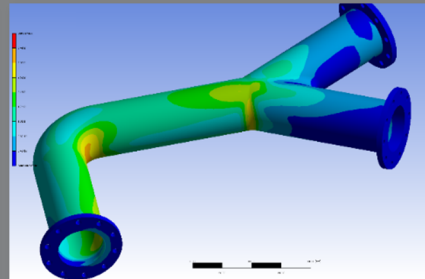
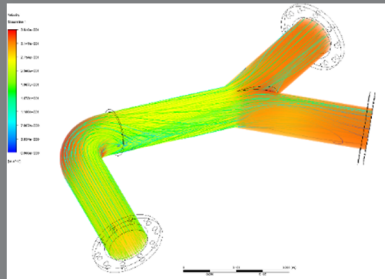
2. FLUID DYNAMICS ENGINEERING

VizionZ Engineering has experience in performing **fluid dynamics** evaluations in several different industry domains. Our engineers are particularly specialized in the design and evaluation of **multi-domain problems** such as fluid-structural interaction systems.

Past Projects

Piping:

Multi-domain analysis (fluid flow and thermal loading to structural stress)

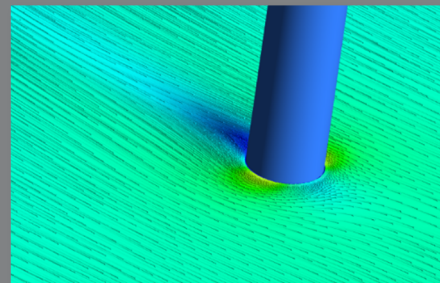


Marine Applications:

Complete design and analysis of marine structures. Starting from dynamic properties evaluation (1) and loads analysis (2) and coupling these to the evaluation of structural stability of the design (3).

Granular flows:

Calculations and evaluation of different granular flows and related structural interaction

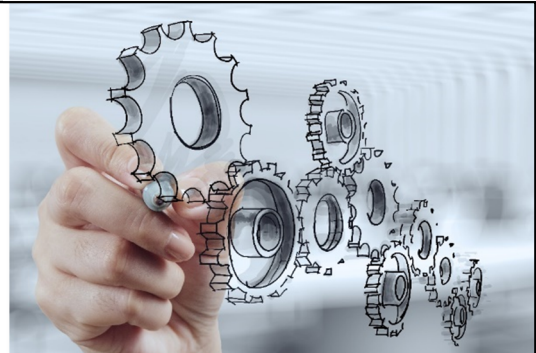


3. DYNAMIC SYSTEM ENGINEERING

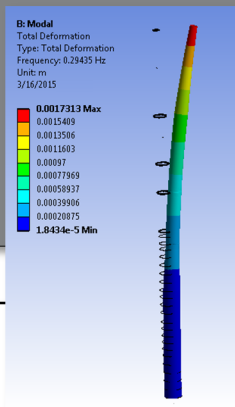


Dynamic Evaluations

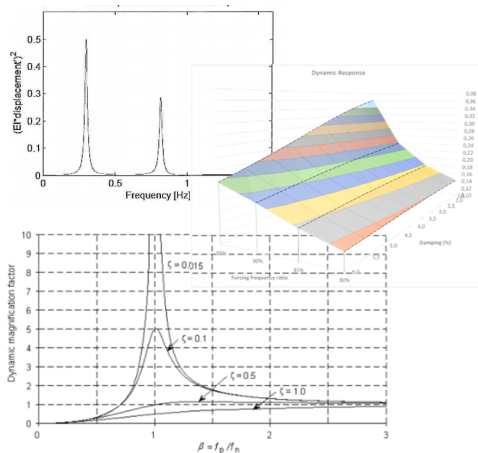
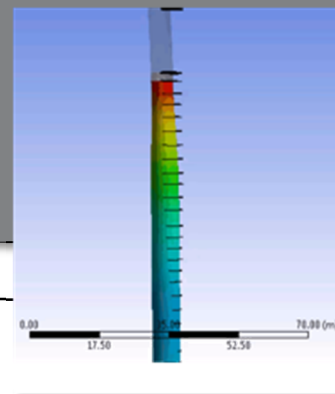
- Fatigue analysis
- Modal analysis
- Dynamic response and time history loading
- Non-linear analysis (material, geometry)
- Plastic analysis



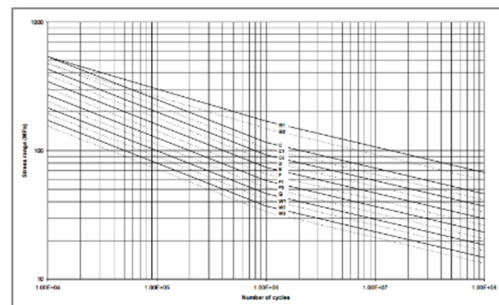
Modal Analysis



Dynamic Behavior



Evaluation of the impact on lifetime



4. DATA MONITORING AND CONTROL SOLUTIONS



We provide solutions for the measurement and analysis of field systems. The system capabilities cover a broad range of data acquisition options, data processing and control system intervention and system performance analysis.

Mobile station for Live Vibration Monitoring

- mobile and self containing station fit for offshore conditions
- monitoring of soil vibrations in different soil types
- real-time feed in the online customer portal with restricted access
- access from mobile devices
- generation of Data Analytics Reports and data analysis services of data logs
- custom alert generation (Email, Twitter, SMS)



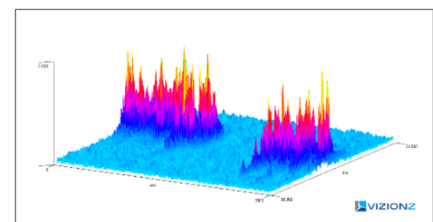
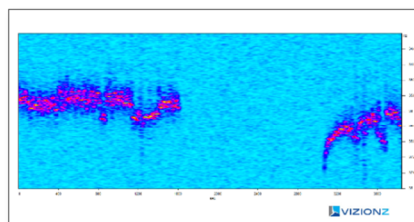
www.vizionz.nl/live-vibration-dashboard

Real-time Online Data Portal



Frequency Domain Analysis

We also provide analysis of the collected measurement data and specialize in vibrations analysis.





VIZIONZ

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