OPTIMIZATION OF A COOLING SYSTEM

BY

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PROJECT REPORT

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SUMMARY

The project is carried out, in order to achieve optimum conditions in H.T.I cooling system.   At the beginning a definition of optimization is made, as well as a brief discription of H.T.I cooling system.

A number of technical data for the various components are collected, and an energy analysis is prepared.

Then a mathematical model of the cooling system is made, (the equations and the variables of each component) and a number of constraint equations is obtained.

After that, several optimization technicques are described, and the "Lagrange Multimpliers" method is selected to be used in the project.

Then the "Lagrange Multimpliers" method is applied, and through certain mathematical techniques a rough solution is achieved.

Finally few comments and conclusions are made about the results.

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