**PROCEEDINGS OF THE
TWENTY-FOURTH INTERNATIONAL
MACHINE TOOL DESIGN AND RESEARCH
CONFERENCE**

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TWENTY-FOURTH INTERNATIONAL
MACHINE TOOL DESIGN AND RESEARCH
CONFERENCE**

*held in Manchester
31st August-1st September 1983*

Edited by

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FOREWORD

BY CONFERENCE CHAIRMAN

It gives me great pleasure to write a foreword to the 24th International Machine Tool Design and Research Conference. This year again the Conference fully justifies the word 'International' in the title. More than half the papers are from fourteen countries other than the UK.

The format of the Conference has not changed, but is different from the majority of conferences in that it covers a wide area of interest to manufacturers in the metalworking industries, covering as it does metalworking processes, control, measurement, machine design and computer-aided engineering. Most conferences now specialise in one or other of these areas. The MTDR Conference has been broadly-based from the beginning, 24 years ago, and it has also been held on a regular annual basis. This regularity is, perhaps, a factor in determining the large number of good papers submitted to the editorial board from overseas. I know from my travels abroad that the Proceedings are to be found in most of the libraries I visit. A set of the proceedings forms a very useful reference source.

Last year I noted the trend towards more papers in the computer-aided engineering field. This year the trend has been reversed in that there are ten papers in the CAE field and 48 in other more traditional areas. The largest number of papers relate to metal forming and shearing. Nevertheless, one cannot doubt the great impact of computers on our work and on the future of metalworking production. The computer is now the key research tool and the key to the application of manufacturing processes. It enables us not only to collect and process data and control machines in ways which were previously impossible, but it also enables us to integrate many of the different functions which constitute manufacturing. It is the integration of process control and management that the main benefits lie in the future.

I trust that all readers find the papers stimulating and useful. We can look forward to producing yet another collection next year at our quarter century.

Professor B. J. Davies