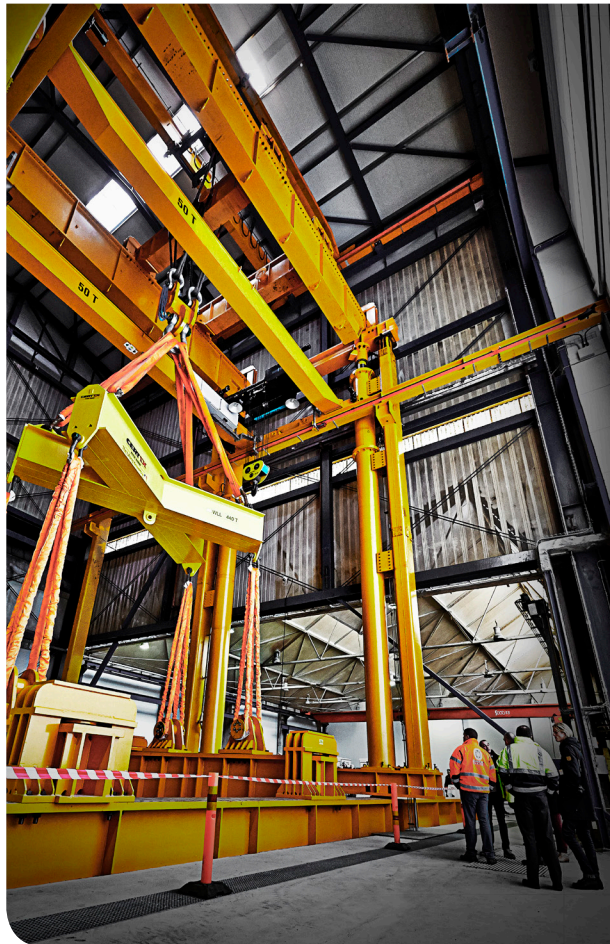


# Engineering services

Expert  
knowledge



# 24/7/365 service

## Contact our technical department



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## LIFTING KNOWHOW

Our Lifting KnowHow is about safety and our efforts to avoid accidents during lifting operations.

For many years we have delivered innovative solutions to our customers' lifting challenges, and through this we have developed extensive expertise and experience.

We use our Lifting KnowHow to give you the best possible service and technical support:

- Design of lifting equipment
- Advice on selection of products
- Advice on your specific lifting job
- Inspection and certification of your equipment



# Technical department

**Solution  
provider**

Our technical department specializes in designing lifting equipment - anything from small simple lifting beams to large complex lifting equipment with mechanical functions.

We also help customers designing handling and transport equipment - including various machines and cranes.

## **We are solution oriented**

- Committed problem solvers
- Reliable and trustworthy
- Comprehensive technical know-how
- 24/7/365 service
- Full documentation package

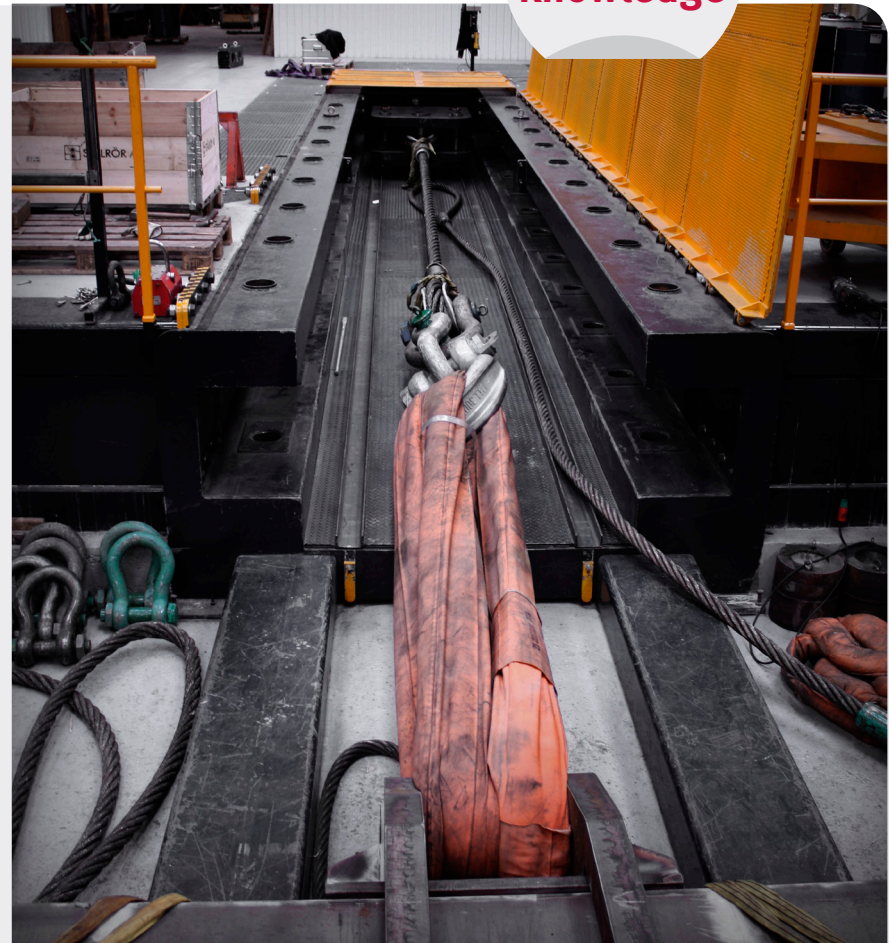


# Our engineering services

Expert  
knowledge

## Our engineering services include:

- Design of lifting and handling equipment
- Project management
- CE marking of equipment according to the Machinery Directive 2006/42/EF
- Calculations: structural analysis and rigging calculations
- Instruction manuals
- Risk assessment
- 3D and 2D drawings
- Manufacture of equipment
- Load test in our own testcenter
- SAT and FAT: Performance of site acceptance test and factory acceptance test





# Lifting equipment

Innovative  
design

Our lifting equipment is designed according to our customers' requirements and standards such as:

## **EN13155**

Cranes, Safety, Non-fixed load lifting attachments

## **DNVGL-ST-0377**

Standard for shipboard lifting appliances

## **DNVGL-ST-0378**

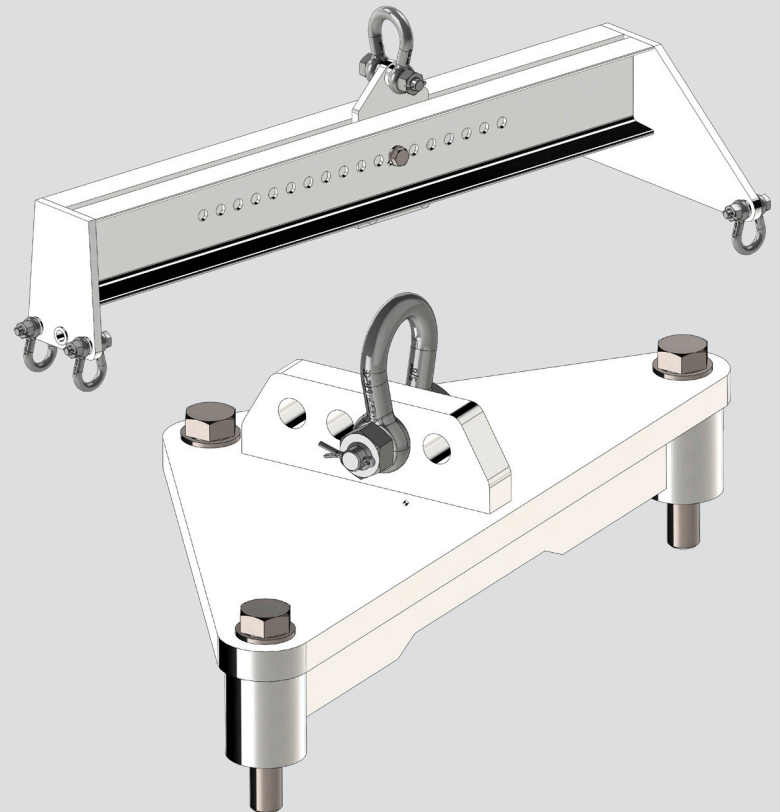
Standard for offshore and platform lifting appliances

## **DNVGL-ST-E271**

Offshore containers

## **DNVGL-ST-E273**

Portable offshore units



# Crane design

Our technical department designs various types of cranes for the on- and offshore industries. We offer both standard and tailor-made solutions. The cranes are designed according to our customers' requirements and standards such as:

## **DS/EN 13001-1 and DS/EN 13001-2**

General crane design

## **DS/EN 15011**

Bridge and gantry cranes

## **DS/EN 14985**

Slewing jib cranes

## **DS/EN 13852-1**

Offshore cranes

**Safety  
first**



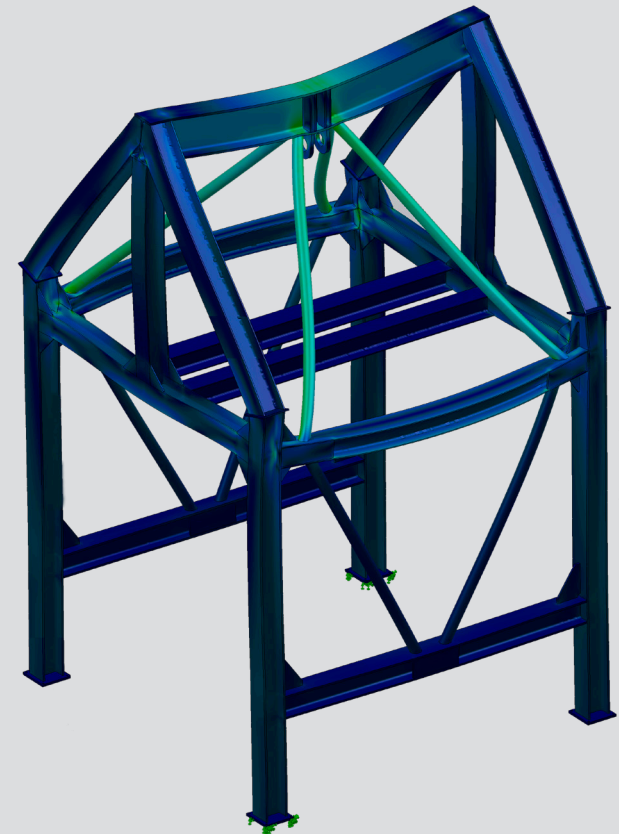
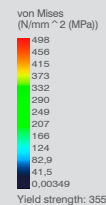
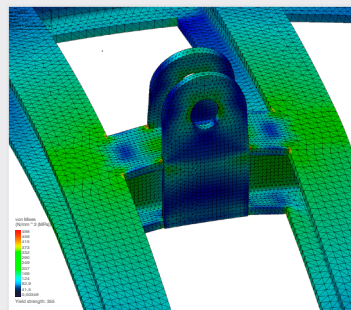
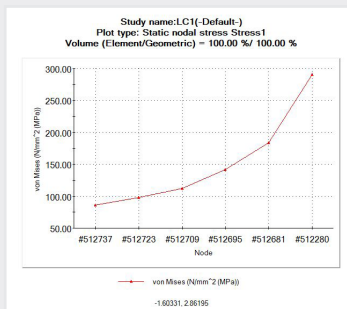
**“**  
We are your  
consulting partner  
in lifting projects and  
optimizations on-  
and offshore.  
**”**



# Structural analysis

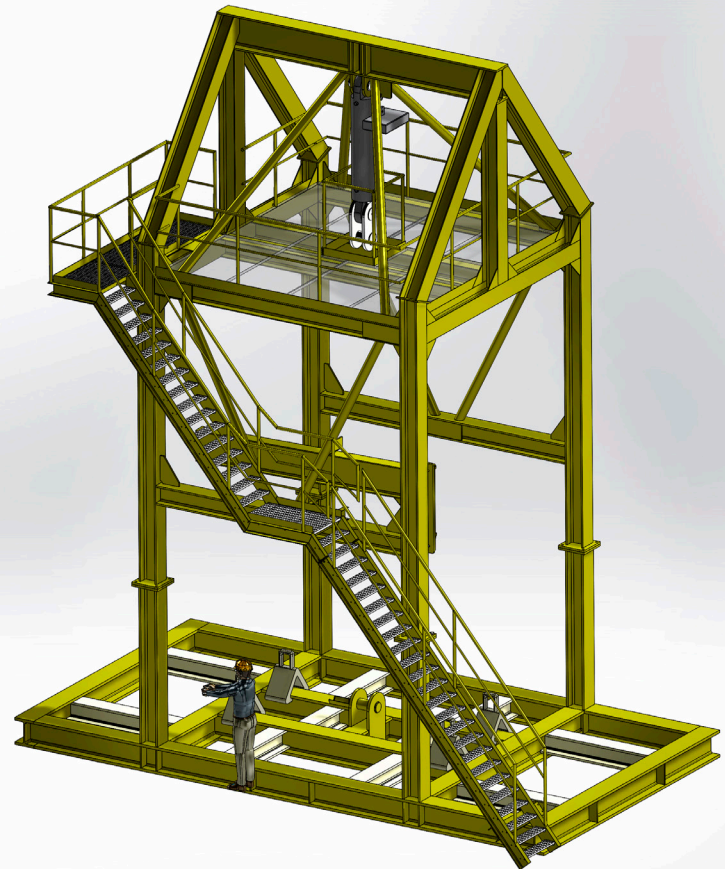
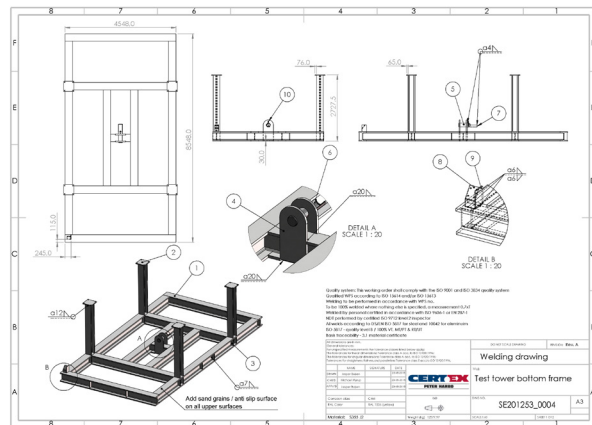
Our experienced engineers are experts in calculations and they will bring solutions to your most challenging projects.

- We perform structural analysis (analytical and numerical FEM) and rigging calculations



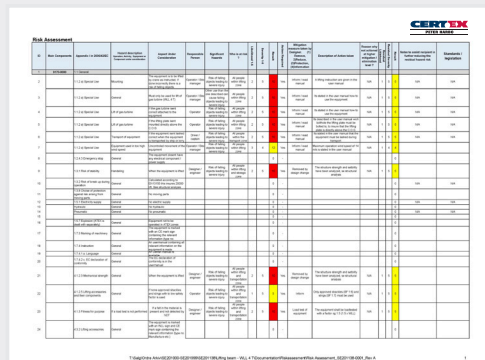
# 3D and 2D drawings

We are experienced in developing complex mechanical systems and steel structures. Using Solid Works, we are able to generate 3D models, which we use to produce 2D drawings for manufacturing.





We always do risk assessments and instruction manuals according to the Machinery Directive 2006/42/EF.



**Manufacture of equipment**  
We only work with welding subcontractors certified according to ISO 3834-2 (quality requirements for fusion welding of metallic materials - comprehensive quality requirements).

# State of the art testing

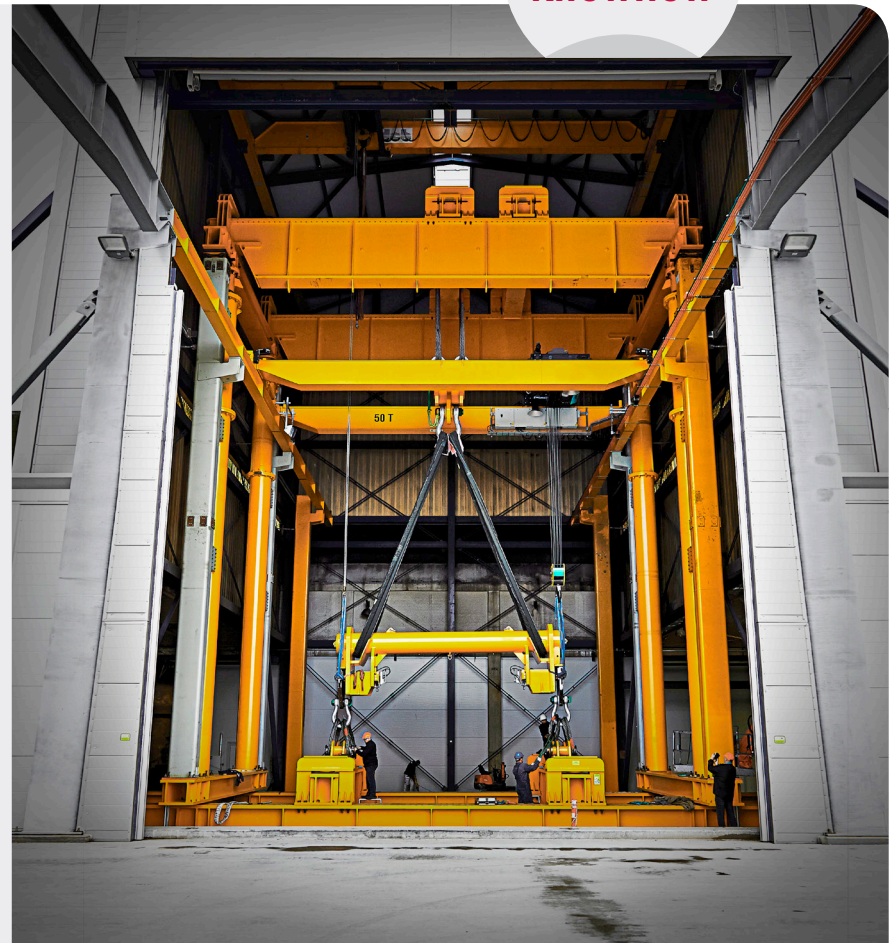
40 years  
knowhow

We perform all kinds of tests both in our own testcenter and at offshore locations. Our tests are always performed with safety in focus.

We are able to test most equipment such as cranes, MOB / lifeboats, lifting beams, wire-, fiber- and chain-slings, frames, winches etc.

## Your benefits:

- High safety
- Economical solutions
- Time saving
- Low testing costs
- Full documentation package





# Load tests

State of  
the art  
testing

## Test tower

The first 2,250 ton test tower in the world with 3D laser measurement.

UP TO 2,250 TON

## Water Weights

Test of lifting beams, cranes etc. up to thousands of tons.

UNLIMITED

## Test tower

We perform load testing of all kinds of equipment in our vertical test tower.

UP TO 50 TON

## Test bench

Pull tests up to 1,200 ton and breaking tests up to 900 ton.

UP TO 1,200 TON



“

Based on 40 years experience  
and KnowHow within lifting and  
testing, CERTEX Peter Harbo A/S  
is your safe and reliable partner  
in steel wire rope, lifting  
applications and related services.

**CERTEX**  
**PETER HARBO**

**Lifting Solutions Group**  
Axel Johnson International

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