NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

Project Detail

MODELLING AND ANALYSIS OF FORK AND IMPROVING SPREADING METHOD IN FORKLIFT

❖ **Student Details**

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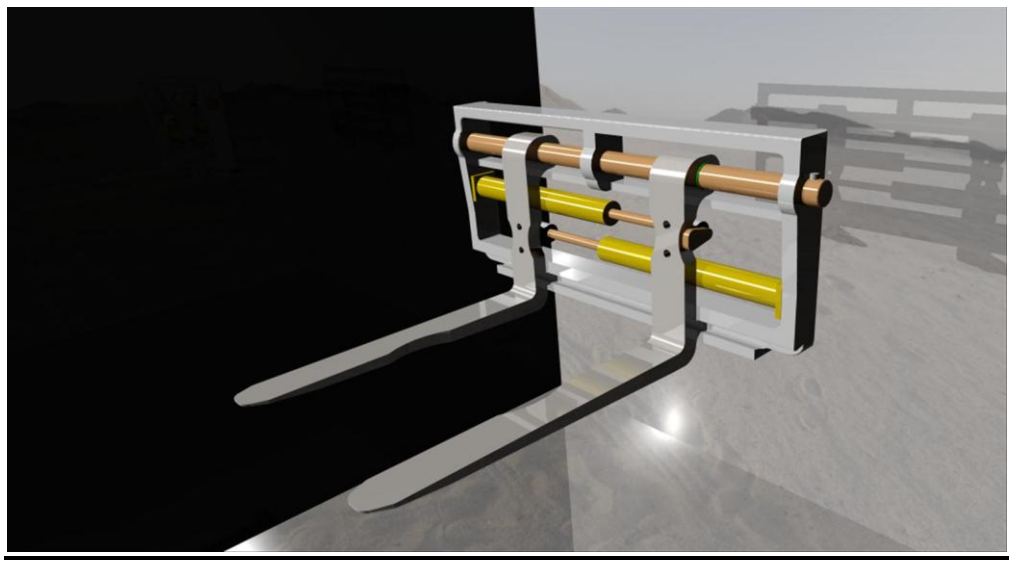
❖ **Name of Project**

MODELLING AND ANALYSIS OF FORK AND IMPROVING SPREADING METHOD IN FORKLIFT

❖ **Working Principle**

Forklift is the basic material handling device used in warehouses. In industry, it is not possible to have products of same sizes to handle always. So, it is necessary to change the spread of the forks accordingly the size of goods. After deciding to work on forklift for our project, we visited the website of VOLTAS FORKLIFT and took their product as a reference for our project. We saw there that the spread varying operation is done by simply pick and place method on a uniformly slotted carriage. We also saw that it is very difficult to vary the size of fork in forklift because of fork weight. To minimize this effort of spreading the fork, we thought of use of some mechanical mean. After brainstorming, we got alternates for it which is the use of hydraulic piston cylinder arrangement for easier movement of forks, we selected the alternate for our project work and after a hard work we have justified it as per our knowledge with minimum weight of fork.



❖ **Application**

- It is used in ports and logistic centres –Emptying containers.
- It is used in Iron and Steel Industries.
- It is used in Radioactive Waste and Beverages.

❖ **Cost**

No Cost

❖ **Internal Guide**

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