

- ① ✓ Mehta - Engng. Dog. workbook using MacDraft.
- ② (Min) Vani, N.S. / Innovative products and practices of Indian origin
- ③ Chakravarty, B.K. : Workbook to develop visualization
- ④ Srinivas, K. : Simulation of snake movements
- ⑤ Dhulkhed, S. : Errors in Approximation
- ⑥ Anupam Shukla : Designers database for plastics

MSR-6
 जौ. ज. केन्द्र पुस्तकालय
 I. D. C. LIBRARY.

The-MSR-6



Special project reports : (ID)

- ⑦ ✓ Prashant Alur: Product Semantics
- ⑧ ✓ V.M. Mundada : Status of IDC Alumni
- ⑨ ✓ Boban P. Varghese: Workbook on Bamboo Craft.

* ⑩ kept separately & loose as it is recd. very late after this binding was done

✓ Suresh, C: Use of Logo & turtle designs.

* This is issued separately under Acc No. MSR-6(A)

B

ENGINEERING DRAWING
WORKBOOK
USING
MacDraft



A special project report

by

J. R. Mehta

MSR-6

जी. ज. केन्द्र पुस्तकालय
I. D. C. LIBRARY

guide

Prof. U. A. Athavankar

Industrial Design Center
Indian Institute Of Technology
Powai, Bombay 400 076

March 1988.

ENGINEERING DRAWING WORKBOOK USING MacDraft



A special project report

by

J. R. Mehta

जी. ज. केन्द्र पुस्तकालय
L. D. C. LIBRARY.

guide

Prof. U. A. Athavankar

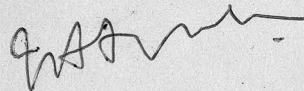
Industrial Design Center
Indian Institute Of Technology
Powai, Bombay 400 076

March 1988.

APPROVAL SHEET

The special project titled "ENGINEERING DRAWING
WORK BOOK USING MacDRAFT" by J. R. Mehta is approved
in partial fulfilment of the requirement for M. Des
degree in Industrial Design.

Signature

A handwritten signature in black ink, appearing to be 'J. R. Mehta', written over a horizontal line.

Date

Guide.

ACKNOWLEDGEMENT

I, sincerely thank prof U. A Athavankar for his valuable guidance and encouragement through this project.

I, also, sincerely thank Asst prof N. S. Sadhu and all concerned faculty, staff and my fellow class mates for their help extended for this project.

J. R. MEHTA

INTRODUCTION

We need drafting table, pencil, paper and various tools, for drawing conventionally, which is not only cumbersome but also time consuming.

Now in the edge of computers, various computer aided drafting programs are available, like AutoCAD, RoboCAD, Mac Draft, Mac 3D etc. Programs like AutoCAD and RoboCAD take lot of time to learn. Where as Mac Draft and Mac 3D being user friendly program take very less time to learn. But as no Work Book exist to teach Engineering Drawing using this program, an attempt is made to meet this need.

WHY WORK BOOK ?

We have a manual for Mac Draft, which teaches the user how and what each tool and menu can do. This it has been demonstrated with the help of just one Architectural drawing. And as Architectural drawing is different from Engineering Drawing the manual is just not sufficient to teach a user how to draw Engineering Drawing using Mac Draft. And so a Work Book to draw Engineering Drawing, like ones available for AutoCAD, RoboCAD etc, was necessary.

WORK BOOK

This Work Book will be in two parts. PART - I : WORK BOOK.
PART- II : Guide to WORK BOOK.

The aim behind presenting the Work Book in two parts is that, that it was felt that the users like to explore on themselves, and this in turn builds in him the confidence.

So, PART - I contains the set of exercises designed keeping in mind the learning process and the capabilities of various tools and menus of the program. Part - II will act as a guide to the user. If the user either finding the exercise difficult or lengthy, can refer to the Guide.

In PART - I, Exercises are given with the Aims and the objectives behind the exercise.

In PART - II, steps are given of how the user is supposed to do the exercise. Here in the first column step number is given, In the second column, the Tool/Menu required is given, in the third column the Action required and in the last the operations which is required to be performed is represented pictorially. This helps in fast grasping the operation to be performed.

NATURE OF EXERCISES

Type - A : BASIC EXERCISE

The aim of these exercise is to acquaint the user with the various Tools available on the Tool pallet and with the various Menus available. Before the user goes on to these exercise he is suppose to have read the Mac Draft manual.

Type - B : INTERMEDIATE EXERCISE

These exercise are designed to make the user more familiar with the program. Here the Orthographic drawing is introduced.

Type -C : COMPLEX EXERCISE

These exercise are specifically designed to stimulate the use to plan out strategies & pose challenges. The aim behind this is to train the user to work effectively by provoking him to take short cuts. This in turn will make him more confident.

This manual contains just the sample exercises, some more exercises can be added in each catogery.

BIBLIOGRAPHY

- 1) French and Vierck, Graphic Science,
McGraw - Hill Book Company, INC. 1958.
- 2) N. D. Bhatt, Machine Drawing,
Charotar Book stall, 1965.
- 3) H. W. Yankee, Machine Drafting and related
technology, McGraw- Hill Book Company, 1966.
- 4) W. J. Luzadder, Innovative Design ,
Prentice- Hall, INC .1975.

