

HIGHER TECHNICAL INSTITUTE

MECHANICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

M/1030

«DESIGN AND CONSTRUCTION  
OF A DROP-HAMMER FOR  
POWDER COMPACTION»

CHARALAMBOUS MARIOS

JUNE 2007

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## “DESIGN AND CONSTRUCTION OF A DROP-HAMMER FOR POWDER COMPACTION”

BY : CHARALAMBOUS MARIOS  
CLASS : 3M

NICOSIA , JUNE 2007

HIGHER TECHNICAL INSTITUTE	PROJECT NO
	3723

**“DESIGN AND CONSTRUCTION OF A  
DROP-HAMMER  
FOR POWDER COMPACTION “**

**BY: Charalambous Marios**

**Project Report  
Submitted to**

**THE DEPARTMENT OF MECHANICAL ENGINEERING**

**OF THE**

**HIGHER TECHNICAL INSTITUTE**

**Nicosia - Cyprus**

**In partial fulfillment of the requirements**

**For the Diploma of**

***Technician Engineer  
in  
Mechanical Engineering***

**June 2007**

**Project Supervisor: Dr. Lazaros Lazari**

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## PREFACE

The purpose of this project is to design and construct a Drop Hammer for compacting powders.

The Drop Hammer is to be used as a laboratory unit for carrying out experiments with various types of powders, metallic and non-metallic, at the laboratories of the HTI (Higher Technical Institute).

At the same time the project is aimed at familiarizing the author with the aspects relating to the drop-hammer type presses and to give him the opportunity to gain further knowledge and experience with the design, construction and uses of such machines.