Gastrow

Injection Molds

102 Proven Designs



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with contributions by

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Preface

Dipl.-Ing. Hans Gastrow has been publishing examples of mold construction for injection molding since the mid-fifties. These were collected and published in 1966 in the first German edition of this book, which was widely acclaimed because there had been, until then, no other collection of its kind. The injection molding industry stood at the beginning of its great upturn and ideas for constructing good and economically feasible molds were received with great interest. Shortly after the publication of the first edition, Gastrow died. The second edition, published in 1975, kept the objectives set by the first. It does not aim to be a textbook but illustrates selected problems of injection mold construction with interesting and commercially tested solutions. Some of the examples from the original Gastrow were retained; others, from younger specialists, were added. The present English translation of the third German edition remains true to this principle. Along with a large number of new examples, principles of construction are also treated. At the time of the second edition's publication, some of them did not possess their present topicality, as for example, hot-runner molds. The solutions to the problems illustrated include molds from the simplest technology to the most complex multi-stage molds.

The publishers and editor extend their thanks to the authors for their collaboration and their willingness to be deeply involved in diagrams, descriptions of mold functions, and to present detailed ideas on design, and the translators Dr. Kurt Alex and Elmar Tremmel who prepared this English edition.

The editor is especially indebted to Dr.-Ing. W. Hoffmanns, without whose extensive work in preparing the texts which accompany the examples, this book could never have been written.

Summer 1983

Publishers and editor

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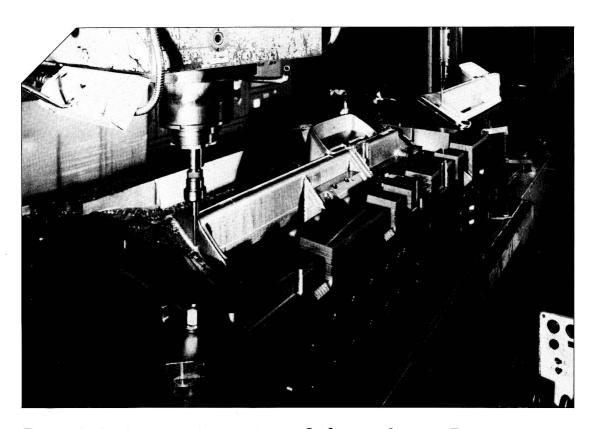
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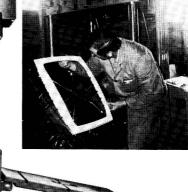
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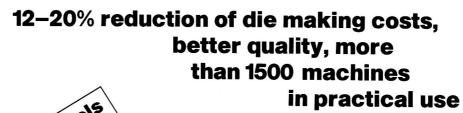
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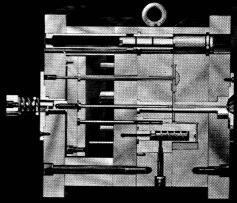
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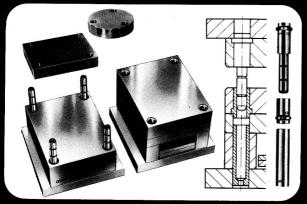
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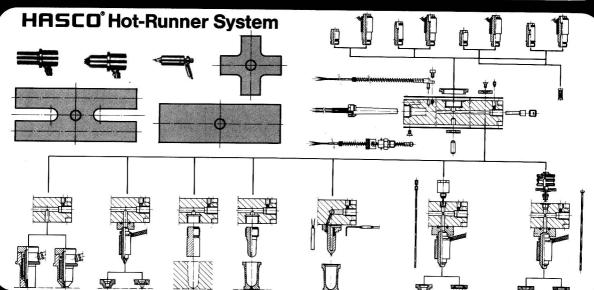
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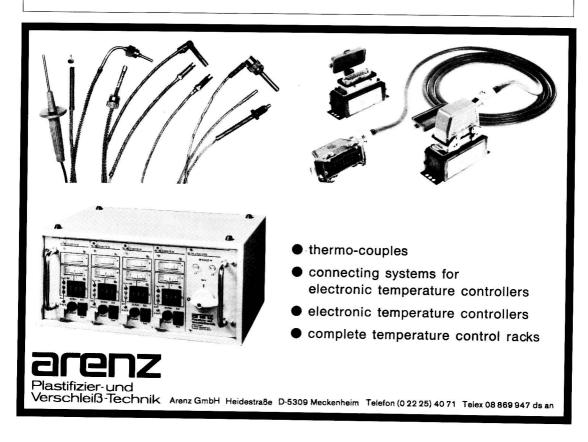
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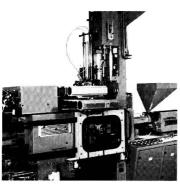
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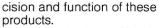






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Comprehensive Guide, SPE-sponsored, and up-to-date reference on plastics materials and technology

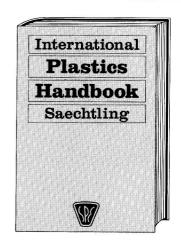
By Dr. H. Saechtling, Frankfurt. Approx. 600 pages, 117 illustrations, 109 tables. 1983. Hardcover. SPE-sponsored. ISBN 3-446-13668-1

This is the international companion to the famous German "Kunststoff-Taschenbuch" which has sold almost 150,000 copies in 22 editions. While sharing the basic concept, it has been designed from the beginning for the world market. The international plastics engineer and specialist will find in it a well-balanced description of the differing technical and commercial developments in the field of plastics worldwide, showing similarities and pointing out differences.

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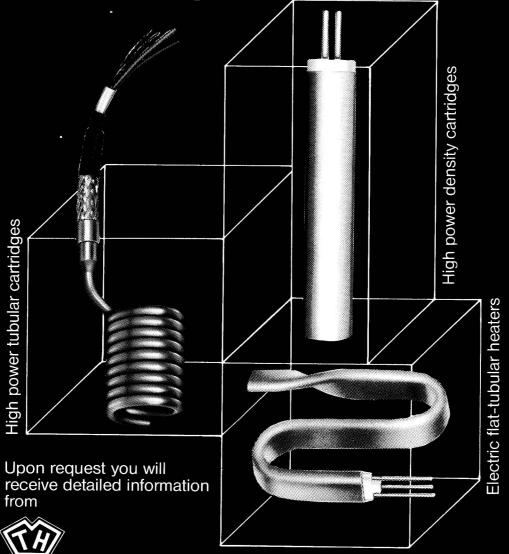
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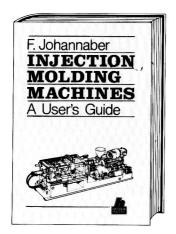
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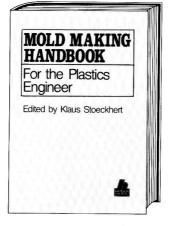


By Dr. F. Johannaber, manager, Technical Machine Laboratories, Plastics and Coating Division, Bayer AG, Leverkusen, W.-Germany 295 pages, 166 illustrations, 31 tables. 1983. Hardcover. ISBN 3-446-13575-8.

This book presents a detailed and succinct description of all the major elements and functions of injection molding machines. Special emphasis is given to the performance data of various types of injection modling machines. The comparison between performance and technical data is unique for reference works on injection molding machines.

The book covers the injection unit with screw and cylinder, various types of clamping mechanisms, drives, hydraulics, and process control instrumentation. In this manner, the book provides an excellent survey of injection molding machines currently available on the market. Also, machine designers and construction engineers can obtain useful design details.

A comprehensive list of machine manufacturers in the USA, Europe, and Japan with detailed information on machine type and size concludes this invaluable reference book. "Injection Molding Machines" is a Guide in the true sense.

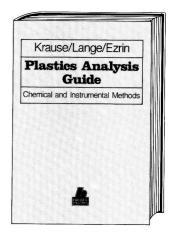


By Dr. K. Stoeckhert (ed.) in collaboration with 21 experts. Approx. 484 pages, 350 Illustrations, 10 tables. 1983. Hardcover. SPE-sponsored. ISBN 3-446-13629-0.

This Handbook is a comprehensive manual for mold construction. All the major processes used for the manufacture of plastics parts are described in detail.

Molds are often designed and/or built by the plastics processor. In many cases, the mold making facilities at his disposal are an important precondition for the production of high-quality moldings. The contributors have endeavored to describe, in concise form, the most important mold making guidelines and to present the latest technical developments in the respective plastics processing techniques. Wherever possible, US standards have been used instead of DIN norms.

The presentation is not restricted to a single technique but enables reference to made to and conclusions to be drawn from other, more or less, related processes. This comprehensive and concise indepth review of mold construction for all major plastics processing techniques will prove extremely useful for engineers, designers, processors, technical salesmen, and students interested in all aspects of mold construction.



By Dr. A. Krause (†) and Dr. A. Lange, Dynamit Nobel, Troisdorf, and Prof. Dr. M. Ezrin, Institute of Materials Science at the University of Connecticut, Storrs. 364 pages, 38 illustrations, 38 tables, 84 spectra. 1983. Hardcover. ISBN 3-446-13587-1.

"Plastics Analysis Guide" covers both chemical and instrumental methods of analysis of plastics. The book is intended primarily for those who deal with polymeric materials in the production, conversion, and utilization of plastics, and who may require analysis of resins, polymers, rubbers, plastics, fibers, or finished products for the purposes of product development, quality control, troubleshooting, or competitive analysis.

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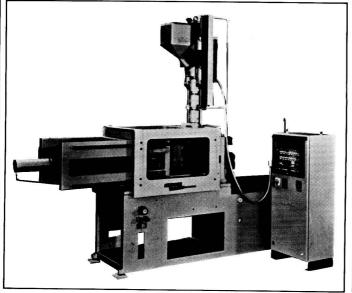
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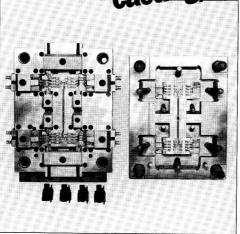
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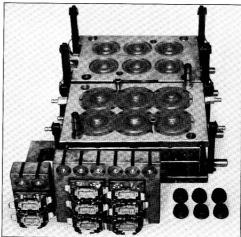
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