

BOOK REVIEW

JEWELRY MANUFACTURER'S ENCYCLOPEDIA (2 volumes)

Written and published by Philip E Romanoff, New Jersey, USA 07732, 2000, 906 pages, Price \$112.00.

The Author is well known for his seminars, previous publications and extensive turnkey plant consultancy work worldwide. This recent work appears to be his consultancy compendium and if he had used a more accurate title along those lines there would have been less grounds for criticism. As it stands, the Author claims that this is an encyclopaedia written for Jewelry Manufacturing Industry and contains complete information on a wide variety of jewellery making topics and over 25 reference charts for all phases of manufacturing.

While an encyclopaedia is not supposed to cover absolutely all knowledge in a sector of information, it should provide facility to find what you need or where else to look. Most encyclopaedias order their topics alphabetically by word or name. CD-ROM encyclopaedias and on-line databases also offer access by timelines (an historical date perspective), reference lists by author/date, or via audio/video content lists. The common objective is rapid and effective communication using a variety of modes. The problem with this Encyclopaedia is not the absence of useful information but finding what is needed without worrying about the accuracy or even-handedness about what is said.

The strongest features are in practical and safety conscious plant layout such as cleaning, finishing, electroplating and recovery of values. The weaknesses are, overall, in the editing, and lack of modern management techniques for quality assurance, economic aspects and critical interpretation of fundamental metallurgy, gemmology, chemistry and physics.

There is a contents list at the beginning of volume 1 but no index or system for cross-referencing thereafter. Figure numbering, captioning and quality of reproduction are very

haphazard. For instance, in the first 40 pages, after 10-30 'pictures', Fig T1 appears, followed by about 10 more 'pictures' and then Figs 1-4, in what appears to be an article or chapter from an unstated source; next is figure 26. All figures, with the exception of those on the glazed card covers, are black and white but some are reproduced at too low a resolution and high contrast to be of any help as an extra means of communication. Most do not have stand-alone captions. There is a glossary of terms but the choice is somewhat arbitrary and definitions vary from precise through vague to incorrect. Some useful appendices are at the end of volume 2 but there is a lot of repetition, particularly among the many conversion tables. Some conversions are given in opposite directions and at different levels of accuracy in different tables and it is arguable whether there is much point in giving both extensive tables and conversion factors.

There is a general problem in that much of the data, priorities, preferences and styles of writing have been taken out of their original context, varying from original metallurgical research papers to equipment manufacturer's catalogues/manuals. Not only does this lead to too much over-generalisation but it is difficult to see where one source of information changes to another. The Author uses the same font and format for 'Chapter Titles/Headings' (he doesn't use the term chapters) and for the next sub-heading style. Much of the text was, presumably, scanned from a variety of original sources and reproduced in a uniformly bold font; readable but rather monolithic and often lacking in interpretation by the Author/Editor.

For instance, pages 7-37 deal with gold alloys, initially from a colour point of view, then by way of composition and properties. Judging from the frequent changes between

temperatures in Celsius and Fahrenheit, the material reviewed is taken from various sources. Some reference numbers remain where diagrams have been copied with their notes and captions, but there is no corresponding reference list. Next, unexpectedly p38-68 deals with crucible melting and almost the rest of volume 1 is devoted to investment casting and related technology. Metallurgy does not figure again until page 791 where there is a paper by Cretu & Van de Linge of Mintek, SA, on 'Coloured Gold Alloys'. This is a reprint from *Gold Bulletin*, 1999, 32, 115-126, where figures, captions, references are properly sequenced. The paper also introduces the nickel-free white golds problem in context, whereas this merits less than one line in the previous 'gold review'.

Reproduction difficulties prevent some of the charts having a practical use. For instance, types and grades of porosity do not show up well in casting technology; similarly, in the only gemmological chart, a reproduction of a useful IGI Diamond Criteria Chart, the clarity gradings need high gloss photo quality reproduction to be useful. There are other gemmological items but, characteristically, these deal with heat treatment of gem material, oiling of emeralds, diamond whitening, healing rubies, and detection of moissanite; all enhancement processes. Other gem 'processes' such as buying and cutting of natural rough, making of synthetic gem stock, faceting, polishing, grading of gemstones are not included.

There is some interesting reading in this compendium provided you can find what you need, or merely what interests you, but a constructively critical approach is required. It may be regarded as fair value if it saves you at least one day of an independent consultant's time!

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