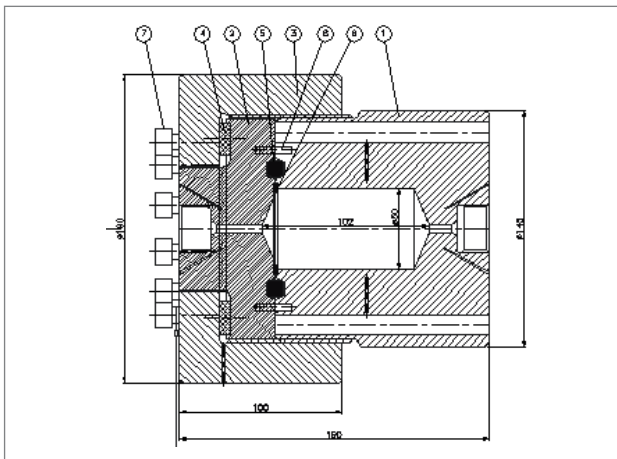


Autoclave for Laboratory Tests



Project Details

Project	Autoclave
Contractor	Aarhus University, iNANO
Client	SCF Technologies A/S
Built	Aarhus, Denmark
Year	2007/2008

iNANO Institute at Aarhus University needed an autoclave for testing supercritical processes in the research for SCF Technologies A/S.

PlantWare designed the autoclave for SCF according to PED regulation even though the volumen of the autoclave is only 200 cm³.

Design conditions

The design conditions for the autoclave was:

- Pressure: 600 bar
- Temperature: 600°C

It is designed for 20,000 cycles.

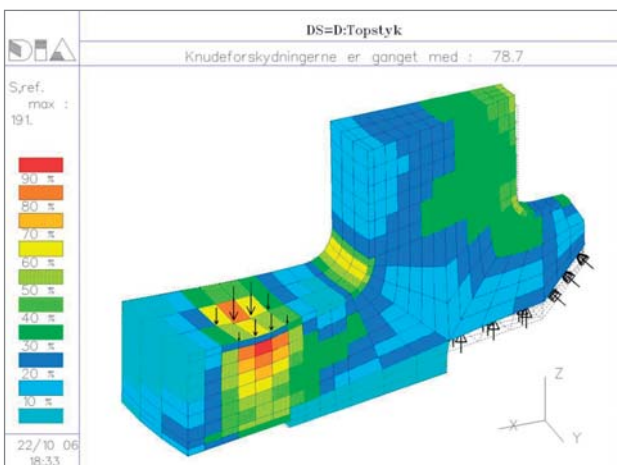
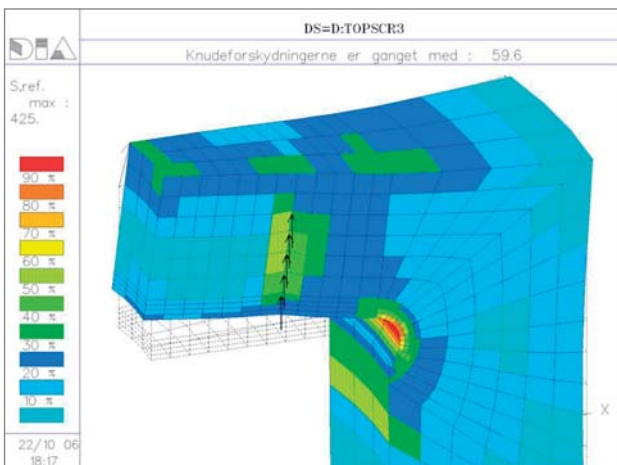
Material Selection

The autoclave, outer screw and tightening bolts was made of DIN X22CrMoV 12-1.

The lining in the autoclave chamber was of gold to obtain corrosion resistance.

The gasket was made of AISI 316L with an ellipse shape.

Calculations was made in a FE-model as shown at the pictures.



Contact



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