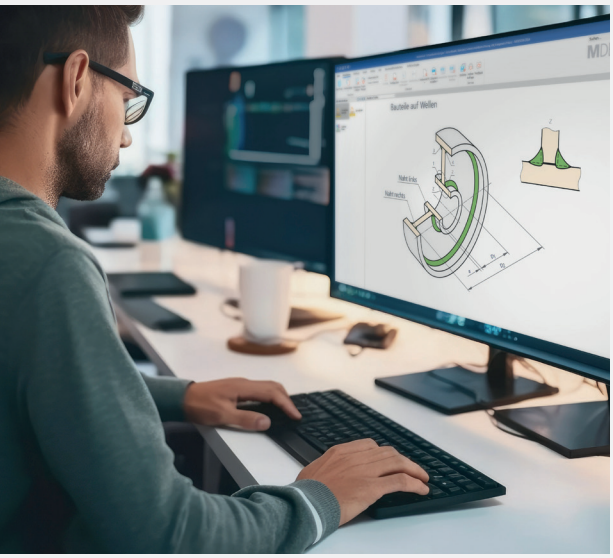
MDESIGN

MDESIGN Seminar

DIFFERENCES IN APPLICATION AND METHODS OF WELD SEAM CALCULATION

These topics await you...

- → Properties of welded joints
- → Current detection methods
- → FEM modeling techniques
- → Standards for weld seam calculations
- → Seam quality and durability



WELD SEAM CALCULATION

Objectives of the seminar

Calculation and design
Application of current guidelines such as FKM, Eurocode or DVS 1612

Cost efficiency
Material and cost savings through optimized design practices

Increase safety
Increase the reliability of verification with knowledge of assessment principles

Practical examples
Independent evaluation of complex applications from practice

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.

WELD SEAM CALCULATION

Content & Details

Introduction: Properties of welded joints

- Cracks in welded joints
- Fractures in welded joints
- Structure of fusion-welded joints
- Possible hardening during welding
- Welding triangle - weldability of a construction
- Examples of damage to welded structures

Safety: Verification concepts for the calculation of welded joints / FEM modeling techniques for evaluations

- Nominal voltage concept
- Structural stress concept
- Notch stress concept
- Effective voltage concept

Standards: Weld seam calculations according to FKM, Eurocode and DVS 1612

- Static and fatigue strength verifications
- With nominal voltages and local voltages
- Examples with various tools (FKM inside ANSYS, Limit and MDESIGN weld)

Practice: Relationship between seam quality and strength

- Evaluation groups according to ISO 5817 steel (ISO 10042 aluminum alloys)
- Weld post-treatment methods and their influence on fatigue strength

More info on
mdesign.de