

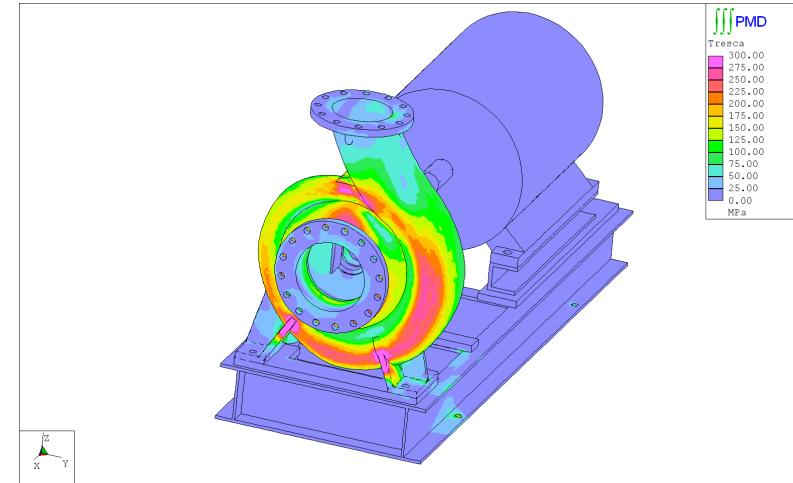
## Challenge

Finite element analysis of parts of power plants – analysis of stress, deformation and strain, temperature, fatigue and lifetime.

Using home-made FE code PMD, which was recommended by the "Special Commission for the Analyses of Components and Piping Systems"

## Goals

- Estimate static and dynamic strength and lifetime.
- Suggest possible numerical methods and approaches.
- Detailed modelling and analysis of parts of power plants.



## Benefits

Based on knowledge of complex responses of thermo-mechanical components of technological parts of power plants we are able to predict their strength and lifetime.

Institute of Thermomechanics of the CAS, v. v. i. in Prague  
[gabriel@it.cas.cz](mailto:gabriel@it.cas.cz) ; [plesek@it.cas.cz](mailto:plesek@it.cas.cz); [kolman@it.cas.cz](mailto:kolman@it.cas.cz) )

Vamet, s.ro. ([petrasek@vamet.cz](mailto:petrasek@vamet.cz) , [www.pmd-fem.com](http://www.pmd-fem.com) )