

STRUCTURAL VERIFICATION ACCORDING TO STANDARDS



Solution
Partner
PLM

SIEMENS



Measurements
And Inspections



Design



Finite Elements
Analysis



Code
Checking



Cloud
Engineering



Tender
Documentation

Proud Member of



TechNetAlliance



<https://sdcverifier.com>

With 20+ years of experience, we offer comprehensive engineering consultancy services in different industries and help companies all over the world to solve complex engineering problems. We build digital twins using Finite Element method to check the design, verify structures according to industry rules, provide tender and certification support.

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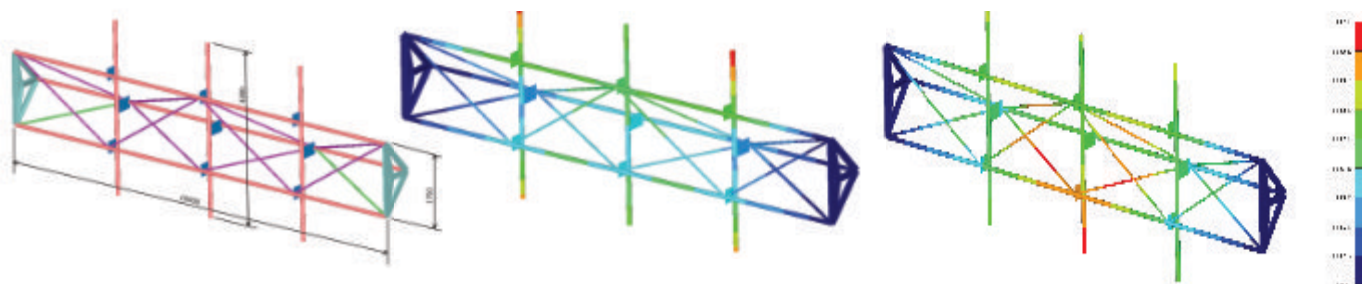
STRUCTURAL CALCULATIONS AND CODE CHECKING

Since 1998, SDC Engineering has been providing consultancy services in Offshore & Marine, Heavylift, Aerospace & Defence, Civil, Automotive and other Industries.

Located in Haarlem, Netherlands and Lviv, Ukraine, our team is delivering solutions for strength, effectiveness and safety by performing structural calculations all over the world.

Using the most powerful Finite Element solutions and our home-built code checking program SDC Verifier, with the synergy of qualified team of engineers and software developers, we offer tailor-made solutions for a wide range of engineering problems.

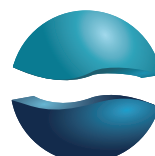
Static Analysis



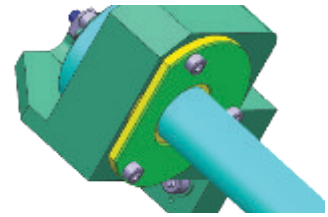
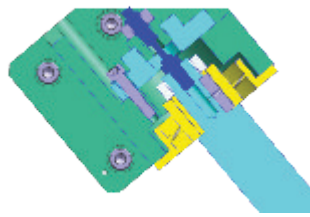
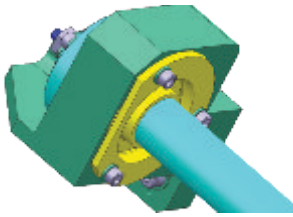
Non-linear Calculations



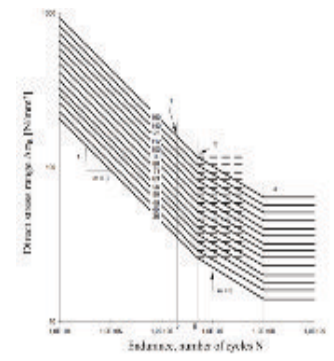
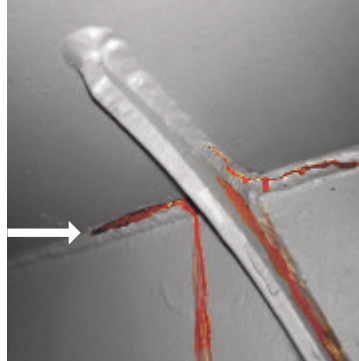
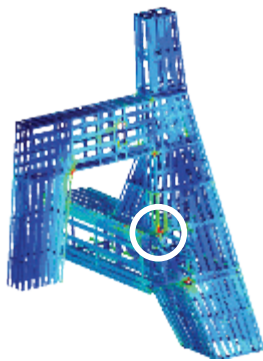
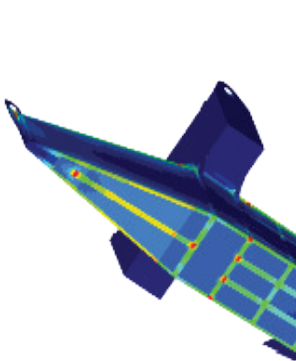
Normal modes frequencies



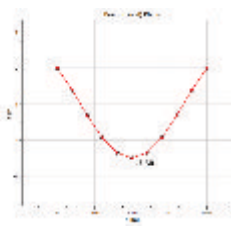
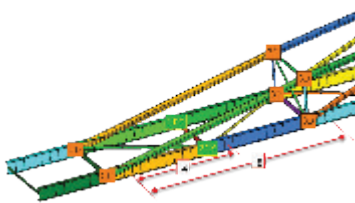
Design



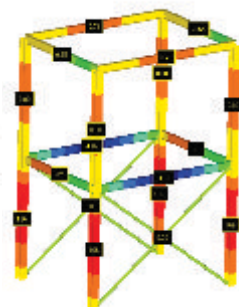
Fatigue. Residual lifetime calculation



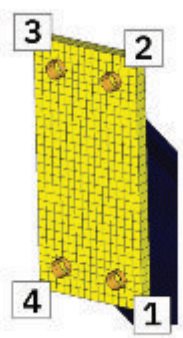
Buckling of Beams and Plates



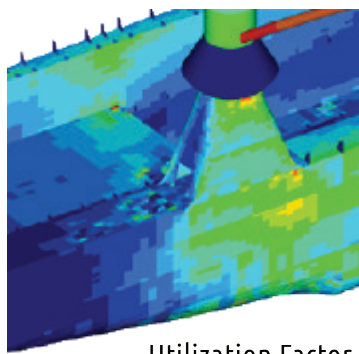
Deflection checks



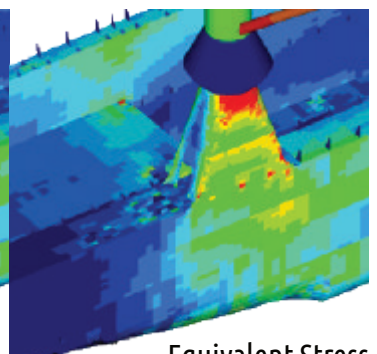
Bolts and connections checks



Static stress check

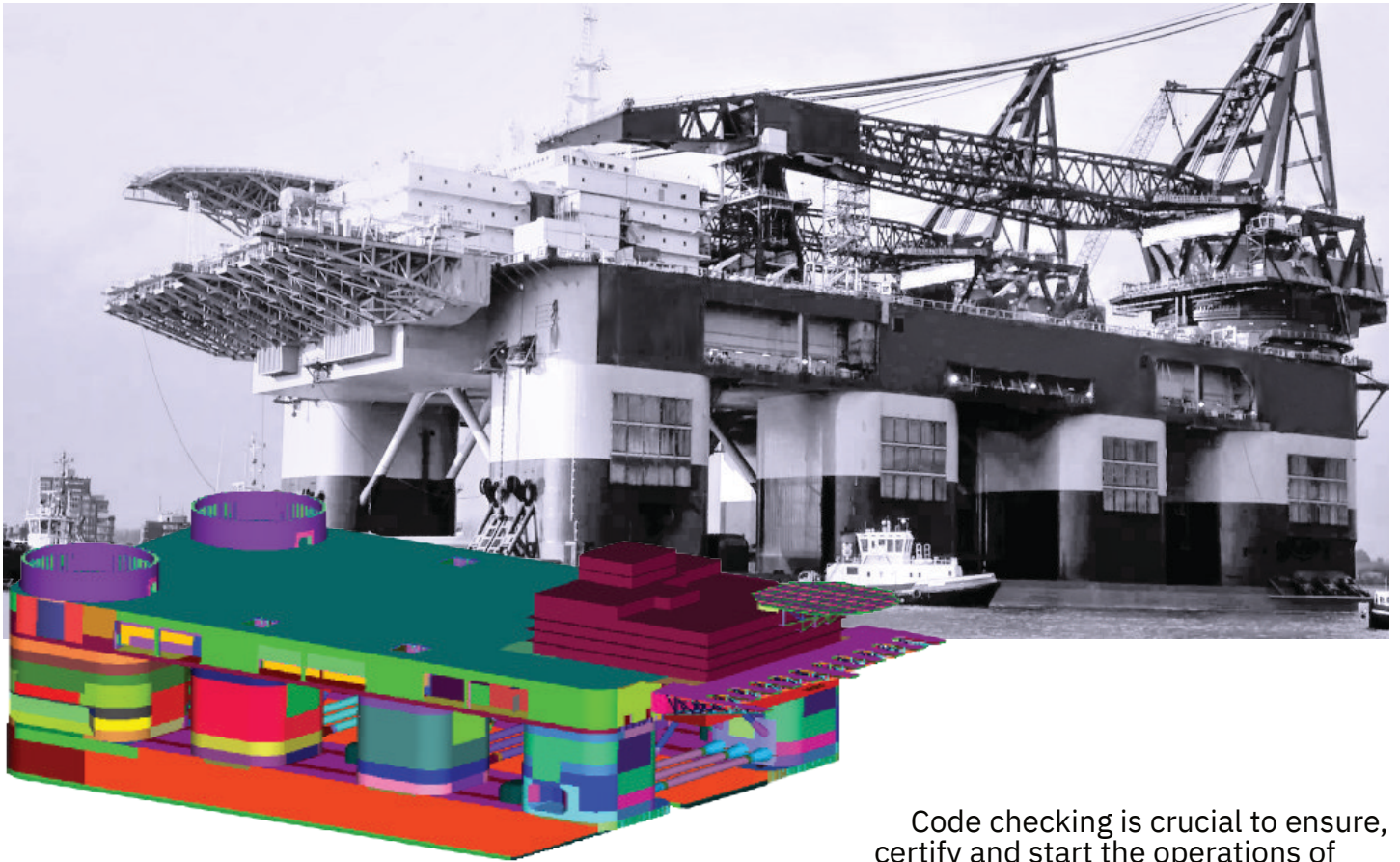


Utilization Factor

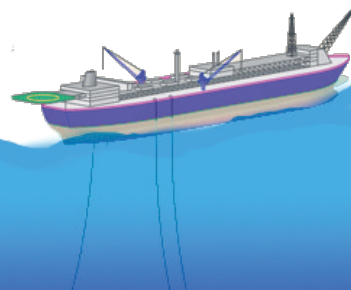
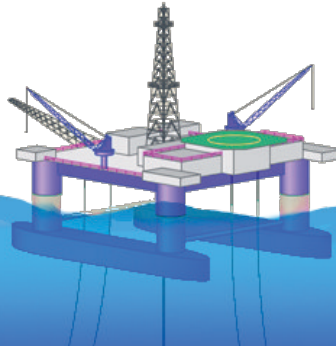
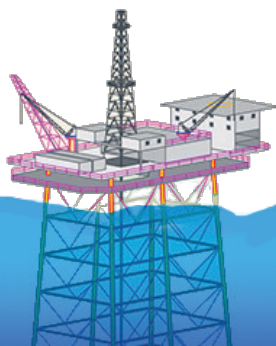
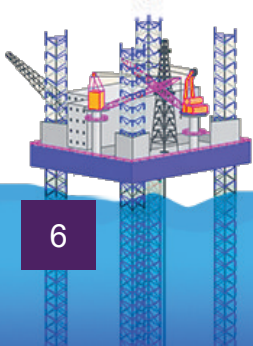
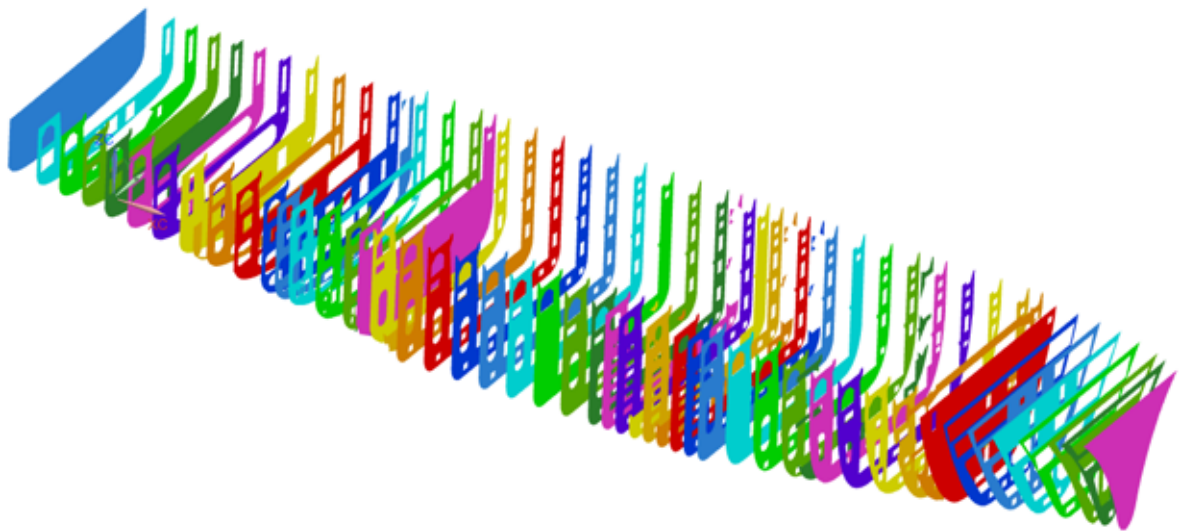
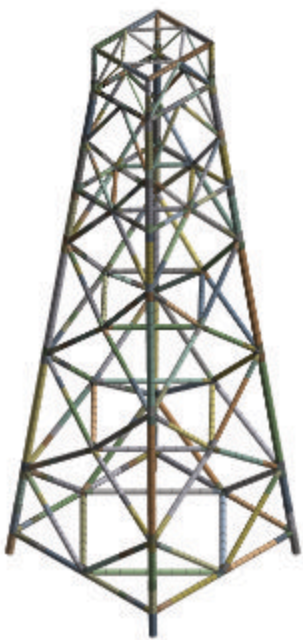


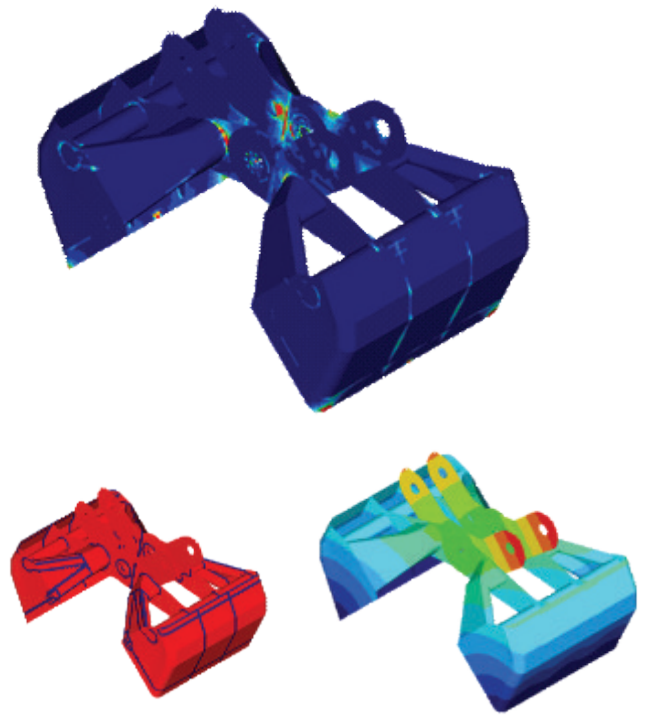
Equivalent Stress



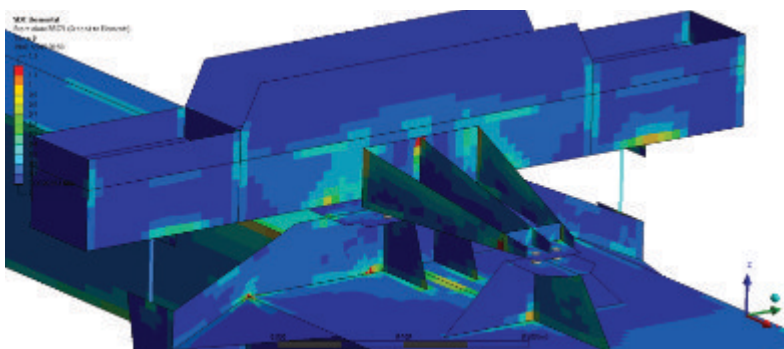
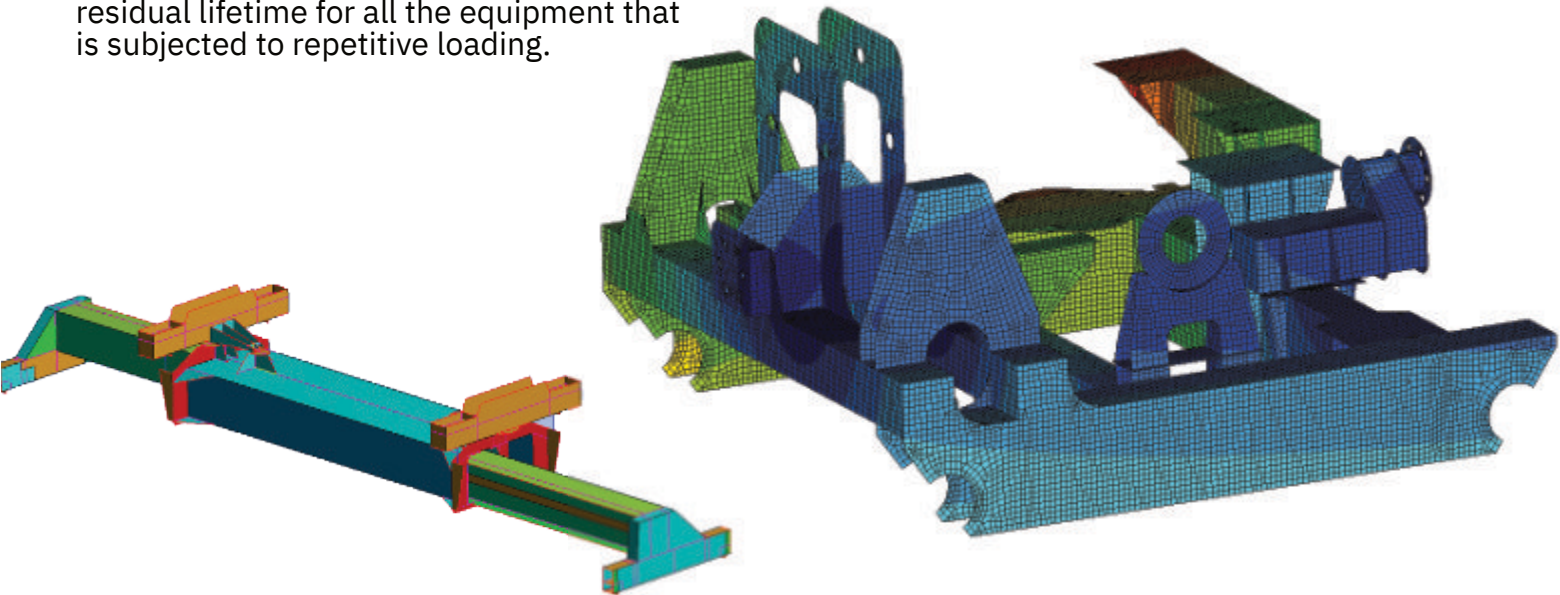


Code checking is crucial to ensure, certify and start the operations of any offshore structure. We're providing calculations according to DNV and ABS rules, as well as custom checks to make sure that vessel, oil rig or platform is built according to industry standards.





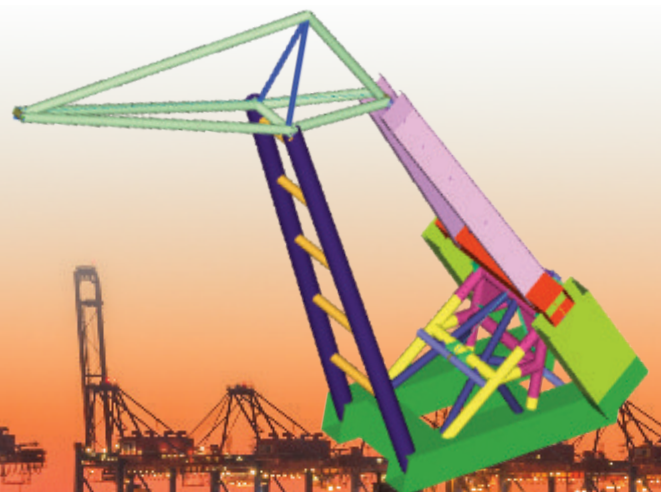
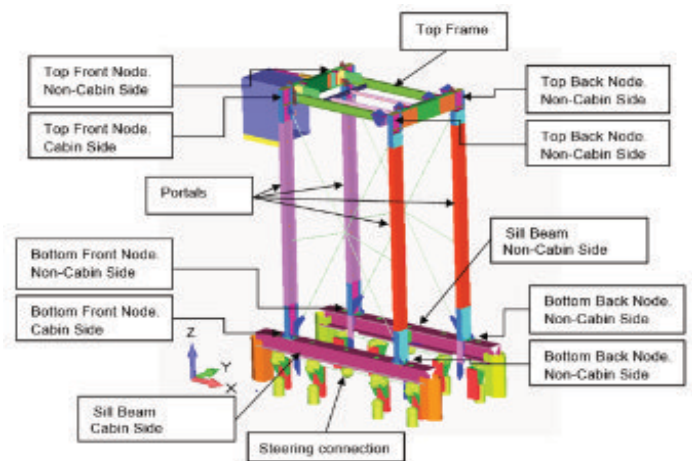
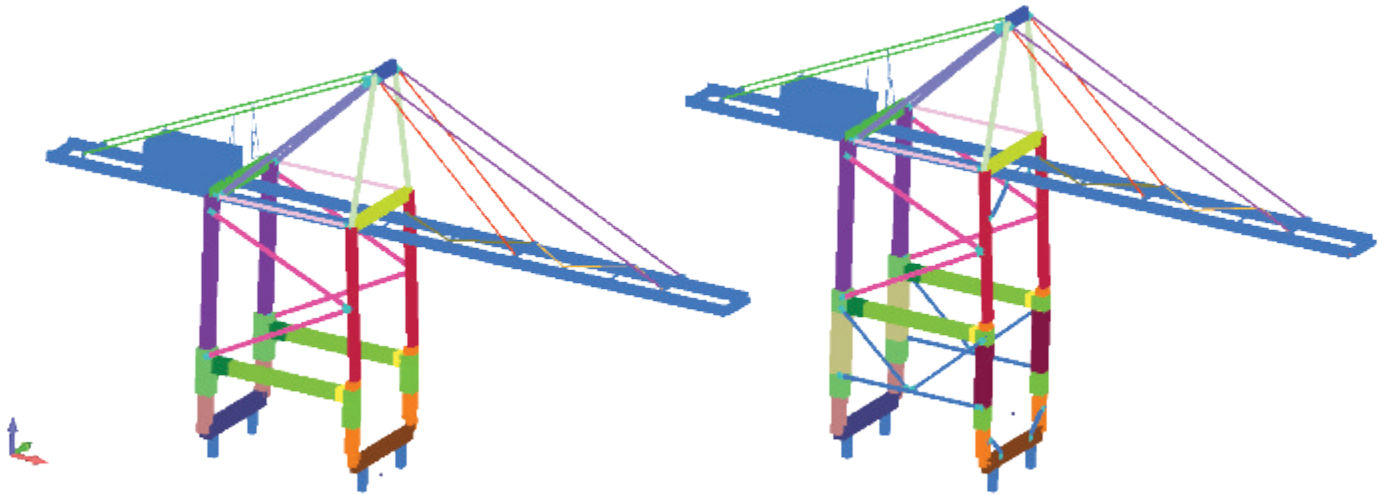
Fatigue is a common problem for the heavy lift equipment. Using the SDC Verifier software our engineers are able to investigate the problems or predict the residual lifetime for all the equipment that is subjected to repetitive loading.

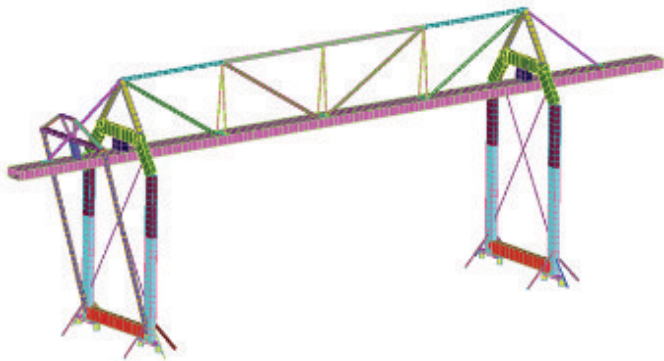
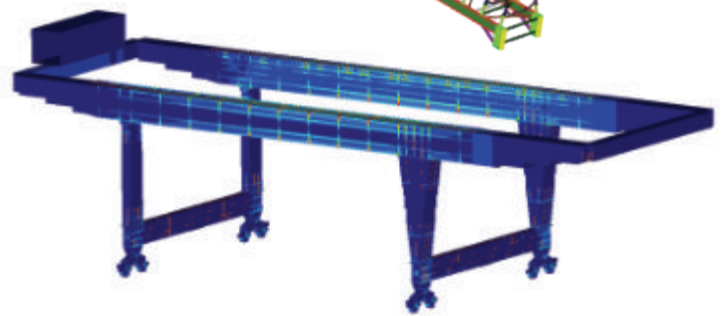
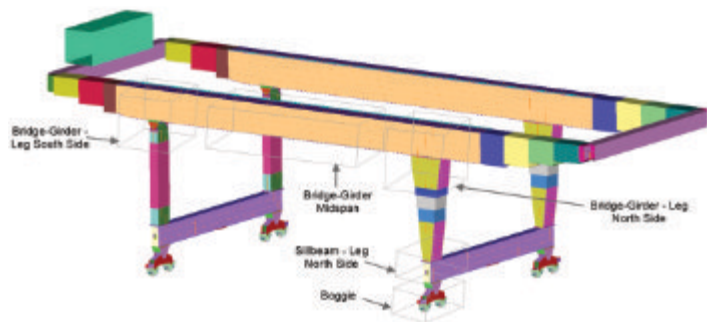


| PORT CRANES

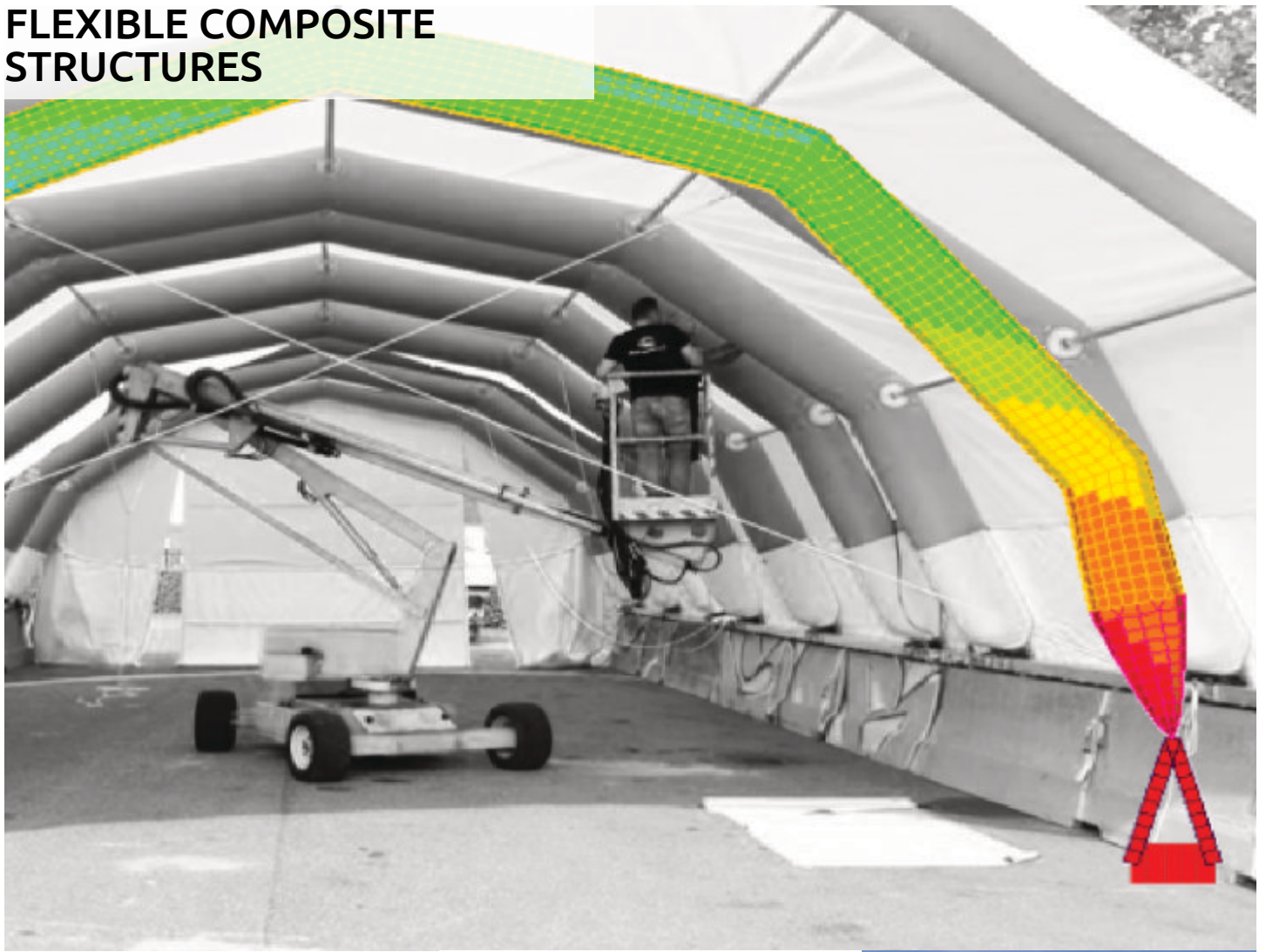
Our Port Cranes projects record covers a large number of geographical areas where more than 50 Ship-to-shore, RTG, RMG, floating cranes, and port equipment such as Straddle carriers, Reachstackers, etc. were analysed to solve complex problems: strength, residual lifetime, stiffness, stability, design changes and modifications, inspections.

We offer full-scope multi-discipline engineering, technical documentation and project management services directly to terminals, as well as to industry contractors, maintenance companies, suppliers and operators.



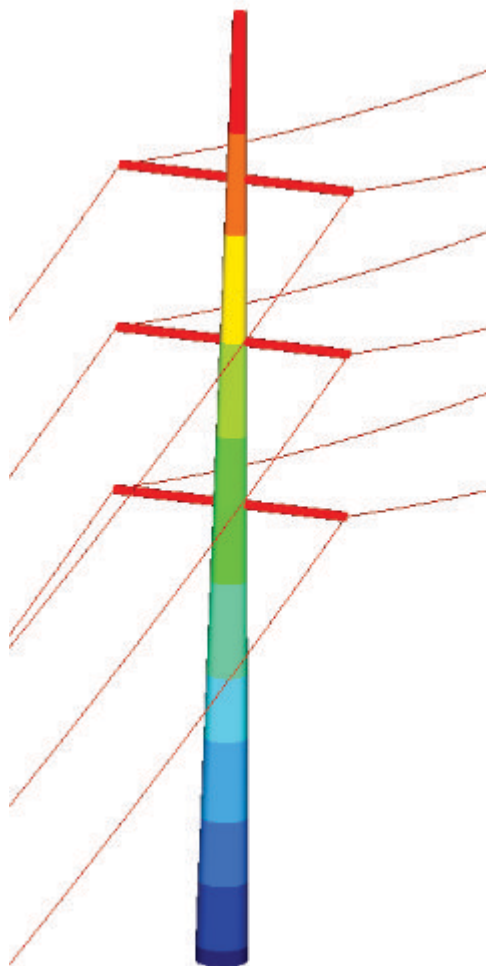


FLEXIBLE COMPOSITE STRUCTURES



We have a strong background of structural analysis for complex composite structures built with uncommon materials under unpredictable conditions.

Detailed full-range reporting of all calculations performed by outstanding engineers is extremely helpful to pick the right design solutions and make sure that the evaluated structure will be safe and effective.

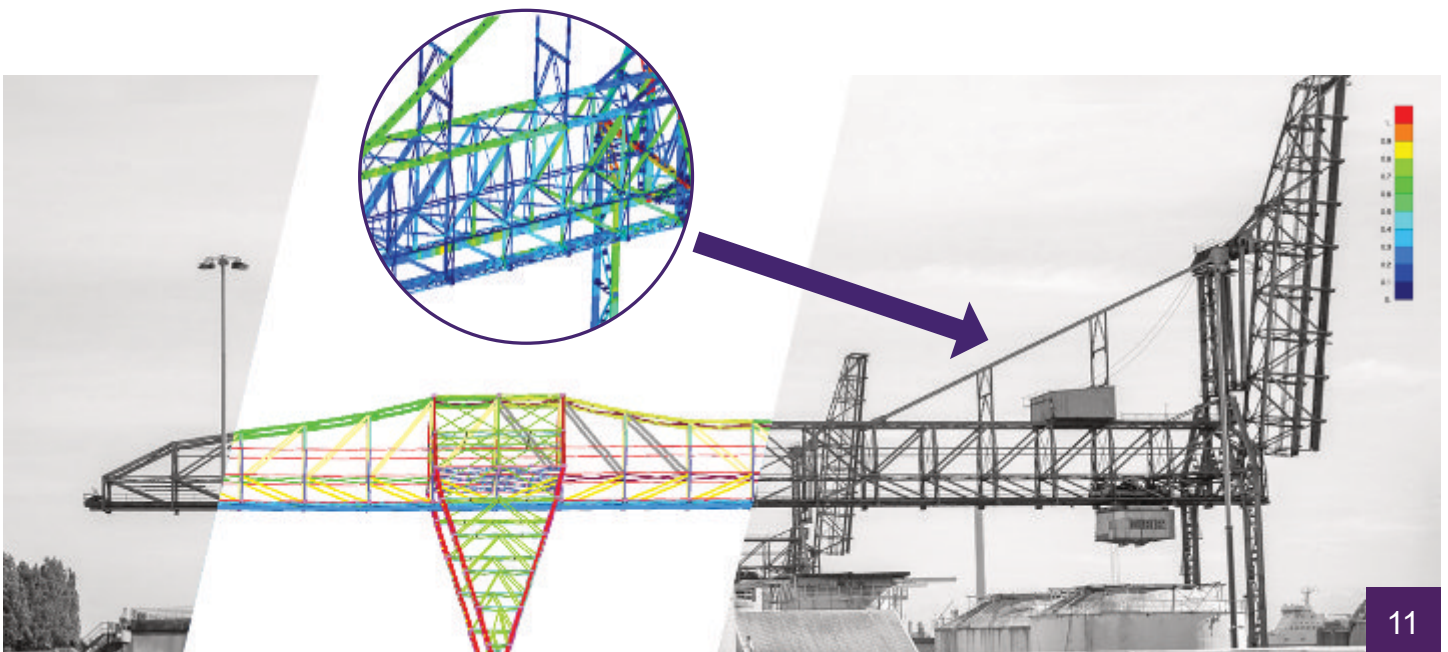


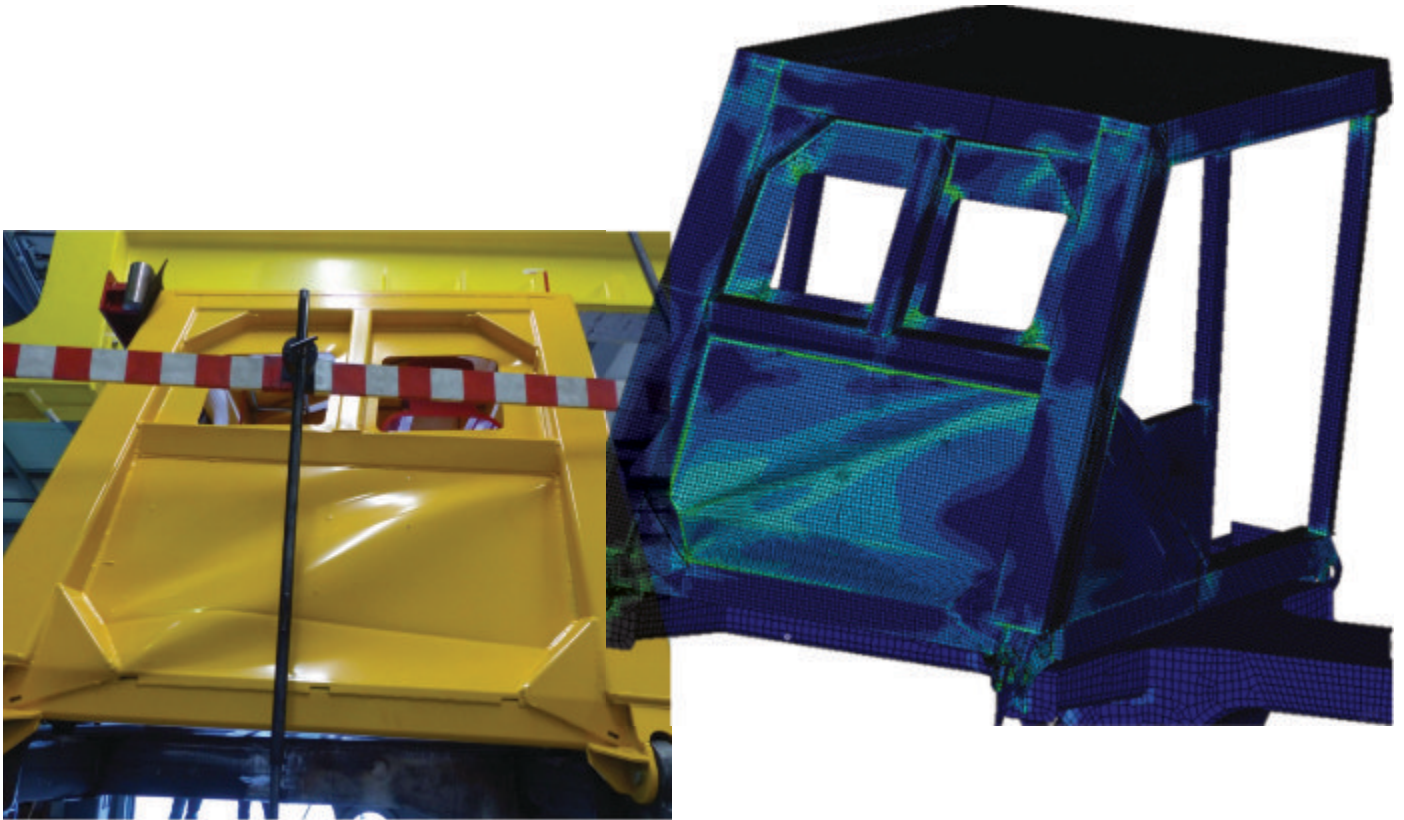
RIVETS, BOLTS CONNECTIONS CHECKS



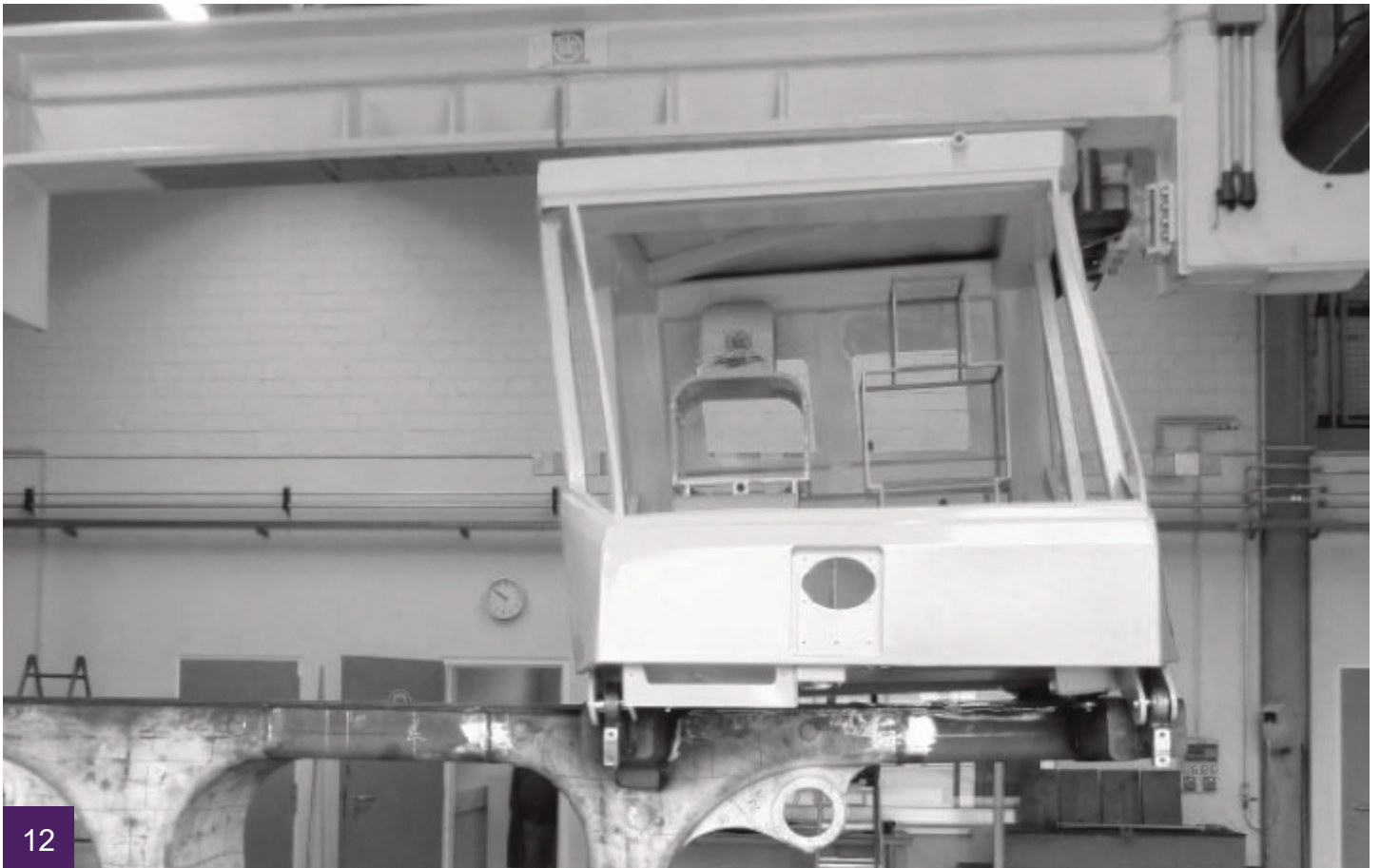
Analysing the structures with our own software SDC Verifier gives us a possibility to check a huge amount of joints and connections against complex standard and under exceptional load combinations. Precise calculations are performed by experienced engineers to fulfil the rules of different industries standards.

For any kind of bolted or riveted connections it's possible to analyze the tension, shear, slip resistance and highlight the bolt that has to be replaced or fixed.

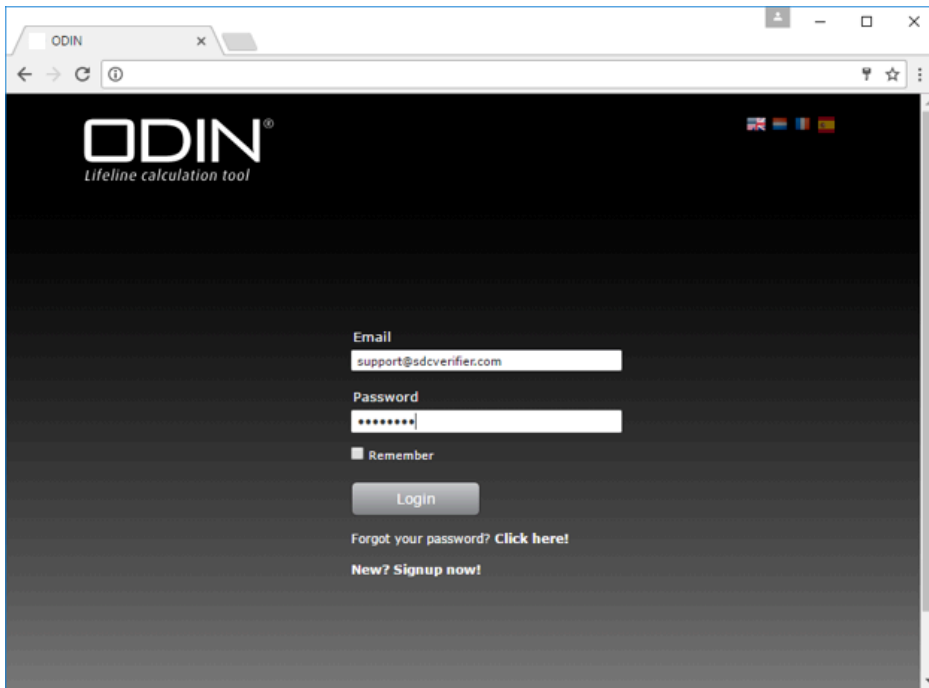




In some cases, time-consuming and expensive live tests are required by rules of the certification organisation or standard. Creating the digital twin of the structure saves a lot of time and money in the design process and helps to reach the required level of energy absorption and strength.



WEB-BASED TOOLS



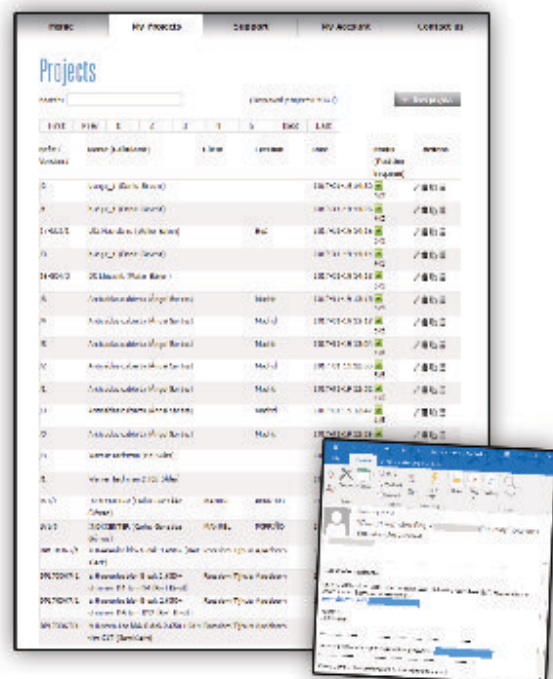
For repetitive parametric calculations our software development department offers a web-based tool. All you have to do is to set the parameters of the calculation online and send it to the server. After the analysis is successfully performed in the cloud results report will be sent to your e-mail address.

Customizable, simple, private and secure. Web-based tools can save you a lot of engineering time on a routine work.

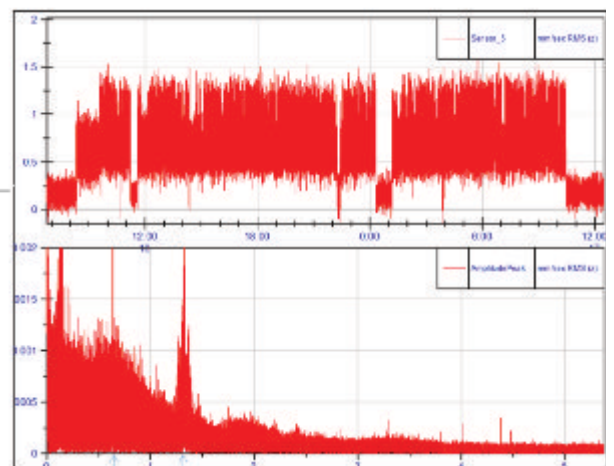
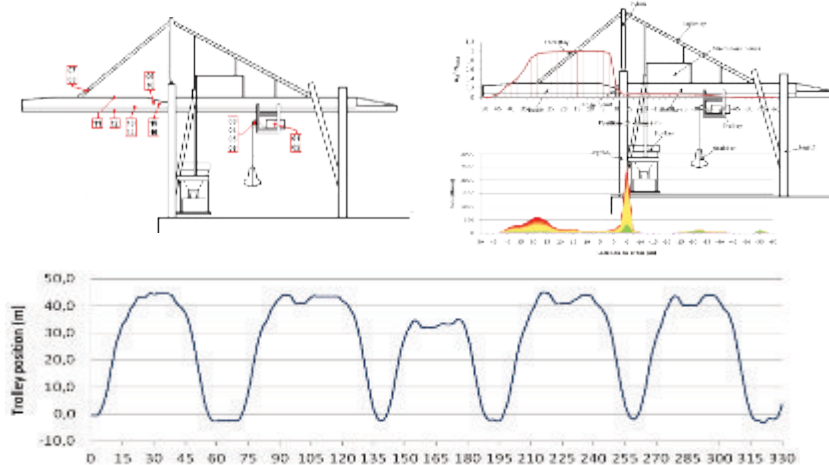
Mail us at

support@sdverifier.com

To learn more



| INSPECTIONS



We're always ready to visit the site for the inspection, highlighting of the potential problem spots, measurements of dimensions, speeds, weights, accelerations, etc.

Professional inspection is beneficial to understand the behaviour of the investigated structure and make sure that calculation will meet reality.



| CLIENTS & FEEDBACK

“Our projects for in-depth analysis of crane steel structures were professionally supported by the team of SDC Engineering. Their ability to perform complex FEA of heavy duty equipment such as container cranes has helped us grow our market in the global container handling industry”,

- Rene Kleiss, KCC





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