

汉英—英汉矿物加工 图解词典

Chinese-English/English-Chinese
Mineral Processing Pictorial Dictionary

邹志毅 编

Edited by Zou Zhiyi



冶金工业出版社

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内 容 简 介

《汉英—英汉矿物加工图解词典》是矿物加工(含选煤)、冶金、建材、矿山机械等专业的学生、教师、科技工作者以及翻译工作者必备的工具书和参考书。

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Dictionary

邹志毅 编

Edited by Zou Zhiyi

任德树 审校

Reviewed by Ren Deshu

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Beijing

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内 容 简 介

本词典共收录了矿物加工、冶金、水泥建材等有关专业词目中文 2500 多条、英文 2600 多条,汇集了 300 多幅图片,分 14 章共 139 个主题。

本词典主要供从事矿物加工(含选煤)、冶金、水泥建材等专业科研、设计和施工的技术人员使用,也可供大专院校矿物加工和矿山机械等专业的在校学生学习专业英语时参考。

This dictionary is a Chinese-English/English-Chinese Mineral Processing Pictorial Dictionary, which contains more than 2,500 entries in Chinese and more than 2600 entries in English concerning related discipline including mineral processing, metallurgy, cement and construction materials. It contains more than 300 pictures, and has 139 subjects. It is designed and edited mainly for professionals in mineral processing (coal preparation), metallurgy, cement and construction materials disciplines, and also can be used by students at college and university who majored in mineral processing and mining machinery.

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前 言

近年来,随着世界矿业经济的发展,各国间在矿业领域中的技术交流、合作与沟通日益频繁。为了满足国内外从事矿物加工、冶金、水泥建材等专业的科技人员进行国际交流、阅读相关的中英文技术资料 and 书籍、撰写中英文论文等需求,编者采用图形示例、汉英对照的方式编写了这本《汉英-英汉矿物加工图解词典》。

本词典以矿物加工、冶金、水泥建材等行业专业词汇为主要内容,收集了烧结球团、环境保护、仪表和自动化等专业的常用词汇。书中共选入中文 2500 多条、英文 2600 多条词目,汇集了 300 多幅彩色图片,分 14 章共 139 个主题。读者可以通过图文对应的方法,熟记单词。

本词典图解部分之后附有矿物名称表、常见英文缩写词及英汉、汉英词条索引,方便读者查阅。

为保证本词典图文的正确性,书中的图例主要选自国外设备厂家提供的资料以及国外期刊,并逐一进行核订。

本词典的编辑出版,为相关行业的科学技术人员和工程技术人员提供了一本极为实用的工具书。本词典也可供大专院校矿物加工和矿山机械专业的在校学生专业英语时参考。

在收集资料和编写过程中,编者曾得到有关单位和朋友们的大力支持与帮助。这里,要特别感谢的是:任德树教授仔细审阅了全部书稿,为本书的最后定稿和完善做了大量认真细致的工作;刘晓同志完成了大部分图片的编辑工作;冶金工业出版社及责任编辑为本书的出版给予了很大支持并做了很多工作;奥图泰(上海)冶金设备技术有限公司、KREBS 机械设备(北京)有限公司、北京中冶华润科技发展有限公司、赣州金环磁选设备有限公司、成都利君实业有限责任公司为本书的出版提供了部分资助,在此一并表示衷心的感谢。

由于编者的水平有限,书中存在不足之处,诚望读者指正。

邹志毅
2008 年 5 月于北京

Preface

Along with global economic growth in recent years, there are more and more opportunities of technical exchange, communication and co-operation in mining industry among different countries in the world. In order to serve the practical and professional needs of all who have international exchange, read related technical documents and write a paper in English and/or Chinese, the Chinese—English/English—Chinese Mineral Processing Pictorial Dictionary is designed and edited in Chinese and English language with illustration by pictures.

This dictionary contains more than 2,500 entries in Chinese and more than 2,600 entries in English, mainly from mineral processing, metallurgy, cement and construction materials disciplines, but also includes terms from sintering & pelletization, environmental protection, instrumentation and automation. Here the words are grouped by their subject matter into 139 sections, divided into fourteen main headings/chapters. It contains more than 300 pictures. By cross-reference to pictures and accompanying terms in this dictionary, it is easy and helpful for the readers to memorize the technical terms in both English and Chinese.

This dictionary is supplemented by appendices e. g. list of mineral name, abbreviation, for readers' convenience. Followed by Chinese English vocabulary and English Chinese vocabulary.

To ensure words and pictures with accuracy in this dictionary, almost all pictures are extracted and selected from oversea suppliers and foreign periodicals and magazines. Definition and translation of each word have been checked carefully.

The publication of this dictionary will provide a practical reference book for students, teachers and professionals in mineral processing (includes coal preparation), metallurgy, mining machinery and cement and construction materials disciplines. This dictionary also can be used by students at college and university who majored in mineral processing and mining machinery.

I am indebted to many organizations and individuals who have given me invaluable help during the preparation of this dictionary. A complete list of acknowledgements appears on page 360. The contribution and very valuable support provided by a few companies requires special acknowledgement. They are Metso Minerals Inc., Mining Media Ltd. (publisher of Engineering & Mining Journal and Coal Age magazine) and Outotec Oy. They generously granted me to use their numerous pictures in this dictionary. Also I would like to express sincere thanks to those who made the most direct contribution, my friend Prof. Ren Deshu, who read the entire manuscript and made many valuable suggestions. Mrs. Liu Xiao, who edited the majority of pictures in this dictionary. I also thank Mr. Zhang Wei and Miss Wang Nan of the publishing company for their arduous work, which make this dictionary beautiful.

Finally I would like to thank five companies for their generous financial assistance for the publication of this dictionary. They are Outotec (Shanghai) Co., Ltd., FLSmidth Krebs Engineers, Beijing CMRC Science & Technology Co., Ltd., SLon Magnetic Separator Ltd. and Chengdu Leejun Industrial Co., Ltd.

Responsibility for any omissions however rests with the editor. Any feedbacks from readers will be appreciated.

Zou Zhiyi
Beijing
May 2008

使用说明

1. 本词典的中英文词目是按主题排列的,分 14 章共 139 个主题,如:

1 工艺流程 Process Flowsheet

1.1 铝生产 Aluminum Production

2. 本词典可按两种方法查阅:

一种方法是按主题词目分类查阅,即先查主题词目分类目录和对应页码,再从正文查阅包含此词条的图形和相应的中英文名称;

另一种方法是按索引查阅,即从汉英对照词汇索引或英汉对照词汇索引查找词条对应正文的页码,再查阅正文。

3. 正文图中带圆圈的数字对应的名称是一个复杂设备或系统结构的名称(用黑体表示),其中包含的设备部件则用不带圆圈数字对应的名称命名。

4. 中文或英文词条相近的释义之间用圆括号“()”区分。

5. 正文中圆括号“()”中的文字为加注性内容或解释性说明。

6. 正文中“〔 〕”中的文字可互换其前面的文字,如:“drum 转筒[鼓]”。

7. 两个索引中的“编号”对应的数字是由点号分隔的三部分组成的:前两个数字分别表示的是章、节编号,最后一位数字表示的是某章节中词条的顺序号。如以“12.9.8”为例,“12.9”为章节编号,“8”表示在此章节中的第 8 个词条。

Notes on the Use of the Dictionary

1. In this Dictionary the Chinese and English entries are grouped by their subject-matter into 14 Chapters and 139 sections, divided into fourteen chapters. For instance:

1 工艺流程 Process Flowsheet

1.1 铝生产 Aluminum Production

2. There are two ways to look up a word in this dictionary. Firstly, look for the word starting from subject matter in the content, turn to the page number shown. Because this dictionary is arranged by subjects, all the related words are found on that or opposite page. Secondly, look for the word in the alphabetical index, then turn to the page number listed.

3. On the plate those numbers which are enclosed in circles refer to complex objects whose parts are also numbered and named.

4. Vocabulary entry is followed by a synonym placed in round brackets.

5. Vocabulary entry is followed by an explanatory note or extra explanation placed in round brackets.

6. Words contained in square brackets can substitute words preceding the square brackets.

7. The terms are numbered. Each number consists of three parts separated by a full stop, e. g. 12. 9. 8, the first two parts preceding the full stop (12. 9 in our example) stands for the number of the chapter and section in the table of content, and the part that follows (8) is the order number of the term within the section.

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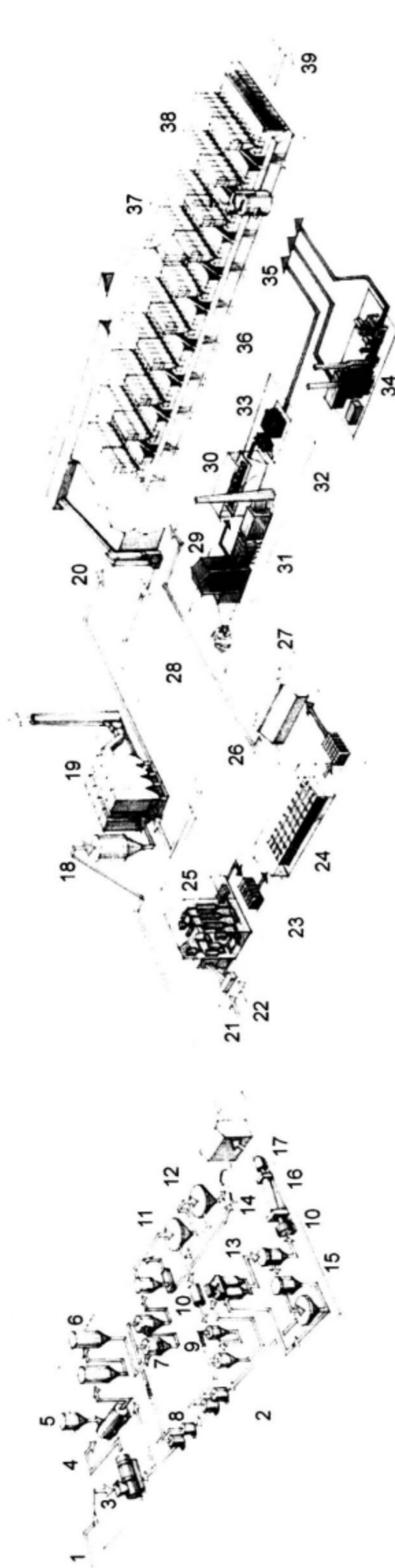
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• 1 •

工艺流程

Process Flowsheet

1.1 铝生产 Aluminum Production



Courtesy of ABB

- | | | |
|----------------------------------|-------------------------------|--|
| 1. 铝土矿采矿 bauxite mining | 15. 分级过滤机 classifying filters | plant |
| 2. 氧化铝厂 alumina plant | 16. 回转窑 rotary kiln | 29. 工业锅炉 industrial boilers |
| 3. 棒磨机 rod mill | 17. 冷却机 cooler | 30. 蒸汽发生器 steam generator |
| 4. 料浆混合机 slurry mixer | 18. 氧化铝 alumina | 31. 空气污染控制 air pollution control |
| 5. 碎石灰 crushed lime | 19. 干式洗涤器 dry scrubber | 32. 联合循环发电厂 combined cycle power plant |
| 6. 蒸汽溶出器 steam digesters | 20. 浓缩氧化铝 enriched alumina | 33. 配电站 electrical switchyard |
| 7. 压力还原罐 pressure reducing tanks | 21. 沥青 pitch | 34. 燃气轮机 gas turbine |
| 8. 加热器 heaters | 22. 焦炭 coke | 35. 坩埚 crucible |
| 9. 热交换器 heat exchanger | 23. 阳极厂 anode plant | 36. 熔炼 smelting |
| 10. 过滤机 filter | 24. 焙烧炉 baking furnace | 37. 氧化铝料斗 alumina supply hopper |
| 11. 矿砂分级机 sand classifiers | 25. 生阳极车间 green anode plant | 38. 电解槽 reducing pots |
| 12. 浓密机 thickener | 26. 阳极 anodes | 39. 去市场 to market |
| 13. 沉降槽 precipitators | 27. 阳极组装 anodes rodding | |
| 14. 废渣池 waste pond | 28. 矿物燃料发电厂 fossil fuel power | |