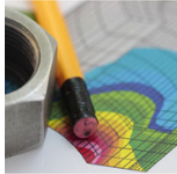


## FEA SERVICES FOR A GULF BASED COMPANY



### The Client's Business Requirement

Flatworld Solutions was approached by a premier engineering services provider based out of the Gulf. Over the years, client has made a name for themselves by providing exceptional engineering services to customers belonging to a variety of industry verticals such as infrastructure, construction, etc.

The client's requirement was specific. They had their own mass lift at a project site with a load bearing capacity of 1 ton, and wanted its capacity to be increased to 3 ton. The client chose Flatworld Solutions based upon our extensive experience in providing similar services, and tasked us with conducting both Finite Element Analysis (FEA) and Fatigue Analysis (FA) with pinpoint accuracy.

### The Flatworld Approach

Our solution to address the client's requirements included the following -

- + Our technical team conducted the procedures for Fatigue Analysis (FA) and Finite Element Analysis (FEA) using Pro/ENGINEER (ProE), as per customer specifications
- + We put together a team of technical experts based on their experience and knowledge, which further helped in identifying the resources and key steps necessary to complete the task at hand. They also ran a full simulation of the whole process for complete accuracy, ensuring top notch work quality
- + In order to increase the mass lift's weight bearing capacity, we had to keep in mind that -
  - The increase in weight would also lead to an increase in the height of the mass lift
  - We had to achieve a high safety factor for the new mass lift
  - The lift weight had to be perfectly optimized

In order to ensure the above, our mechanical engineers helped create a list of all items required for finishing the task with their material specifications, also known as the Bill of Material (BOM). The BOM also helped us to draw accurate project cost estimates

### A Satisfactory Project Outcome

The client was extremely satisfied with the way we handled the project. Some of the highlights from our faultless execution of the project include -

- + Our team of mechanical engineers was able to increase the load capacity from 1 ton to 3 ton for the mass lift in a short time, ensuring enhanced customer satisfaction
- + We were able to successfully increase the mass lifts' height from 5 meters to 6 meters
- + The weight lift was effectively optimized and achieved a safety factor of 2
- + Our engineers generated exhaustive and detailed analysis reports
- + Based upon client request, we delivered complete video animation files of the analysis simulation in AVI format
- + Our prior experience ensured we finished the project in extremely short TAT and at highly cost-effective rates
- + The customer promised to approach us directly in case of any other requirement, as well as provided our reference to other potential customers

### Outsource to Flatworld Solutions for Accurate FEA and Fatigue Analysis

Over the past 16 years, Flatworld has provided excellent [FEA services](#) to global businesses across a variety of industry verticals; from chemical engineering, to automobile, aerospace, etc. Our exceptional [mechanical engineering services](#) are further highlighted by our talented resource pool, wherein all our engineers have either PhDs or Master's degree from prestigious institutions.

[Contact us](#) now for efficient, [cost-effective](#) and professional Finite Element Analysis and Fatigue Analysis (FA) Services.