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(1978) - 4th International Specialty Conference on Cold-Formed Steel Structures

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Fourth International Speciality Conference on
Cold-Formed Steel Structures

RECENT RESEARCH AND DEVELOPMENTS IN
COLD-FORMED STEEL STRUCTURES

In two volumes
Volume I

Held in St. Louis, Missouri, U.S.A.
June 1-2, 1978

Edited by
Wei-Wen Yu and Joseph H. Senne

Department of Civil Engineering
University of Missouri - Rolla

Presented by
Department of Civil Engineering
University of Missouri-Rolla

Sponsored by
American Iron and Steel Institute
University of Missouri-Rolla
Extension Division

In Cooperation with
ASCE Committee on Cold-Formed Members
Canadian Sheet Steel Building Institute, Canada
Metal Building Manufacturers Association
Rack Manufacturer's Institute
Steel Deck Institute
Structural Stability Research Council Task Group
on Thin-Walled Metal Construction
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PREFACE

During the past, cold-formed steel members have been used in virtually every area of construction. In order to review the research findings and the design methods developed in this field, the First, Second, and Third Specialty Conferences on Cold-Formed Steel Structures were held in 1971, 1973, and 1975 respectively.

Since 1975, significant progress has been made in various studies of cold-formed steel members and structural systems throughout the world. The Fourth International Specialty Conference on Cold-Formed Steel Structures was held in St. Louis, Missouri, on June 1-2, 1978. This Conference was sponsored by the American Iron and Steel Institute (AISI) and the University of Missouri-Rolla (UMR) in cooperation with the American Society of Civil Engineers (ASCE) Committee on Cold-Formed Members, Canadian Sheet Steel Building Institute (CSSBI), Metal Building Manufacturers Association (MBMA), Rack Manufacturers Institute (RMI), Steel Deck Institute (SDI), Structural Stability Research Council Task Group on Thin-Walled Metal Construction, and the University of Strathclyde, Scotland.

This publication contains 32 papers presented at the Conference. These papers not only report the results of recent research but also discuss the technical developments in cold-formed steel design and construction.

As Directors of the Conference, we are very grateful to all the sponsors for their financial and technical support and to all authors for their contributions in the field of cold-formed steel structures. Appreciation is also due to members of the Planning Committee (S.J. Errera, N.R. Fleming, A.L. Johnson, D.L. Johnson, T.J. Jones, H. Klein, J. Rhodes, S.A. Roehrig, D.L. Tarlton, G. Winter and D.S. Wolford) for review and selection of the papers and their advice in preparation of the conference.

We wish to express our sincere thanks to Dr. Jim C. Pogue, Interim Chancellor of the University of Missouri-Rolla for his welcoming remarks.

Appreciation should also be expressed to all Chairmen of the technical sessions: Dr. G. Winter, Dr. S.J. Errera, Mr. K.H. Klippstein, and Dr. J. Rhodes.

Finally, we wish also to thank the many faculty and staff members of the University of Missouri-Rolla, Dean J.E. Halligan, Dean G.E. Lorey, Dean S.A. Douglas, Professor J.B. Heagler, Mr. E.C. Murphy, Mr. W. Ries, Mrs. N.R. Fleming, and many others. Their advice, encouragement and contributions have been of great value to the conference.

Special thanks are extended to Mrs. Terry Lewis for her assistance in preparing this publication.

Rolla, Missouri

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