A SELECTED LIST
OF ENGINEERING
REFERENCE BOOKS, ABSTRACTS,
AND INDEXES PREPARED
FOR THE
ARAB REPUBLIC OF EGYPT

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NOTE: None of the annotative information included in this volume is the work of King Research, Inc. All annotations supplied were extracted from sources listed herein.
INTRODUCTION

This volume represents a core list of engineering reference books, abstracts, and indexing publications. For this compilation, titles of English-language books only have been included, with heavy American emphasis. Given the vast amount of published material in the field of engineering, items have been selected in order to provide basic coverage of the field. No obvious attempt has been made to present only the "best" of the sources available. Rather, in many cases, they are merely representative of their type. Because scientific and technical information must be up-to-date, the primary criterion for inclusion is that the reference be a current source of information. Therefore, few titles published prior to 1965 have been included.

Engineering is that field of science which can be applied to help develop ways to economically solve a country's environmental and technological problems. Currently, Egypt is involved in numerous engineering-related projects\textsuperscript{1,2,3} which have been instituted to solve priority development problems. To name a few, these include the construction of gas turbine generator plants, design and construction of grain silos, rehabilitation of municipal electric power systems, municipal water and sewage facilities, modernization of the telecommunications sector, low-cost housing and reconstruction, irrigation and drainage systems, corrosion in the petroleum industry, biogas technology, instrumentation technology, among others. There are many fields within the engineering discipline which are concerned with these and other R&D problems. The primary areas addressed in this volume include aerospace, agricultural, chemical, civil, electrical, energy, environmental, industrial, mechanical, nuclear, and transportation engineering. Since engineering deals with all aspects of the physical world, classifications included in this list are not mutually exclusive, but frequently overlap with other fields of science such as physics, chemistry, and mathematics. For example, a large number of references concerned with irrigation and drainage are found in the agricultural core list, whereas materials dealing with sewage and water pollution are found in the core list on medicine and public health. Topics about computers


and computer science are dealt with separately in the volume on science and technology. Also, secondary publications such as Chemical Abstracts and Physics Abstracts have been listed under chemistry and physics only, although both are highly relevant to engineering collections as well.

This list is divided into reference books and abstracting and indexing publications. When appropriate, reference books are divided by type of material, such as handbooks, dictionaries, encyclopedias, and textbooks. Reference books which are listed under the category "Books" are loosely defined as any book that is likely to be consulted for factual information more frequently than it will be picked up and read through in sequential order. Entries within each division or subdivision are arranged alphabetically by title, except in some cases where the order has been disrupted due to additions or substitutions. Book entries contain basic bibliographic information, while the secondary source entries contain annotative information about scope and coverage.

The most fundamental reference tools used for identifying reference books were the guides, bibliographies, and bibliographic essays to the literature. Such lists were particularly valuable in that they were compiled by science bibliographers, librarians with subject expertise, or other subject specialists within specific scientific disciplines. The reference sources used are listed below.

- *Science and Technology: An Introduction to the Literature.*

- *Scientific and Technical Information Sources.*

- *Scientific, Engineering and Medical Societies Publications in Print; 1978-1979.*

- "State of the art survey of reference sources in engineering."

- "State of the art survey of reference sources in engineering."

- "State of the art survey of reference sources in engineering."


- *Use of Engineering Literature.*


Other sources used to supplement the above lists include *Technical Book Review Index*¹, *Reference Sources*², *Scientific and Technical Books in Print*³, and *Choice*⁴. Items in the enclosed list which were not extracted from a published core list or evaluative reference tool are so indicated by a single asterisk (*). We emphasize here that the goal of this and the other core lists is not to present a comprehensive, overall picture of scientific and technical literature. Rather, our goal is to provide a quantitative method whereby individual library collections can be checked against a reliable list generated from well-known sources of evaluative and/or descrip-


tive bibliographic information. The coverage statistics which are observed will then be used as an input to determining costs for individual libraries to fill the gaps between what is relevant and held and what is relevant and not held.
INSTRUCTIONS

The purpose of this list is to help you assess the completeness of your reference collection. For each book and secondary source on the list, we need to know if the item is relevant (desireable) or not relevant (not desireable) to your collection or your library users' needs. **If a title is relevant, please write the code "1" in the box adjacent to it if it is in your collection. Please write a "2" if the item is relevant, but is not in your collection. If the item is not relevant, please write the code "3" in the box adjacent to it.**
ENGINEERING REFERENCE BOOKS
SUBFIELD HEADINGS
(Engineering Books)

- Aerospace Engineering
- Agricultural Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Energy Engineering
- Engineering - Geology
- Environmental
- General Engineering and Engineering Fundamentals
- Industrial Engineering
- Lubrication Engineering
- Materials Engineering
- Mechanical Engineering
- Nuclear Engineering
- Transportation Engineering
- Engineering Miscellaneous
AEROSPACE ENGINEERING

BOOKS


2. *Aerospace Propulsion.


AEROSPACE ENGINEERING (Cont'd)

HANDBOOKS

   Beachcomber Bks.


    N. Ya. Kondrat'ev and V.A. Odinstov. Translated by R. Hardin Jerusalem:

17. Handbook of Satellites and Space Vehicles.

DICTIONARIES


22. Glossary of Aeronautical Terms.

23. Space-age acronyms, abbreviations and designations.


ENCYCLOPAEDIA


28. The Encyclopedia of space.  
illus., diagrs., maps.


30. The new space encyclopaedia; a new guide to astronomy and space research.  
AGRICULTURAL ENGINEERING

BOOKS

31. **Agricultural Engineering: A Dictionary and Handbook.**

32. **Food engineering operations.**

33. **Food engineering principles and selected applications.**

34. **Food engineering systems.**

35. **International Directory of Agricultural Engineering Institutions.**
1973. 537 pp. Up-to-date material collected from 115 countries. $17.00.

36. **Introduction to Agricultural Engineering.**

HANDBOOK

37. **Agricultural Engineers' Handbook.**

ENCYCLOPAEDIA

38. **Encyclopedia of Hydraulics, Soil & Foundation Engineering.**

DICTIONARIES

39. **A Dictionary of Plants Used by Man.**

40. **Dictionary of Gardening.** 2nd ed.
BOOKS


DICTIONARIES

CHEMICAL ENGINEERING (Cont'd)

DICTIONARIES (Cont'd)

53. Dictionary of Chemistry and Chemical Engineering. 2 v.


ENCYCLOPAEDIA


57. Chemical Technology: An Encyclopedia Treatment.


59. Encyclopedia of Chemical Technology. 2nd ed.

60. Encyclopedia of Chemistry.

61. Encyclopedia of Industrial Chemical Analysis.


HANDBOOKS

CHEMICAL ENGINEERING (Cont'd)

HANDBOOKS

□ 64. Adhesives: Guidebook and Directory.

□ 65. Chemical Engineer's Handbook. 5th ed.


□ 67. Corrosion resistant material's handbook.
   Ibert Melan. Ed.3. Park Ridge, NJ.

□ 68. Handbook of analysis of organic solvents.


□ 70. Handbook of Reactive Chemical Hazards.

□ 71. Handbook of Thin Film Technology.

□ 72. Mining chemicals handbook.

□ 73. Riegel's Handbook of Industrial Chemistry. 7th ed.
CIVIL ENGINEERING

BOOKS


CIVIL ENGINEERING (Cont'd)

BOOKS (Cont'd)

    Washington, DC: American Association for State Highway and Transportation
    Officials, Operating Subcommittee on Bridges and Structures, 1974.

89. Manual of Concrete Practice. 3 v.
    Detroit: American Concrete Institute, 1972-1975.

90. Manual of Precast Concrete Construction with Large Reinforced Concrete and
    Prestresses Concrete Components: Design, Analysis, and Construction.


93. Methods and materials of residential construction.
    336 p. $13.50.

94. Planning and Estimating Dam Construction.

95. Probability, Statistics, and Decisions for Civil Engineers.

96. Roadwork technology.
    illus., tables.


98. The Engineering of Large Dams. 2 v.

99. Wind effects on buildings and structures.

100. Wind effects on structures; an introduction to wind engineering.
     77-21192.
DICTIONARIES

101. A Dictionary of Civil Engineering.


103. Concise Encyclopedic Dictionary of Civil Engineering.


105. Definitions of Surveying and Associated Terms.
    Society of Civil Engineers, 1972.

106. Dictionary of Architectural Abbreviations, Signs and Symbols.


108. Dictionary of Building. 2nd ed.

    encountered terms.

110. Dictionary of Civil Engineering Abbreviations, Signs and Symbols.


CIVIL ENGINEERING (Cont'd)

ENCYCLOPAEDIA


HANDBOOKS


## CIVIL ENGINEERING (Cont'd)

### HANDBOOKS (Cont'd)

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author / Editor</th>
<th>Publisher 1</th>
<th>Publisher 2</th>
<th>Year</th>
<th>Pages</th>
<th>Price</th>
<th>ISBN</th>
</tr>
</thead>
</table>
144. **Standard handbook for civil engineers.**
   $39.95. LC 25850.

145. **Structural engineering handbook.**
   Charles N. Gaylord & E.H. Gaylord, Jr., ed. Ed. 2. New York, McGraw-
   Hill, 1979. 1248 p. $46.50. LC 78-25705.

146. **Structural Steel Designers' Handbook.**

147. **Switchgear and control handbook.**


149. **The Practical Handbook of Concrete and Masonry.**

ELECTRICAL ENGINEERING

BOOKS


ELECTRICAL ENGINEERING (Cont'd)

BOOKS (Cont'd)


166. The Electronics Engineer's Reference Book.

    Cleveland: Harris, 1976.

DICTIONARIES

168. DEIA: Dictionary of electrical abbreviations, signs and symbols.


170. *Dictionary of Electrical & Electronic Engineering: German-English &

171. Dictionary of electrical engineering, telecommunications and electronics.


173. Dictionary of Electronics. 2nd ed.


175. Dictionary of Electronics and Nucleonics.

176. Dictionary of Electronics, Communications & Electrical Engineering.
    (English-German; German-English). New York: Adler, 1969. 2 v.

177. Elsevier's Electrotechnical dictionary.
ELECTRICAL ENGINEERING (Cont'd)

DICTIONARIES (Cont'd)


185. Technical dictionary of the terms used in electrical engineering, radio, television, telecommunication; including the most used terms of acoustics, illumination, mathematics, materials, mechanics, optics, heating, etc. H. Thali. 6th-6th ed. Lucerne, Thali, 1960-


ENCYCLOPAEDIA


ENCYCLEOPAEDIA (Cont'd)

189. Encyclopedia of Instrumentation and Control.

190. Newnes' Concise encylopaedia of electrical engineering.

191. The Encyclopedia of electronics.

HANDBOOKS


193. Basic Tables in Electrical Engineering.


196. Data Book for Electronic Technicians and Engineers.

197. Electrical Installations Handbook.

198. Electricity supply handbook.


201. Electronics Engineer's Handbook.

ELECTRICAL ENGINEERING (Cont'd)

HANDBOOKS (Cont'd)

[ ] 203. **Electronics Data Handbook.** 2nd ed.


[ ] 205. **Electronics Reference Databook.**

[ ] 206. **Essential Formulae for Electrical Engineers.**

[ ] 207. **Handbook for Electronics Engineering Technicians.**

[ ] 208. **Handbook of Basic Electronic Trouble Shooting.**

[ ] 209. **Handbook of circuit analysis languages and techniques.**

[ ] 210. **Handbook of Electronic Engineering.**

[ ] 211. **Handbook of electronics calculations for engineers and technicians.**

[ ] 212. **Handbook of Electronic Instruments and Measurement Techniques.**

[ ] 213. **Handbook of Materials and Processes for Electronica.** 2nd ed.

[ ] 214. **Handbook of Modern Data.**

ELECTRICAL ENGINEERING (Cont'd)

HANDBOOKS (Cont'd)

216. Handlist of basic reference material in electrical and electronic engineering.

217. Illustrated Handbook of Electronic Tables, Measurements and Values.

diagr., (17th ed £2.60).


221. Radar Handbook.


223. Standard handbook for electrical engineers. 11th ed.
diagr., graphs, tables. $49.50.

224. Sourcebook of electronic circuits: over 3,000 modern electronic circuits,
complete with values of all parts... J. Markus. New York, London [etc.]

ENERGY ENGINEERING

**BOOKS**


228. *Principles of solar engineering.*

229. *Technical data on fuel.*

**ENCYCLOPAEDIA**


**HANDBOOKS**


HANDBOOKS (Cont'd)

    Denver: Cameron Engineers, 1975.

ATLAS

    259 p. $25. LC 78-50805.

DICTIONARY

ENGINEERING - GEOLOGY

BOOKS

240. Anchoring in rock.


244. Rock mechanics and engineering.

HANDBOOK

245. SME Mining Engineering Handbook.

DICTIONARY

ENIRONMENTAL

BOOKS

253. Public Health engineering; sewerage.

254. The Energy Sourcebook.

255. Wastewater engineering.

256. Wastewater engineering; treatment-disposal-reuse.

257. Water renovation and reuse.


DICTIONARIES


260. A glossary of sanitary engineering terms.

261. Glossary of Environmental Terms (Terrestrial).

DIRECTORIES

ENVIRONMENTAL

DIRECTORIES (Cont'd)


HANDBOOKS


A practical tool based on the working experience of professionals in the field.


ENVIRONMENTAL

HANDBOOKS (Cont'd)

273. Handbook of Environmental Civil Engineering.

274. Handbook of Environmental Control. 5 v.
C.P. Straub and others, editors. Cleveland, CRC Press, 1972-1975.


277. Industrial Pollution Control Handbook.


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GENERAL ENGINEERING AND ENGINEERING FUNDAMENTALS

BOOKS


288. Computing Methods for Scientists and Engineers.


291. Engineering fundamentals for professional engineers' examinations.
LC 78-21927.


293. Engineering manual: a practical reference of design methods and data in
building systems, chemical, civil, electrical, mechanical, and environmental

294. Engineering mathematics. 2v.

295. Engineering science II.

296. Engineering science for technicians. v.2.
I. MacDonagh and others. London, Arnold, 200 p. £3.10. LC 78-302567.


298. Engineers of Distinction, Including Scientists in Related Fields.

299. Errors in practical measurement in science, engineering and technology.
LC 78-9754.

300. How to find out about engineering.
BOOKS (Cont'd)


302. Introduction to Engineering Design & Graphics.  
     New ed.  
     George C. Beakley et al.  (Illus.).  1973.  16.95 (ISBN 0-02-307360-8,  
     30736).  Macmillan.

303. Kempe's Engineer's year-book ...  
     2 v. £16).

304. Landolt-Boernstein Numerical Data & Functional Relationships in Science &  
     Technology, New Series, Group 2.  
     K.H. Hellwege & A.M. Hellwege, eds.


308. Modern formulas for statics and dynamics; a stress and strain approach.  
     $18.50.  LC 77-15093.

309. Probability and statistics for engineer.  
     76-12701.

310. Recommendations for letter symbols, signs and abbreviations.  
     AMD 2291.  1977.

311. Technical services for industry: technical information and other services  
     available from Government departments and associated organizations.  
     Great Britain.  Department of Industry.  [rev. ed.].  London, the Department,  

312. Temperature Measurements in Engineering.  2 vols.  

313. The Consulting engineers who's who & yearbook.  
     London, Northwood Publications, in consultation with the Association of  

314. Who's Who in Engineering; A Biographical Dictionary of the Engineering  
     1964.
GENERAL ENGINEERING AND ENGINEERING FUNDAMENTALS (Cont'd)

BOOKS (Cont'd)


316. World metric standards for engineering.  
LC 77-25875.

ENCYCLOPAEDIA


HANDBOOKS

323. ASHRAE Handbook of Fundamentals. 2nd ed.  

324. Basic Engineering and Mathematical Tables.  

325. CRC Handbook of Tables for Applied Engineering Science. 2nd ed.  

GENERAL ENGINEERING AND ENGINEERING FUNDAMENTALS (Cont'd)

HANDBOOKS (Cont'd)

☐ 327. Engineering formulas.

☐ 328. Engineering mathematics handbook.

☐ 329. Engineering Tables and Data.


☐ 333. Handbook for Engineers. 2 v.


☐ 335. Handbook of Comparative World Steel Standards.
     Tokyo. International Technical Information Institute. (Steel World Standards mutual speedy finder; v. 6) 1976. 446 p. $100.00.


GENERAL ENGINEERING AND ENGINEERING FUNDAMENTALS (Cont’d)

HANDBOOKS (Cont’d)


344. *Handbook of Precision Engineering.

345. Handbooks and tables in science and technology.

346. IES Lighting Handbook. 5th ed.

347. *Introduction to Engineering Design.

348. Machinery’s Mathematical Tables. 3rd edition.


GENERAL ENGINEERING AND ENGINEERING FUNDAMENTALS (Cont'd)

HANDBOOKS (Cont'd)


359. The Engineer's Handbook.


DICTIONARIES

361. A Dictionary of Thermodynamics.

362. Concise Chemical and Technical Dictionary. 3rd enl. ed.


364. Dictionary of Physics and Mathematics Abbreviations, Signs and Symbols.

365. Dictionary of Science and Technology.

366. Dictionary of Science and Technology (German-English and English-German).


368. Dictionary of visual science. 2nd ed.
GENERAL ENGINEERING AND ENGINEERING FUNDAMENTALS (Cont'd)

DICTIONARIES

364. Elsevier's Dictionary of electronics and waveguides, in six languages:
English/American, French, Spanish, Italian, Dutch, German.

365. Encyclopedia dictionary of mathematics for engineers and applied scientists.


375. The International Dictionary of Applied Mathematics.


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DICTIONARIES (Cont'd)


DIRECTORIES


BOOKS


INDUSTRIAL ENGINEERING

BOOKS

Norbert L. Enrick. 2nd ed. LC 77-15461. 1978. 11b. bdg. 17.50.

Charles B. Going. (Management History Ser.: No. 45). Repr. of 1911


DICTIONARY

389. Dictionary of Industrial Engineering Abbreviations, Signs and Symbols.

HANDBOOKS

1024 p.

391. Handbook of Industrial Engineering and Management. 2nd ed.

392. Handbook of Industrial Pipework Engineering.

393. Handbook of Precision Engineering.
(Philips Technical Library).


395. Industrial energy conservation; a handbook for engineers and managers.
$22. LC 78-40982.


INDUSTRIAL ENGINEERING (Cont'd)

HANDBOOKS (Cont'd)


     1084 pp.
LUBRICATION ENGINEERING

BOOKS


MATERIALS ENGINEERING

BOOKS


418. Progress in materials science. Oxford [etc.], (Pergamon Press, 1949-  v.1-

by E.N. Simons (Muller, 1970).

by D. Birchon (Newnes, 1965).

422. Dictionary of Rubber.  

423. Textile Terms and Definitions. 7th ed.  


Henry L. Clauser. 265 W. State Street, Westport, Conn. 06880.  


428. Encyclopaedia of PVC. v.2.  
LC 76-3336.

429. The encyclopaedia of engineering materials and processes.  

430. Adhesives Handbooks. 2nd ed.  

MATERIALS ENGINEERING (Cont'd)

HANDBOOKS

     Edited by Roger W. Bolz. American Society of Mechanical Engineers.

     Oscar J. Horger, editor. American Society of Mechanical Engineers.

434. CRC Handbook of materials science.
     C.T. Lynch, ed. Cleveland, Ohio, CRC Press, 1975. 3v. illus.,
     tables.


436. Handbook of adhesives.
     894 p. $39.95. LC 76-18057.

     Calvin Victor Davis and Kenneth E. Sorensen, eds. New York, McGraw-Hill,
     1969. lv. (various paging).


     Donald Peckner and I.M. Bernstein, editors. New York, McGraw-Hill,


441. Materials handbook: an encyclopaedia for managers, technical professionals,
     purchasing and production managers, technicians, supervisors and foreman.
     11th ed. G.S. Brady and H.R. Clauser. New York, London, etc. McGraw-


     Society of the Plastics Industry. Edited by Joel Frados. New York:

444. Raw materials data handbook.
     National Printing Ink Research Institute. v.2.: Proprietary solvents.
     Bethlehem. PA. Author. 216 p. $50.

445. The Plastics Engineers' Data Book.
MECHANICAL ENGINEERING

BOOKS

446. Automatic control systems.
    $15. LC 76-28020.


448. Engineering Sciences Data; Mechanical Engineering Series: Fluid Mechanics,

449. Engineering thermodynamics.
    612 p. £15.95.

450. Fundamentals and application of centrifugal pumps for the practicing engineer.

451. Jet pumps and ejectors; a state of the art review.
    111 p. £10.00.


458. Mechanical fault diagnosis and condition monitoring.

459. Plumbing installation and design.
    $14.95. LC 77-73227.

MECHANICAL ENGINEERING  (Cont'd)

BOOKS  (Cont'd)

461. Refrigeration and air conditioning.

462. Submersibles and their use in oceanography and ocean engineering.

DICTIONARIES


466. Dictionary of Mechanical Engineering Abbreviations, Signs and Symbols.


468. Dictionary of Refrigeration and Air Conditioning.

469. The Automotive Dictionary.

HANDBOOKS

American Society of Mechanical Engineers. New York; McGraw-Hill, 1965-


MECHANICAL ENGINEERING (Cont'd)

HANDBOOKS (Cont'd)


MECHANICAL ENGINEERING (Cont'd)

HANDBOOKS (Cont'd)


ENCYCLOPEDIA

BOOKS


NUCLEAR (Cont'd)

BOOKS (Cont'd)

    M.M. El-Wakil. (Nuclear Engineering Ser.). 1962. text ed. 26.50


☐ 524. *Nuclear Reactor Analysis.

☐ 525. Progress in nuclear energy. v. 2.
    $100.00.


    Intl. Ideas.

☐ 528. Who's Who in Nuclear Energy.

DICTIONARIES


☐ 530. The Atomic Energy Desk Book.

ENCYCLOPEDIA

☐ 531. Newnes Concise Encyclopedia of Nuclear Energy.

☐ 532. The Illustrated Nuclear Encyclopedia.
NUCLEAR (Cont'd)

HANDBOOKS


   O.J. Foust, ed. (U.S. Atomic Energy Commission Monographs.). (Illus.).
   Vol. 3. 57.00. (ISBN 0-677-03040-1); Vol. 4. 57.00. (ISBN 0-677-03050-9);
BOOKS


TRANSPORTATION ENGINEERING (Cont'd)

BOOKS (Cont'd)

549. *Traffic Planning & Engineering. 2nd ed.
F. D. Hobbs. rev. ed. 1975. text ed. 27.00 (ISBN 0-08-017926-6); pap.
*Traffic Planning & Engineering. 2nd ed.
F. D. Hobbs. (Civil Engineering Division of PIL Ser.). (Illus.). 1978
text ed. 50.00 (ISBN 0-08-022696-5); pap. text ed. 20.00 (ISBN 0-08-022697-3).
Pergamon.


Lawrence D. Burns. LC 79-1725. (Illus.). Date not set. price not set


HANDBOOKS


ENGINEERING MISCELLANEOUS

BOOKS

557. Alternative energy sources.

558. Applied optics and optical engineering.

559. Automobile engineering.


561. Dock and harbour engineering. 2nd ed.


563. Port engineering.


565. The efficient use of energy.

DICTIONARIES

566. A dictionary of foundry work.

567. Dictionary of refrigeration and air conditioning.


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DICTIONARIES (Cont'd)


ENCYCLOPEDIAS


572. The illustrated encyclopedia of motorcycles.  

HANDBOOKS


574. Casting design handbook.  

575. Electrical engineering handbook.  


577. Metals handbook. 8th ed.  
ENGINEERING MISCELLANEOUS

HANDBOOKS (Cont'd)

578. **Gear handbook: the design, manufacture and application of gears.**

579. **Handbook of Engineering in Medicine and Biology.**

580. **Handbook of metal treatment and testing.**

581. **Handbook of ocean and underwater engineering.**

582. **Handbook of refrigerating engineering. 4th ed.**


584. **Hydraulic handbook.**

585. **Piping handbook. 5th ed.**

586. **Pneumatic handbook. 4th ed.**

587. **The solar energy handbook. 3rd ed.**

588. **The Radio communication handbook. 5th ed.**
Radio Society of Great Britain. London, the Society, 1976077. 2 v. (xvi, 464 p., xii, 324 p.). illus., diagrs., tables. £15.54.

589. **Welding handbook. 5th - 7th ed.**
ABSTRACTS AND INDEXES

590. Applied Mechanics Reviews. 1948-
Published monthly by the American Society of Mechanical Engineers.

Applied Mechanics Reviews is "a critical review of the world literature in applied mechanics and related engineering science." The signed abstracts are critical as well as informative and are arranged in six sections under 54 sub-headings. The main headings are rational mechanics and math methods, automatic control, mechanics of solids, mechanics of fluids, heat and combined fields. There is usually a feature article, with an extensive bibliography, in each issue. Publications indexed are journals (about 100), technical reports, conference proceedings and books. An author index is included and this cumulates annually. In 1972 the annual subject index was replaced by a subject tabulation which is merely a guide to the broad subject headings used in the monthly issues. This is much less satisfactory than the previous subject index and is of little use to the retrospective searcher. A list of books reviewed appears each month and, although useful, some of the book reviews are rather long.

591. Applied Science and Technology, 1958-

Emphasizes both theoretical aspects of sciences and their engineering applications. Slight overlap with British Periodicals Index and Engineering Index.

Covers: Aeronautics, automation, chemistry, electricity and electronics, engineering, geology and metallurgy, industrial and mechanical arts, physics, transportation, etc. List provided on cover of monthly issues and quarterly cumulations. Aimed at laymen, high school and college students.

Scope: English-language journals.

592. ASCE Publications Abstracts.
New York: American Society of Civil Engineers, 1966- [Bimonthly]

This publication contains indicative abstracts of all papers appearing in all the ASCE journals and in Civil Engineering. It covers the fields of engineering mechanics, hydraulics, irrigation, sanitary engineering, soil mechanics and foundations, surveying and mapping, urban planning, and general civil engineering. The tables of contents are reproduced, with a separate subject index and separate citations (in 3 X 5 inch format), for those who wish to clip and file. It also has author indexes but no cumulative indexes.

593. Atomindex. Vols. 1-.

Volumes 1-10 published under title: List of Bibliographies on Nuclear Energy. With the discontinuation of Nuclear Science Abstracts on June 30, 1976, Atomindex and ERDA Research Abstracts became the major sources of information on the subject, as gleaned from research reports, books, journal literature, etc. The work is international in scope, the result of a cooperative effort between ERDA and the International Nuclear Information System. Indexed similarly to NSA, including personal and corporate-author, subject, and report-number indexes.
594. **Bioengineering Abstracts.**

Selected material for professionals in bioengineering and related fields. Up-to-date, concise information. Scans some 2,000 core journals, conference papers and reports, industrial activities, etc.4

595. **British Technology Index, 1962-.**
Library Association, London. Monthly with annual cumulations. Supersedes in part in the *Subject Index to Periodicals*.

An alphabetical subject index to articles in British technical journals.

**Coverage:** All phases of engineering and chemical technology and manufacturing processes are covered. Also includes the chemistry and physics of man-made objects and industrial processes, instruments and articles on the chemistry of individual substances. Does not cover industrial economics except for articles of mixed technical-economic character. In the field of management, the policy is to include only material on such physical and statistical techniques as work study, ergonomics and operational research. The biological sciences are not covered; however, borderline subjects such as the production, technology and chemistry of food, drugs and pesticides are covered while the physiological chemical aspects are excluded.1,4

596. **Building Science Abstracts, 1928-.**

Indicative abstracts are given for selected periodical articles. The work considers construction materials as well as techniques and operations and has annual author and subject indexes.2
ABSTRACTS AND INDEXES
(Continued)

597. Civil Engineering Hydraulics Abstracts, 1976-
Bedford, England: British Hydromechanics Research Associations, 1960-
Monthly.

More oriented to the applications of fluid mechanics to civil and structural
engineering than either Engineering Index or Oceanic Abstracts. Worldwide
coverage of hydraulics as it pertains to coastal and ocean waters, instrumen-
tation, etc.4

598. Concrete Abstracts. Vols. 1-
Detroit: American Concrete Institute, 1973-. Bimonthly.

Volume 3, 1974. Covers primary literature. Keyword index.4

599. Corrosion Abstracts, 1962-

Arranged by subject with subject indexes. Covers testing, characteristic
corrosion phenomena, corrosive environments, preventive measures, materials,
equipment, industries, etc.

Scope: International.1,4

600. Current Papers in Electrical and Electronics Engineering. v.1-

Contains references to every item abstracted in Electrical and Electronics
Abstracts. Current Papers lists items in the same classification scheme. As
a listing, rather than an abstracting service, it appears much sooner and hence
serves the purpose of current awareness.3

601. Electrical and Electronic Abstracts, Vols. 1-

Section B of Science Abstracts. Over 40,000 items per year are abstracted from
89 core journals from 13 countries as well as secondary. Author and subject
indexes. Supplemented by Current Papers in Electrical and Electronics Engi-
neering.

Covers engineering, mathematics and materials science, electromagnetic fields,
instrumentation and special applications, power systems and applications. (IEEE
is the major abstracting service in the field).4,6

602. Electronics and Communications Abstracts Journal. v. 1-

An international abstracting service covering electronic physics, electronic
systems, electronic circuits, electronic devices, and communications. Indexed
sources are periodicals, government reports, conference proceedings, books, dis-
sertations and patents. Approximately 5,000 items per annum are abstracted.3
603. **Engineering Index, 1884-**


Engineering's first and most comprehensive English-language collection of abstracts in engineering, and all its subdisciplines. Scans and abstracts reports, patents, books, symposium papers, and articles from over 3,500 journals.

Covers: Engineering, technical and applied science and the functions of research, testing, design, construction, maintenance, etc. Includes Mechanical electrical and civil engineering, including such marginal subjects as geology, chemicals and chemical processes; optics; personnel; public works, regional and city planning; sugar; textiles; and wood and wood products.

Scope: International.

604. **Fluid power abstracts: world-wide coverage of hydraulics and pneumatics literature.**


605. **Fluidics Feedbacks; Abstracts, Reviews, Industrial News, Products, Patents: A Monthly Review of the World of Fluidics.** v. 1-.


An excellent specialized bibliographic and reporting service in hydraulic engineering, surveying the world's primary literature and producing circa 800 abstracts each year. Annual subject, personal, and corporate author indexes, Its several sections cover circuits and circuit components, general topics, devices of moving parts, non-moving part devices, applications, and new products.
606. Highway Research Abstracts, 1931-
U.S. Highway Research Board, National Research Council, National Academy of
Sciences, National Academy of Engineering.

A guide to current literature for the highway administrator and engineer.

Covers highway transportation and related subjects including accidents, air
pollution, bridges, cement, drainage, mass transportation, planning, design,
vibration, etc. (Annual subject index).

Scope: International.

607. HRIS Abstracts, 1968-
Board, Division of Engineering, National Research Council, National Academy
of Sciences, National Academy of Engineering.

Includes contributions from various U.S. government agencies, the National
Safety Council, American Society of Civil Engineers, universities, state high-
way departments, Transport and Road Research Laboratory (Crowthorne, England,
the English Language Center for International Road Research Documentation),
Roads and Transportation Association of Canada.

Covers: Transportation administration, finance and economics, photogrametry,
highway, pavement and bridge design, materials, maintenance, safety, control,
etc.

608. ICE Abstracts. 1974-
This new publication from the Institution of Civil Engineers fills what has
been a serious gap in the abstracting services for civil engineering. Civil
engineers now have an abstracting journal devoted solely to their subject which
appears ten times a year (monthly except August and December) and covers the
publications of the Institution of Civil Engineers, the American Society of Civil
Engineers, the American Concrete Institute, the Prestressed Concrete Institute
and the Water Pollution Control Federation. In addition, articles from about
100 European journals are abstracted by qualified engineers. ICE Abstracts may
be obtained on microfiche or on computer tapes, but is produced in A5 format
for general use. It remains to be seen whether or not the present coverage is
wide enough to satisfy the needs of the practising civil engineer in view of
the surprising exclusion of journals published outside Europe, with the ex-
ception of those produced by the institutions in the USA previously mentioned.

609. IMM Abstracts, 1950-

The index deals with mining, extraction metallurgy, mineral dressing and
economic geology. It is arranged by a subject classification system, and all
items have annotations that are often more informative than indicative in
style. Coal and ferrous extraction metallurgy are not covered.
ABSTRACTS AND INDEXES

(Continued)

| 610. | **Index Aeronauticus: Journal of Aeronautical and Astronautical Abstracts.**
  | Abstracts the contents of approximately 500 journals, and arranges them by universal decimal classification. Also included is a list of translations. Annual subject and author indexes.⁴

| 611. | **International Aerospace Abstracts.** Vols. 1-.
  | A worldwide abstracting service issued alternately with STAR. Covers periodicals, books, meeting papers, translations, and proceedings in the field of aeronautics, and space science and technology. Author, subject, report-number, and accession-number indexes are issued quarterly, semiannually, and annually.⁴

| 612. | **Key Abstracts.** Vols. 1-.
  | There are 6 monthly parts: Key Abstracts: Solid State Devices; Key Abstracts: Electronic Circuits; Key Abstracts: Systems Theory; Key Abstracts: Communication Technology; Key Abstracts: Power Transmission and Distribution; Key Abstracts: Industrial Power and Control Systems.
  | Designed for individual use by R&D specialists and for smaller, specialized companies and libraries, each Key Abstract is drawn from the INSPEC database and covers only the most important worldwide developments within its specific subject discipline - no more than 250 items in each issue. Issues are restricted to 24 pages and contain complete bibliographic information.⁴

| 613. | **Metals Abstracts, 1968-**
  | The 25,000 or so abstracts produced per annum are a reflection of the wide international coverage of about 1000 journals, reports, monographs and conference proceedings. Covers all aspects of the science and practice of metallurgy and related fields. Annual cumulative author and subject indexes.³,⁵

  | Prior to February 1975, issued by Atomic Energy Commission. Abstracts the technical report literature sponsored by the AEC and other government agencies, universities, and foreign research establishments. It also provides international coverage of patents, books, periodical articles, translations, etc., in nuclear science and technology. Complete bibliographic information as well
as corporate, personal-author, subject, and report-number indexes. Ordering procedures also available. Arranged under 21 main headings and many subdivisions. Has been replaced by ATOMINDEX.4


The most comprehensive abstracting service in existence, providing c.1,000,000 abstracts pa. In 1966 it covered 21,000 periodicals and serials, 6,000 monographs and 11,000 patent specifications and standards, - material published in 110 countries in over 60 languages. Abstracts appear up to 6-7 months after publication of the original article. Annual subject indexes commonly arrive very late. The Polar record (v. 11, no. 70, January 1962. p. 81-83) has paid tribute to the high standard of accuracy in printed non-Russian references. If a table, diagram or map is essential to the comprehension of a paper, it is reproduced in the abstract. Duplication between the various series is sensibly permitted.6


A review of world literature on roads and traffic. Covers all aspects of roads and traffic including construction, bridges, tunnels, pertinent geological, climatological, hydrological and economic material road layout, parking accidents and safety measures and other relevant material. Now superseded by International Road Documentation Scheme (Paris, OECD; English language version. Crowthorne, Berks, Transport and Road Research Laboratory, 1965-).4,6

617. Road Documentation for Developing Countries. Crowthorne, Berks, Transport and Road Research Laboratory Overseas, 1973-.

About 600 abstracts, covering highway planning, design, construction and maintenance, traffic engineering and road safety.6
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1. Abstracts and Indexes in Science and Technology: A Descriptive Guide.
   Dolores B. Owen and Marguerite M. Hanchey. Metuchen, New Jersey:

2. Guide to Basic Information Sources in Engineering.


4. Scientific and Technical Information Sources.

5. Use of Engineering Literature.