Macmillan Engineering Craft Studies

Part 2 Mechanical Engineering

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D W G Hall H Higgins J K Millington T E Savage

Macmillan Education

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D W G Hall H Higgins J K Millington T E Savage

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EDITOR'S NOTE

This series of books meets the requirements of the new Council of Technical Examining Bodies Craft Studies Courses. The texts are presented with great clarity. The large format includes space for written work and sketches by the student, thus reflecting the progressive nature of the new syllabus in which student participation is an important feature.

There are two important aspects of the new CTEB Engineering Craft Studies courses.

(a) They are specially designed for students undergoing planned training, usually on programmes following the recommendations of the Industrial Training Boards.

(b) They form the further education complement of industrial training, involving the students in workshop and laboratory activities, investigations and projects, rather than relying on conventional listening and note-taking.

The technical studies of the Part 2 course, which extend over two years, are planned to suit both day and block release students. This course in Mechanical Engineering covers all aspects of the two-year course for those who have successfully completed a Part 1 Craft Studies course or a recognized alternative.

Henley College of Further Education
Coventry
June 1970

ABOUT THIS BOOK

This book will become your own complete record of your progress. Important facts are set out on the left-hand side of each page, and the right-hand side has space for you to answer questions and make extra notes and sketches.

The practical investigations are spread throughout the book, but can be carried out as and when equipment is available. At the end of this book is a section of projects which has been included as this type of work is important for craft students. These are problems of manufacturing and design to which there may be a number of possible answers; you will have to choose the best with a definite objective in mind. They also provide an opportunity to work with other students, since the projects are best undertaken by two or three of you working together.

NOTE TO TEACHER

This series of books provides the basis of a co-operative venture by you, your students and the authors, active student participation being encouraged throughout. This approach will enable you to cover the large amount of material in the new syllabus by releasing, for productive and constructive work, time which would otherwise be spent in note-taking.

Information is presented in parallel with material for student activity: questions to be answered and instructions for sketches and practical investigations. The material is intended to be at a level which will neither bore nor overwhelm the student, but which will nevertheless demand an effort on his part. These investigations are proposed at the ideal stage of the course, but could well be carried out as and when facilities are available.

At the end of this book is a section of projects which has been included because of the importance of this type of work in Craft Studies Courses. Most colleges will devise their own projects to suit the facilities and needs of their students, however, these examples may serve as a useful basis for a programme of work, since they have already been proved successful.

The books will become the comprehensive record of the student's progress and will reflect his particular interests. A great deal of space is available for extra teaching notes which you may wish to give and for additional work by the students. These books cannot replace the teacher but provide a framework within which he can present information, ideas and principles in his own way. The authors already know how satisfying this student-centred course can be and hope that you and your students will find it equally rewarding.

D. W. G. Hall
H. Higgins
J. K. Millington
T. E. Savage

Contents

SECTION 1	Safety in the Workshop	2
SECTION 2	Dimensional Control	20
SECTION 3	Work Holding	102
SECTION 4	Machine Tools	152
SECTION 5	Material and Metal Removal	216
SECTION 6	Planning	318
SECTION 7	Projects	341