

DESIGN OF  
A TOGGLE JACK

Project report submitted by

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## Summary

This textbook deals with the subject of screw jack design. The type of screw jack which was selected for design is a typical one applied in power transmission systems. The power is transmitted through the screw, into two nuts and links for raising or lowering a load of 4KN. It has been required that the area of the jack should not exceed 300mmx300mm, therefore general assumptions concerning the length and width of the parts were made.

The design involves force and stress analysis of the screw and nuts, links, pins, base and finally the top plate at which the load is applied.

In conclusion, all the parts alone first and then in assembly, are computer aided designed.

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