Case Study: Offshore Certification



Myles DeRouen

Position: Mechanical Design Engineer Company: Sole Trader Location: Lafayette, LA

SkyCiv Beam

SkyCiv Structural 3D

Main Applications

- SkyCiv Beam for Skid Car certification
- Beam and Structural 3D Preliminary Designs
- Iteration during Design Process
- Double Check

How SkyCiv Helped Myles

- Saved Myles \$15,000 in engineering consulting fees for Skid car certification (DNV 2.7-1)
- Offers an alternative to SolidWorks and ANSYS for quick, accurate analysis
- Allows simpler iteration and collaboration with other engineers
- Clean professional reporting

SkyCiv CLOUD ENGINEERING SOFTWARE

Feedback

Speed of Analysis (10/10)

Simple Iteration process (9.5/10)

Ease of Use (9.5)

Functionality (9/10)

Customer Support (10/10)

In Myles' Words

I am a mechanical design consultant in Lafayette Louisiana. So I take on a variety of oil field projects. I recently encountered a project that required DNV certification on the skid that the customers product would be mounted on. DNV requires structural analysis on the skid and several supporting documents to go with that report.

Supporting documents include the calculations and moment justification on the different beams of the skid as well as clear definition of the shear and strain of each member. These can be done by hand but with my unit having so many different members it became very cumbersome. I submitted to DNV and the engineer viewed the classification of the supports for each full penetration welded member from my point of view. He saw a member with full penetration weld at each end as pin support on each end and I saw it as fixed support on each end.

This became very complex because of the geometry of some of the members. We were spending hours going back and forth with iterations and various scenarios in both Solidworks and ANSYS. We would have to run full simulations every time and **it would take all day to do the process** on several occasions.

I searched for a beam analysis software that was fast and simple with a report worthy of intellectual debate. I came across SkyCiv and tried it for free. It gave me most everything I needed in the free version and in only a matter of a minute or two. Seeing that there were more segments of data to be acquired in their full professional version, I signed up on the spot and to my surprise I got a report that gave me more data in a minute or less than I have ever gotten out of any of the other softwares I have used in my twelve years in the CAD industry.

I got the other engineer on a GoToMeeting and we were able to change supports and cross sections in seconds and settled our debate in less than twenty minutes. The fact that supporting calcs were provided made all the difference in the world. My alternative was to hire another consultant to completely redo my work from scratch and verify my results. That would have cost me thousands of dollars and I got it done on SkyCiv at a fraction of the cost.

I was able to get everything I needed in a report that graphically displayed results beyond just a scattered spreadsheet of values and min and max charts. The other engineer was so impressed that he approved the drawing AND agreed with my views on the members in the same day.

I have used and owned every major design and engineering software that is in the mechanical space. SkyCiv is able to fill a need that I have quite often for checking my beam selections and structural design in mere minutes. The other softwares available that target this process have dozens and dozens of buttons cluttering a very uninviting interface. SkyCiv's user interface makes me want to explore and expand my level of interaction with its features. In fact, I was able to use SkyCiv the very first time with successful results with no tutorial. It is so simple that it can be figured out by the information given in the descriptions that there was not even a doubt that I was doing the analysis appropriately.

I use Sky Civ every opportunity I get because of the high quality professional result that is give and the ease of iteration should I need to change my design. I believe in the potential it has to save other engineers time so much, that I am now a Sales Representative of SkyCiv to distribute the software to engineers in my local area.