
Interactive workshop -Weld on Sweden

**Root cause analysis for
Specifying training with CUs for designers**

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Fatigue failures have occurred with different final fractures, brittle and ductile - 2 examples are on the table



You are the project leader and must solve the problem, so it does not happen again.

- **What competences and actions would you propose?**
- **Can you suggest "Competence Units" for the designers or calculators?**

One possible list could be

Identify typical signs on the fracture surface

- Fatigue "strings", final rupture area, initiation defects, inclusions or similar?

Identify the load situation

- Force levels, no of cycles, max load, service life?

Check the materials used

- Yield, ultimate strength, fracture toughness etc?

Try to picture a scenario leading to failure

- Service loads or exceptional things?

Do analysis if a correlation can be found

- Methods to use, analysis same as scenario?

CU = Competence Units

- **Welding for designers**
- **Material analysis**
- **Load analysis**
- **Static load analysis**
- **Design of welded products subjected to fatigue loads**
- **Fatigue analysis AND Fatigue life assessment**