

# DESIGN OF A ROD CONVEYOR FOR FOOD INDUSTRIES

BY  
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PROJECT REPORT SUBMITTED TO THE  
DEPARTMENT OF MECHANICAL ENGINEERING  
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3<sup>rd</sup> year student in

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**OBJECTIVES:**

1. To present complete design calculations for the proposed system to meet the terms and conditions specified below.
2. To present manufacturers catalogues and selection procedures for the machine components to be used.
3. To present assembly drawings including a material list.
4. To make separate detailed drawings to a large scale for small components.
5. To prepare a cost estimate for the proposed design.

**TERMS AND CONDITIONS:**

1. The device should be suitable for carrying unit loads in a horizontal plane (including horizontal curves).
2. The conveyor should be useful for carrying loaves of bread.

**Student: kivernites Aristides (3ME)**

**Supervisor: Nikos Papanastasiou**

## **ABSTRACT**

**This project deals with the design of a rod conveyor for carrying loaves of breads.**

**Chapter 1: introduction and selection of design sketch.**

**Chapter 2: deals with the selection of the conveyor chain, stock wheels, motor and gear unit.**

**Chapter 3: deals with the selection of shafts (rods) and bearings.**

**Chapter 4: deals with the selection of UPN channel**

**Chapter 5: deals with the selection of square hollow sections for used as legs to hold the conveyor**

**Chapter 6: deals with the maintenance and accessories of the conveyor system.**

**Chapter 7: is a cost estimate of the conveyor system.**

**Chapter 8: deals with the drawings with dimensions and assembly procedures.**

**Tables and catalogues related with the conveyor system are included at the end of the project.**

**Reference books and catalogues at the last page.**

# NOTE

**SOMETIMES I WAS REFERRING TO SOME PAGES IN**

**THIS PROJECT. AND DUE TO SOME PROBLEM**

**OCCURRED AT PRINTING THIS BOOK YOU MUST ADD**

**NUMBER 6 IN ALL PAGES (e.x. (see picture: 4, page 23) you**

**must turn in page  $23+6=(29)$ ).**

**CATALOGUES AND TABLES WILL BE GIVEN**

**SEPARATELY IN A TABLE BOOK.**

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