

DESIGN OF A GEARBOX

Project Report Submitted by

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ABSTRACT

The aim of this project is to design a gearbox for the transmission of power from a motor to a compressor. The whole content of the project is divided into 8 chapters.

The first 3 chapters deal with gear calculations. Two methods are employed for calculating the gear dimensions the Lewis and Hertz method and the recommended procedure by BS 436.

The next chapter (Chapter 4) deals with the design of the shafts where the gears are secured.

Chapter 5 deals with the design of the bearings while Chapter 6 contains the selection of the various equipment to be employed in the system.

Chapter 7 deals with the design of the casing, including the suggested overall gearbox dimensions.

The last chapter deals with the cost of the gearbox, including the individual cost of each part of it.

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