

HIGHER TECHNICAL INSTITUTE

MECHANICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

**DESING OF A GENERAL PURPOSE SMALL PLOUGH FOR
TRACTORS**

by

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JUNE 1995

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Project Report

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the Department of Mechanical Engineering

of the Higher Technical Institute

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in

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THIS PROJECT IS DEDICATED TO THE MEMORY
OF MY BELOVED AUNT CHRISTINA WHO DIED
ON FEBRUARY THE 25th 1994 .

ACKNOWLEDGMENTS

I wish to express , my sincere thanks to my project supervisor , Mr C. Neocleous , Mechanical engineer , lecturer of H. T. I. for his guidance in executing this project .

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Finally , I thank all the persons who in a way helped me to complete this project .

GENETHLIOU NAPOLEON

OBJECTIVES:

1. To apply an appropriate design process in order to design a specified plough for tractors.
2. To apply creativity , decision making and optimisation phases .
3. To present detailed design calculations .
4. To present selection procedures and detailed specifications for items that are not to be designed
5. To specify all materials and manufacturing processes .
6. To present detailed layout , assembly and manufacturing drawings .
7. To present a detailed cost estimate .

TERMS AND CONDITIONS :

Plough working width = 1.2 m

Ploughing depth = up to 0.3 m

Working speed = up to 10 km/hr

At first we will see two models of plowshares
manufactured in Cyprus . The first one is by Athienitis
and the second one is by Patis .