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NON-DESTRUCTIVE TESTING

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Preface

It is of great importance that both individual components and complete engineering assemblies and structures are free from damaging defects and other possible causes of premature failure. A whole series of inspection instruments and techniques has been evolved over the years and new methods are still being developed to assist in the process of assessing the integrity and reliability of parts and assemblies. Non-destructive testing and evaluation methods are widely used in industry for checking the quality of production, and also as part of routine inspection and maintenance in service.

Despite the obvious importance of the subject, and the fact that most of the inspection methods are based on well-established scientific principles, there is a dearth of publications suitable for use as texts in our universities and colleges. The whole area of non-destructive testing receives scant attention in many engineering degree and diploma courses in the UK and this may be a consequence of a shortage of student texts. The authors, in producing this basic text, hope that it will prove useful to students on engineering courses and, possibly, act as a stimulus for the more widespread introduction of the subject into curricula.

It is also hoped that the work will have a wider circulation than merely academic circles and that it will prove useful to many people in industry. The book is not intended for the industrial practitioners in NDT as the coverage of topics is too general and at too shallow a depth for such individuals. On the other hand we hope that it will be widely read by all personnel concerned with production, general management and marketing who have an interest in quality control but who are non-specialists in non-destructive testing.

Barry Hull
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