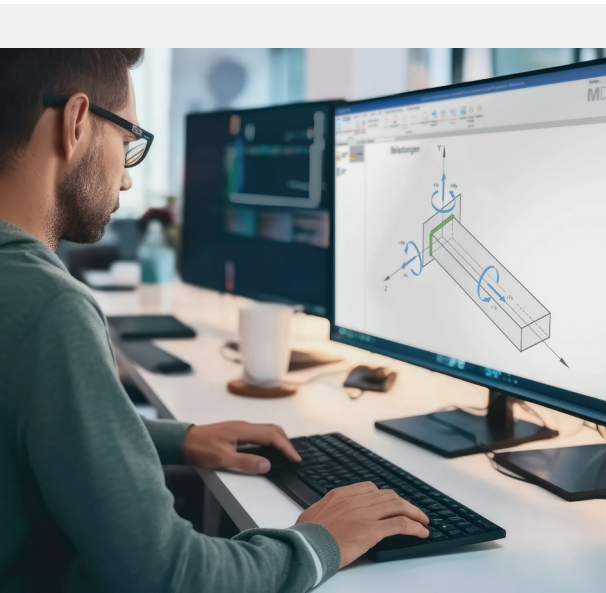


MDESIGN Seminar

WELDED JOINTS QUALITY DESIGN IN PRACTICE

These topics await you...

- Weldable design in practice
- Assessment of the quality of a welded construction
- Avoid damage and optimize welded constructions
- Standardized welding drawings according to ISO 2553



WELDED CONNECTIONS

Objectives of the seminar

Avoid weak points

Recognize structural changes and notch effects and consider countermeasures

Cost efficiency

Material and cost savings through optimized design practices

Increased safety

Secure verifications in conjunction with optimizations

Practical examples

Independent assessment and evaluation of welding situations

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.

WELDED CONNECTIONS

Content & Details



Standards: Symbolic representation of weld seams according to ISO 2553, general tolerances and cut edge quality

- ✓ Basic and additional symbols and fork
- ✓ Dimensioning of weld seams
- ✓ Exercise part with consolidation
- ✓ General tolerance ISO 13920 - Meaning and application
- ✓ Tolerance for thermally cut parts according to ISO 9013
- ✓ Application example for cut edge testing according to EN 1090



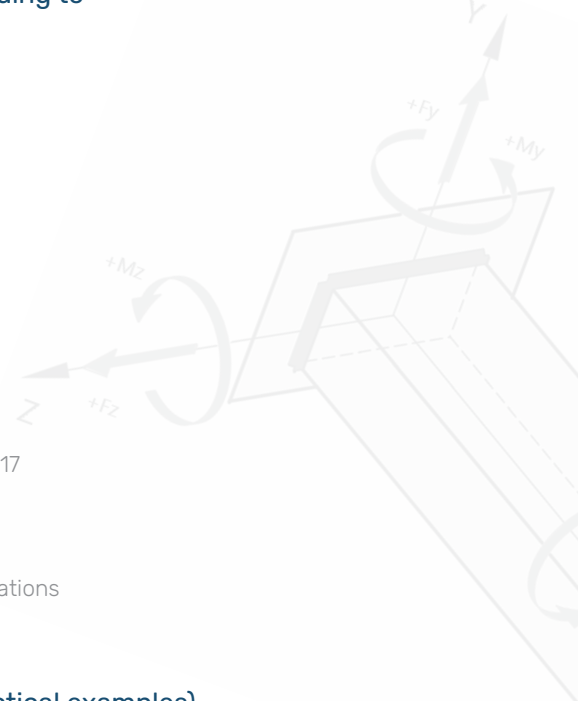
Safety: Quality of a welding

- ✓ What does this depend on - how can the designer control it?
- ✓ Weld seam irregularities and evaluation groups according to ISO 5817
- ✓ Introduction to non-destructive testing (NDT) and its importance
- ✓ Quality assurance measures in welding technology
- ✓ Application-related quality requirements and manufacturer certifications
- ✓ Measures to prevent damage



Practice: Design of welded constructions (with many practical examples)

- ✓ Influence of welding parameters on the executed weld seam for selected welding processes and the importance of welding procedure specifications (WPS)
- ✓ Weld seam preparation, structural changes and their effects
- ✓ Weld seam as a notch - and what you can do about it
- ✓ Development of residual stresses and distortion and possible countermeasures, measurement of residual stresses
- ✓ design to meet requirements - industry-neutral - suitable for production and stresses
- ✓ Application-oriented design - mechanical engineering, rail vehicle construction, steel construction, vehicle construction, welded sheet metal constructions, etc.
- ✓ Weld seam post-treatment to increase fatigue strength
- ✓ Case studies - design and layout according to FKM and Eurocode



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