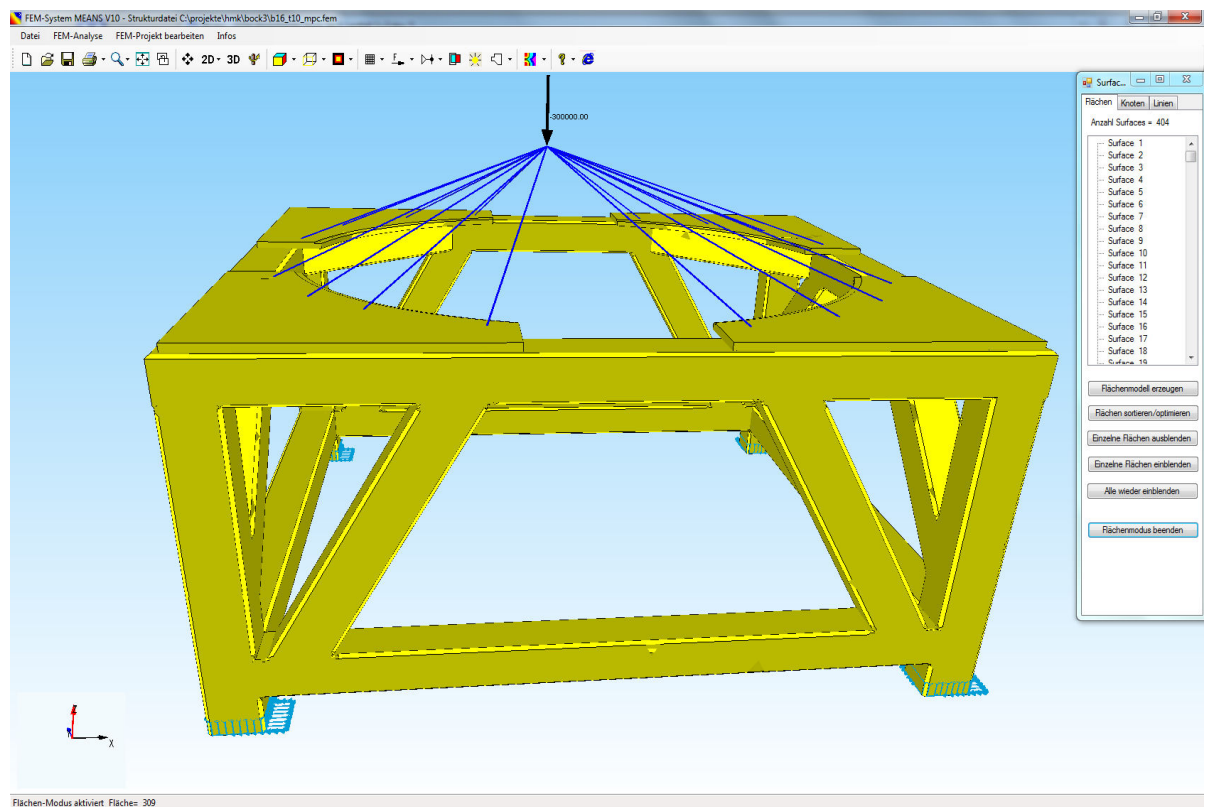


# FEM-Calculation of a LEO2 Transport Cradle with FEM-System MEANS V10 from HTA-Software

[www.fem-infos.com](http://www.fem-infos.com)

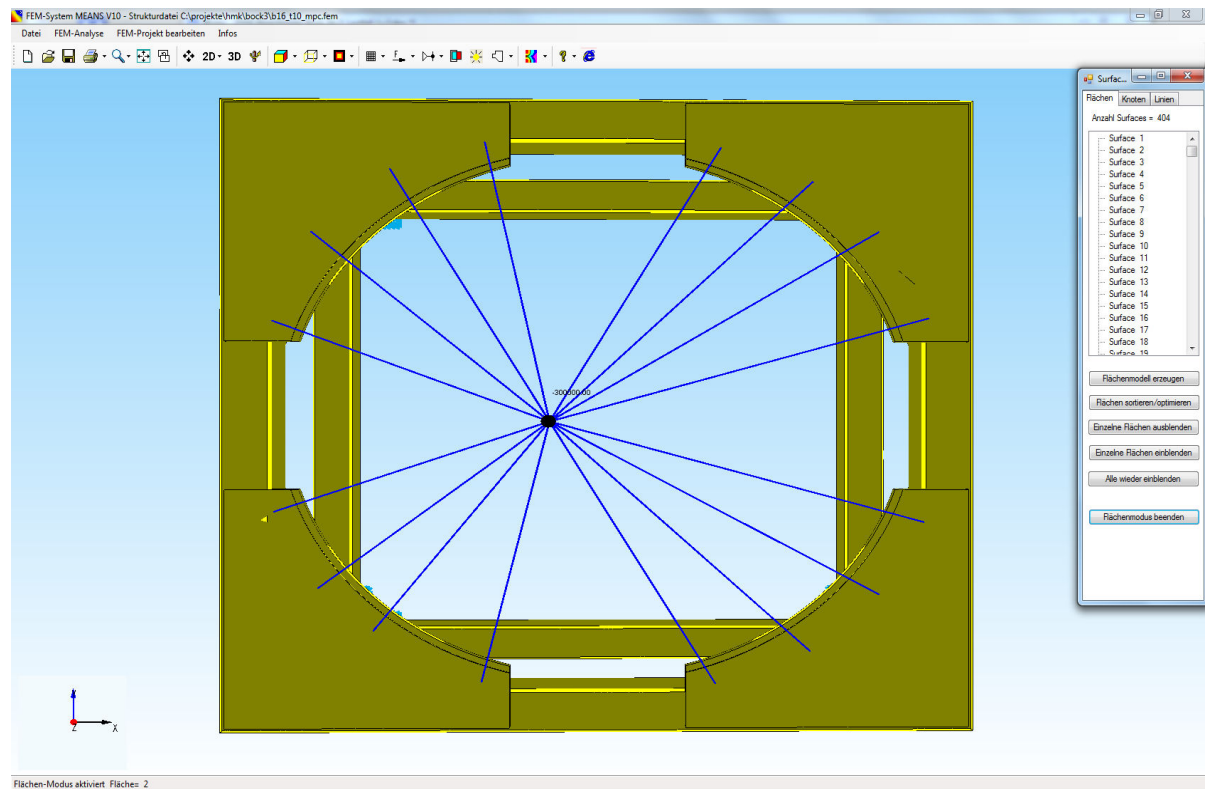
## Finite Element Structure

217 289 Nodes  
378 833 TET10-Tetrahedral Elements  
651 867 Degrees of Freedom



## View from below

The weight center was offset by 118 mm on the X axis

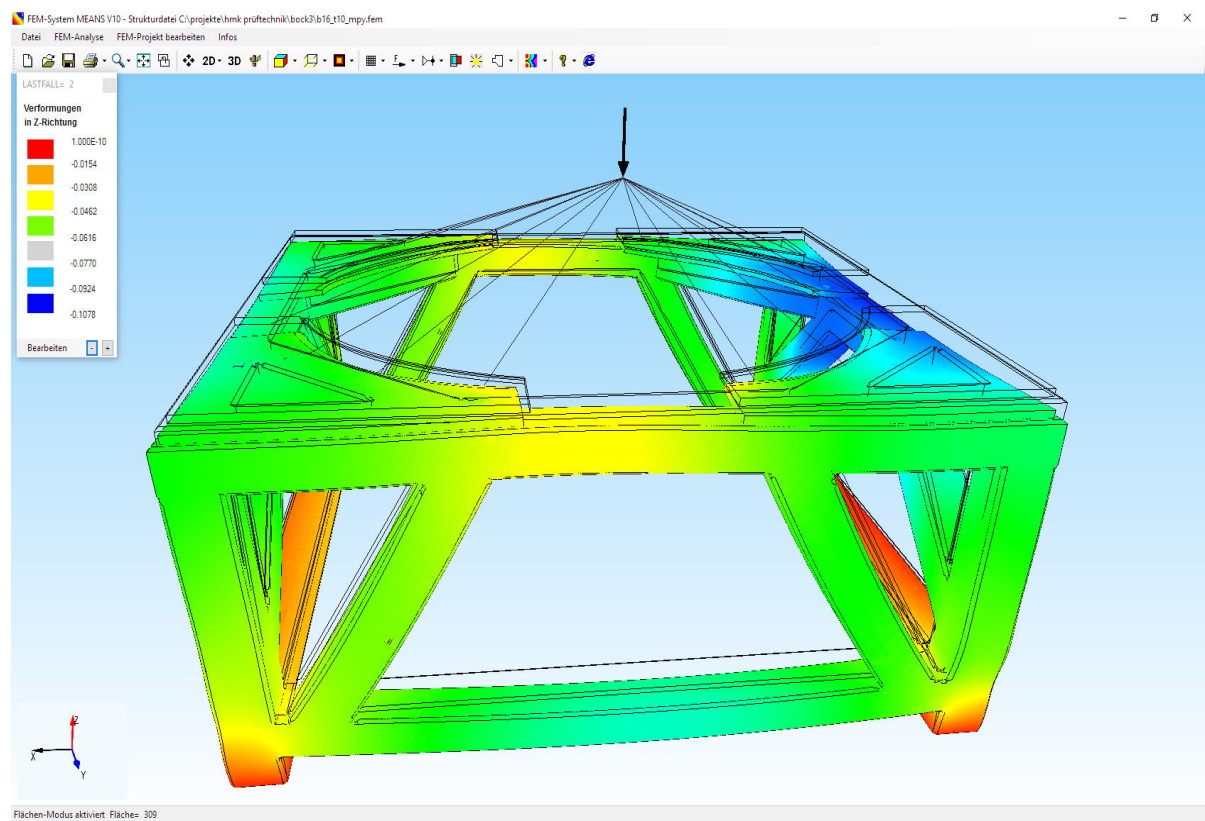


## Load Case 1

- Total Load of 30 tons
- Gravitation Load 1g downward

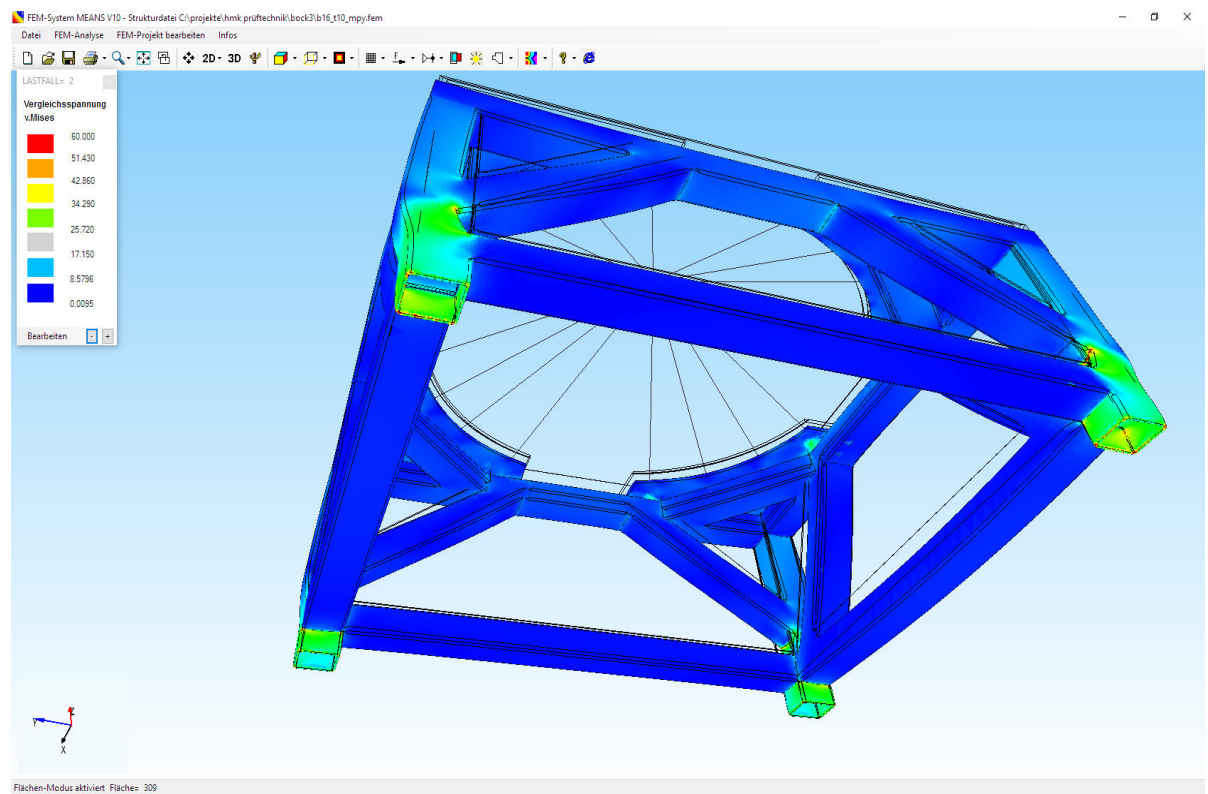
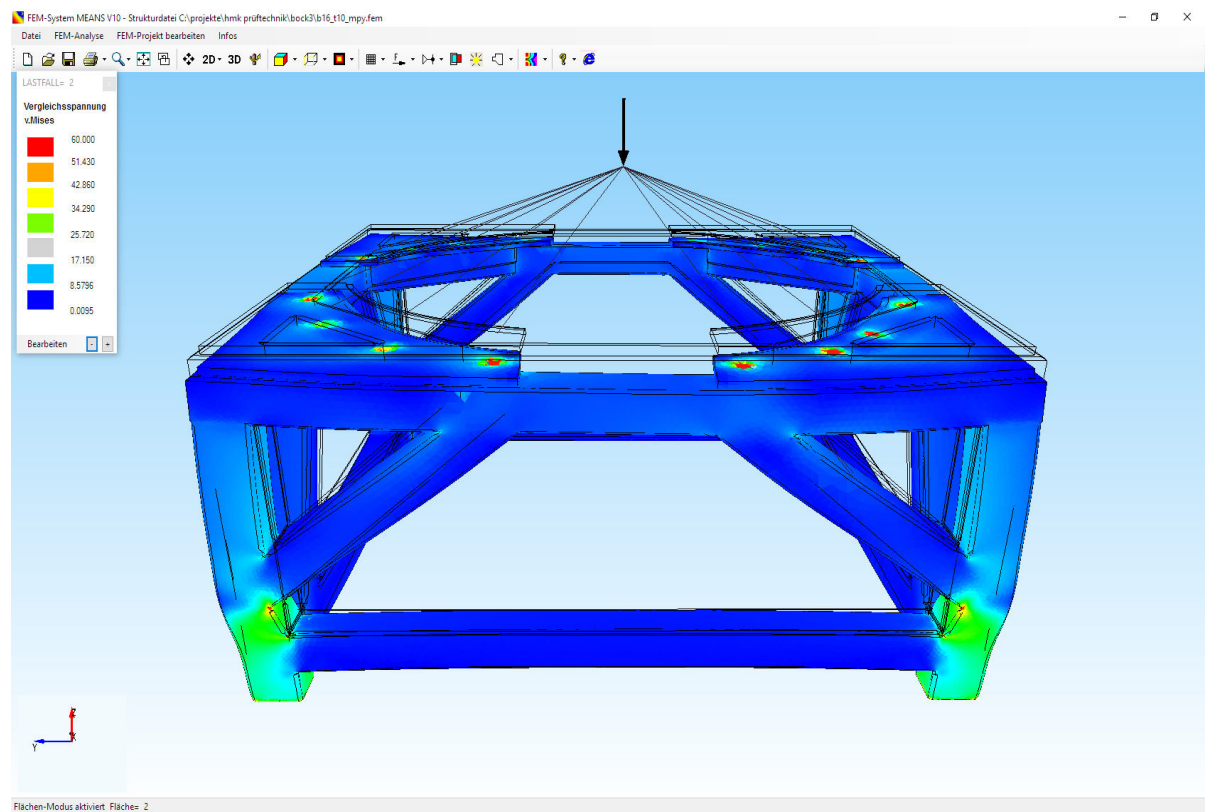
## Displacements

Max. Displacements in Z Direction = - 0.1078 mm



## v.Mises-Stresses

Max. v.Mises-Stresses = 55 MPa

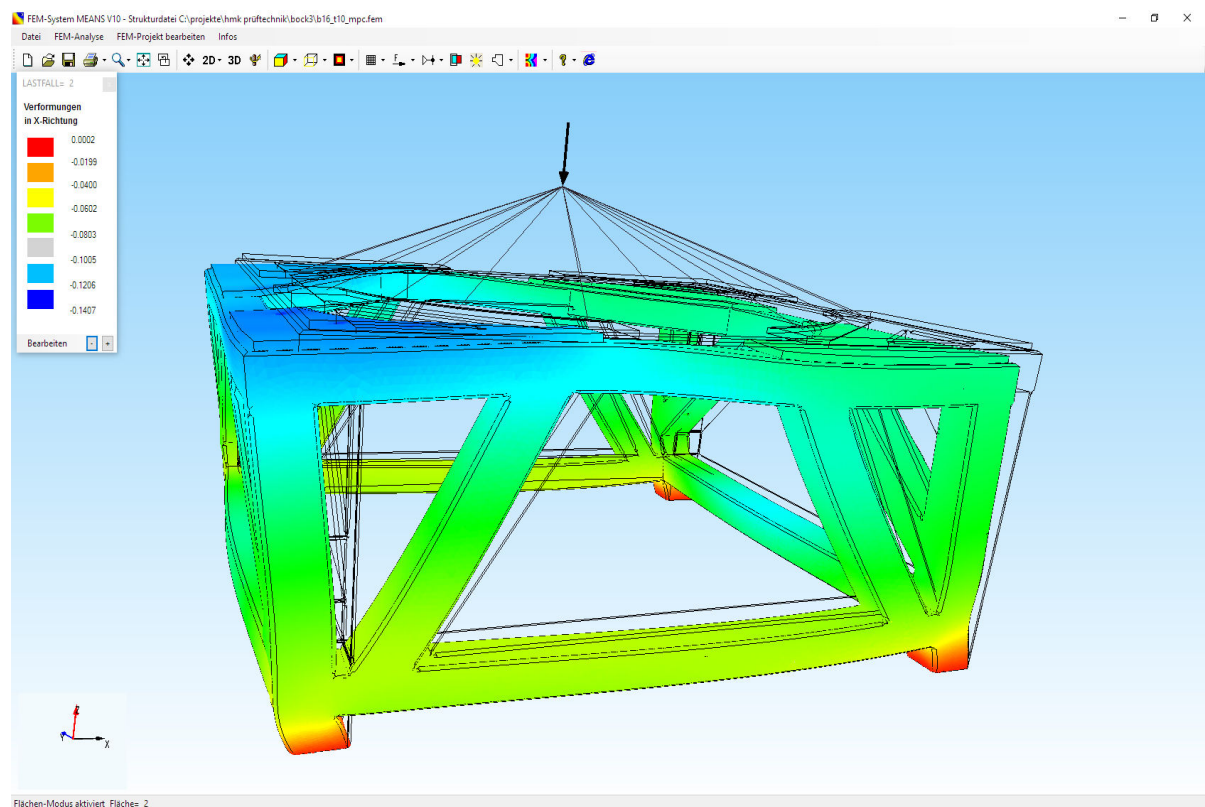


## Load Case 2

- Total Load of 30 tons
- Gravitation Load 1g downward
- Gravitation Load 2g longitudinal

## Displacements

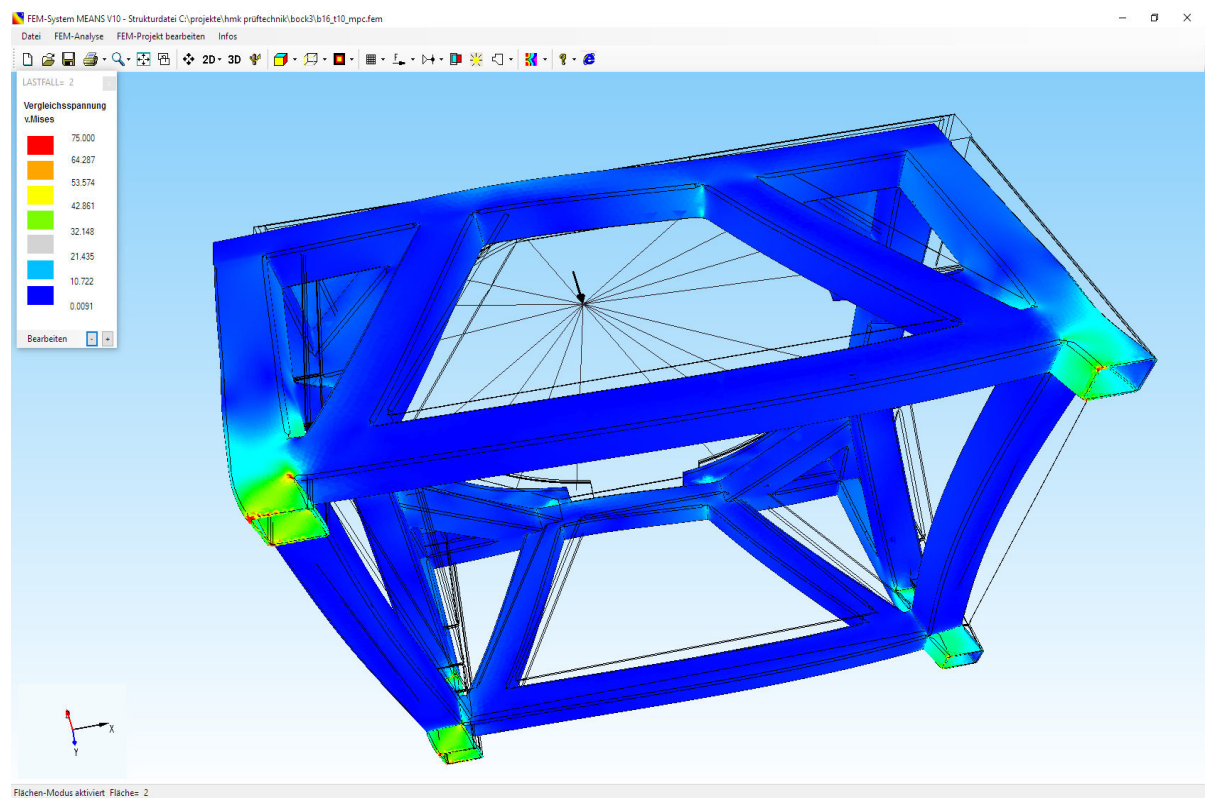
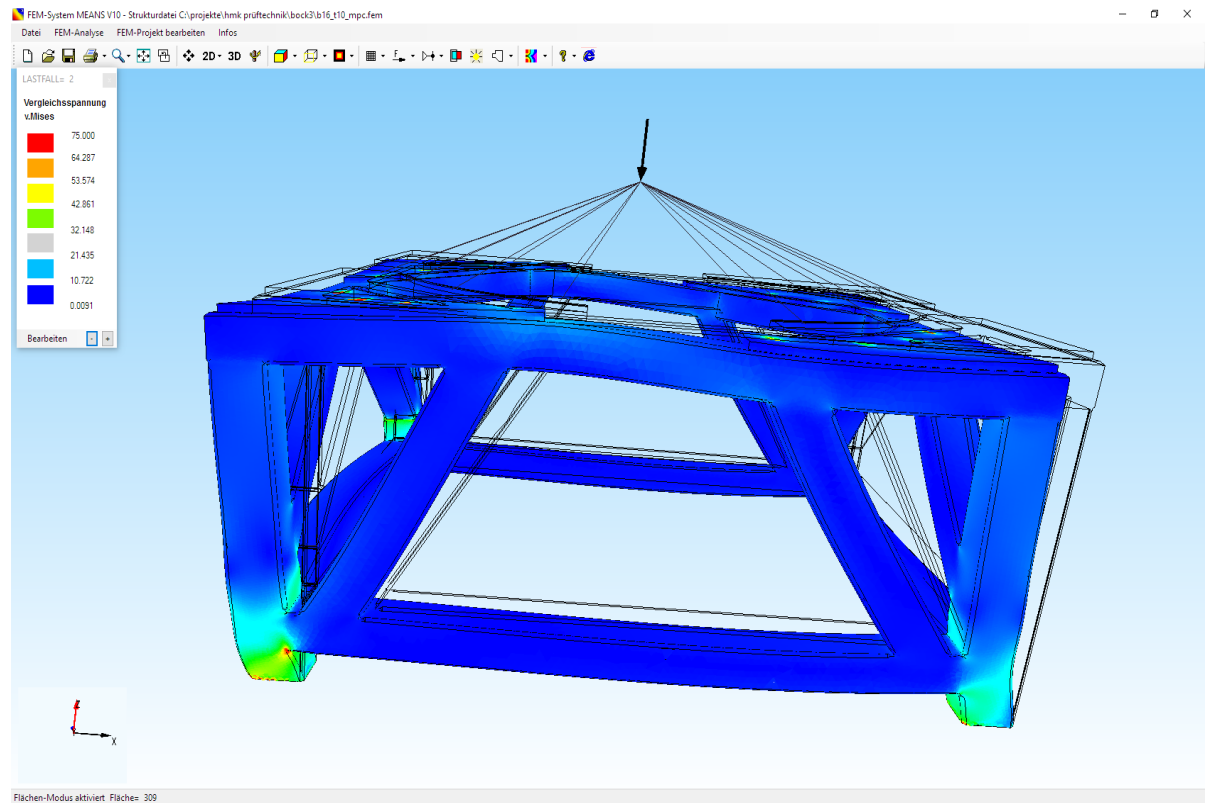
Max. Displacements in X Direction = 0.1407 mm





# v.Mises-Stresses

Max. v.Mises-Stresses = 75 MPa

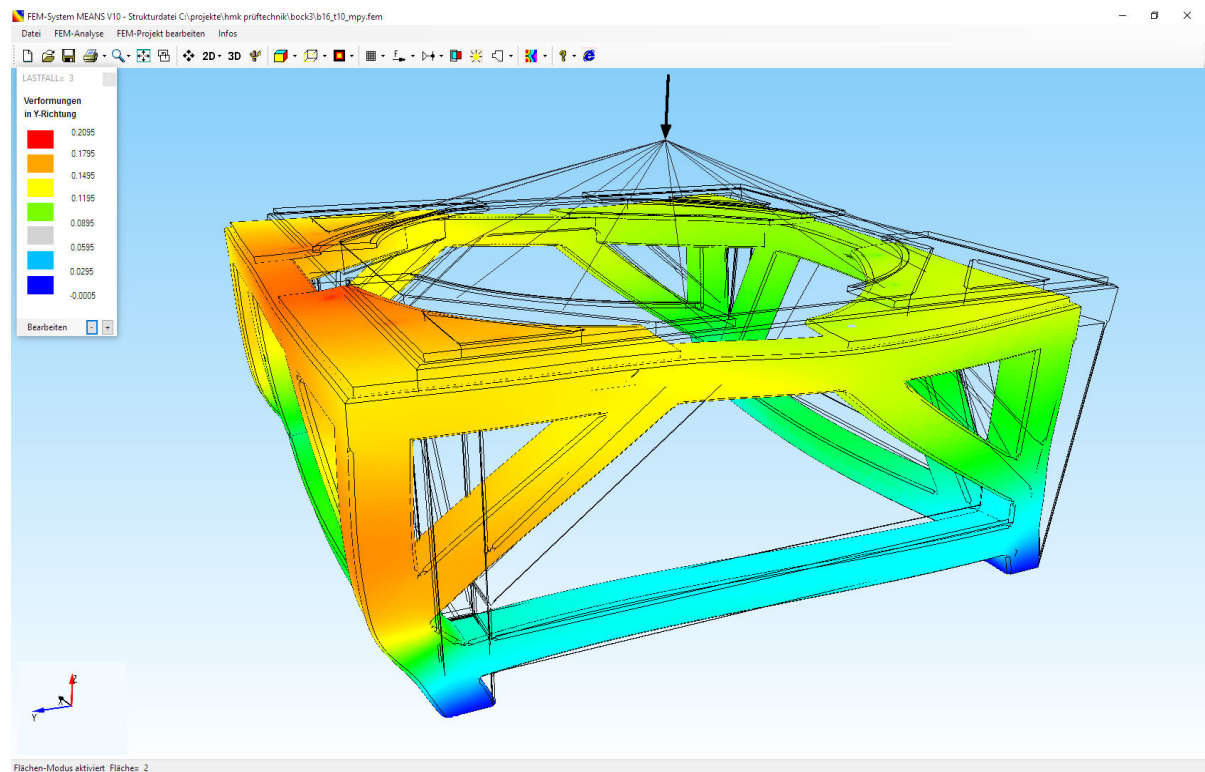


## Lastfall 3

- Total Load of 30 tons
- Gravitation Load 1g downward
- Gravitation Load 2g lateral

## Displacements

Max. Displacements in Y Direction = 0.2095 mm



## v.Mises-Stresses

Max. v.Mises-Stresses = 80 MPa

