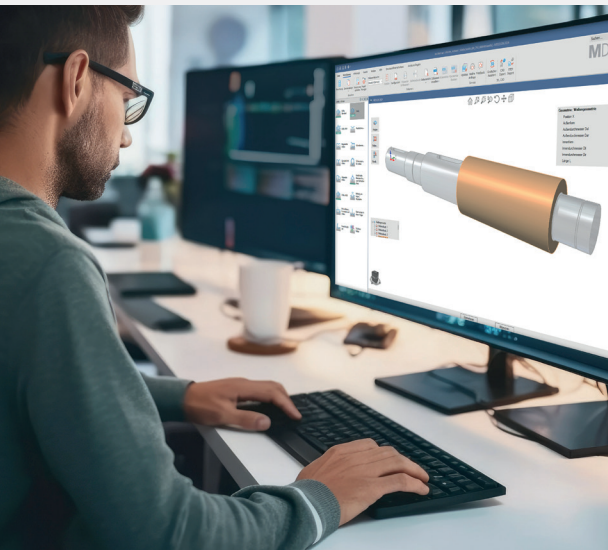


MDESIGN Seminar

SHAFT – DETECTION METHODS IN THE PRACTICAL APPLICATION

These topics await you...

- Criteria for a comprehensive shaft calculation
- Dynamic and static strength verification
- Notch coefficients and Material influencing factors
- Zeitfestigkeit und Lastkollektive



SHAFT

Objectives of the seminar

Digital tools

Use of computer-aided applications for wave calculations

Cost efficiency

Material and cost savings through optimized design

Increased safety

Increased safety in parallel with shaft optimization

Practical examples

Independent assessment of function and safety

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.

SHAFT

Content & Details



Calculations: Introduction and necessity of wave calculation

- ✓ Damage mechanisms and consequences
- ✓ Scope of application DIN 743 Part 1 - 4
- ✓ Criteria for a comprehensive shaft calculation

Determination of influencing factors

- ✓ Notch effect figures
- ✓ Material influencing factors
- ✓ Use of analytical and numerical methods



Safety: Evidence and comparison of methods

- ✓ Origin/theory/concept
- ✓ Dynamic strength verification
- ✓ Static strength verification
- ✓ Load case differentiation/voltage curves
- ✓ Differentiation between the calculation methods (DIN 743/FKM)
- ✓ Decision criteria for the choice of method



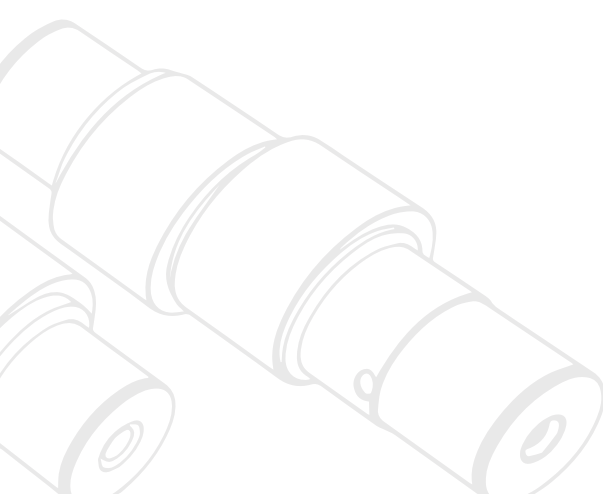
Standards: Fatigue strength and load spectra

- ✓ Fatigue strength calculation according to DIN 743
- ✓ Load assumptions and creation of load spectra
- ✓ Use of miner processes
- ✓ Sample calculations for DIN 743 - Supplement 1 & 2



Practice: Computer-aided application of DIN 743 / Direct comparison with FKM guideline

- ✓ Modeling and transfer from CAD systems
- ✓ Calculation and graphical evaluation
- ✓ Safety certificates and documentation
- ✓ Example calculation using a drive shaft with notch overlay



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