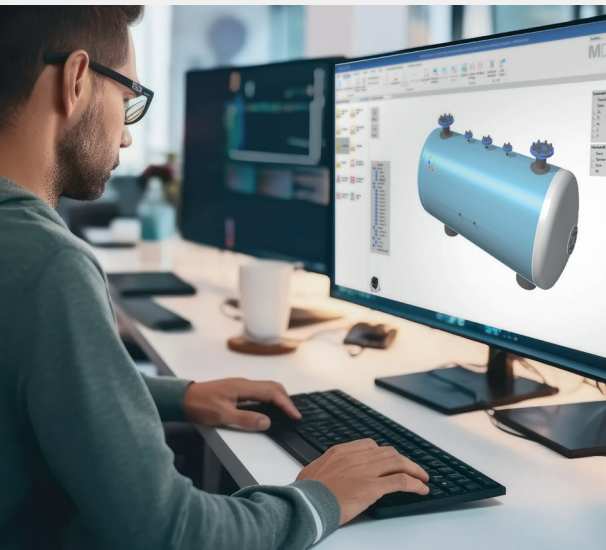


MDESIGN Seminar

## STRENGTH DESIGN OF PRESSURE VESSELS

### These topics await you...

- Introduction & special features of device types
- Life cycle & design of pressure vessels
- Guidelines, standards & Co. as a basis for appliances
- The practical implementation of the PED 2014/68/EU



PRESSURE VESSEL

### Objectives of the seminar

#### Understanding the differences

Norms, standards and guidelines for pressure vessels and apparatus

#### Cost efficiency

Material and cost savings through optimized designs

#### Increased security

Increased security in conjunction with optimizations

#### Practical examples

Evaluating & processing complex and new tasks

KNOWLEDGE UPDATE

### Use your advantages

- ✓ **Personal certificate**  
Documentation of your newly acquired knowledge after attending the seminar
- ✓ **Good integration into everyday working life**  
Compact seminar content spread over 2 days
- ✓ **Flexible choice of dates**  
Several seminar dates per year
- ✓ **Online & Live**  
Seminars from anywhere and ask our experts questions interactively
- ✓ **Seminar documents**  
We also provide you with all the relevant information for „afterwards“ for reference

### Target group

Engineers and specialists from the fields of development, design and calculation, teachers from educational institutions, experts from research institutions and testing companies.

PRESSURE VESSEL

## Content & Details



### Calculations: Basics of strength calculation

- ✓ Basic process engineering operations and equipment
- ✓ Elements of apparatus engineering
- ✓ Stresses on a hollow cylinder
- ✓ Basic strength condition
- ✓ Loads
- ✓ Material characteristics
- ✓ Types of failure



### Safety: The strength design in connection with the life cycle of apparatus

- ✓ The life cycle of process engineering equipment
- ✓ Key contents of the individual phases
- ✓ Influence of the life cycle on the design



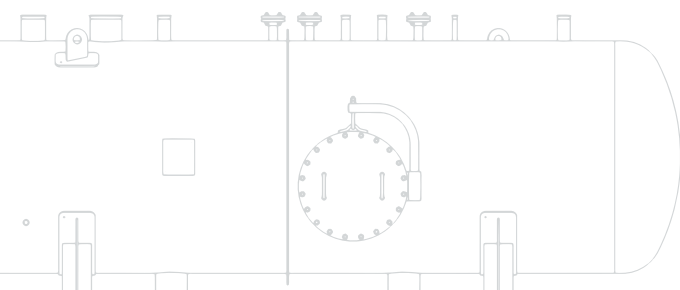
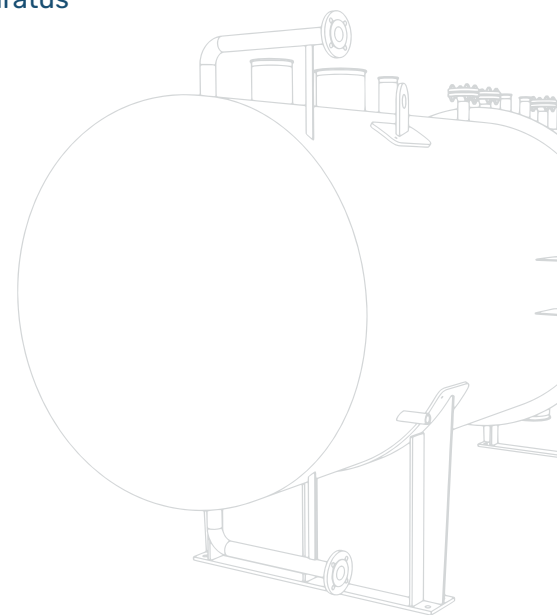
### Standards: The European Pressure Equipment Directive & basis for the placing on the market and operation of apparatus

- ✓ Difference between norms/standards and directives/laws
- ✓ Placing on the market and operation of appliances
- ✓ Norms, guidelines and standards in apparatus engineering
- ✓ Scope of application
- ✓ Definitions
- ✓ Safety requirements
- ✓ Selection of conformity assessment procedures
- ✓ Overview of the module



### Practice: Design of selected elements using the example of the AD2000 regulations

- ✓ Introduction and overview
- ✓ Calculation of cylinders and spherical shells
- ✓ Calculation of curved floors
- ✓ Cut-outs in devices



More info on  
[mdesign.de](https://www.mdesign.de)