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Expert group meeting on the selection of equipment for the sugar processing industry
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INFORMATION REMARKS ON ELEVEN DOCUMENTS REVIEWING AND ANALYSING INDUSTRIAL SUGAR PRODUCTION ACTIVITIES 1/

by

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1/ The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

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These information remarks refer to the following documents outlining the approach to the problems discussed therein:-

ID/WG.10/4 - Questions of normalisation in the sugar industry;
/5 - Process flow in the sugar industry;
/6 - Unit operation in the sugar industry;
/7 - Safety and sanitary requirements in the sugar industry;
/8 - Water, steam, gas and energy supply for a sugar factory;
/9 - Thermo-technical evaluations of the sugar production process;
/10 - Quality control requirements of the sugar industry;
/11 - Sugar production equipment characteristics and spare parts;
/12 - Industrial feasibility calculations in the sugar industry;
/13 - Offers and quotations for sugar production equipment and complete sugar factories;
/14 - Test runs and take-over certificate of sugar production plants.

THE APPROACH TO THE PROBLEMS

The selection of equipment for a processing industry requires first of all a knowledge of the objectives for which the equipment is to be used. This in turn requires an understanding of the processing industry itself. In order to be able to discuss proposals intelligently and with the greatest prospective benefit it is necessary to agree on terminology, to understand the local situation in terms of economic development, cultural background and national aspirations.

The [illegible] (1) have been prepared with the primary object of defining areas for discussion. This involves correct phrasing of questions which is of more fundamental importance than defining answers.

Three basic questions will be used as a framework around which to build the structural units which will go to make up the compound documents for discussion. These are:-

1) What is the situation?
2) How has this situation come about?
3) Why did this situation develop in this way?

There are of course numerous variants to these basic questions but by maintaining the general framework as defined the real purpose of the discussion can be kept in its right perspective.

The eleven documents referred to are not intended necessarily to provide the answers, their intention is to generate questions in an organized manner and by systematic development of the questions it is hoped that useful answers will be forthcoming.

A short list of relevant text books is given which is by no means exhaustive but is provided as an initial background to the papers presented here. No attempt has been made to list the journals or conference proceedings specialising in various aspects of sugar manufacture and control. These have proliferated in number covering nearly every country where sugar is produced. There are also many important publications related to these topics which have appeared in journals other than those set apart especially for sugar related topics.

An indication of the tremendous volume of published literature may be obtained from a perusal of the documented reference contained in the texts, to which general reference is given here.

There may well be a place for a centralized agency to develop a computerized reference library for the sole benefit of the sugar industry as has been done in other areas of science and technology. Some assistance in this direction can be obtained from libraries specializing in computerized referencing and Chemical Abstracts has reserved a section for sugar related publications which provides a wealth of information for anyone concerned with surveys of literature or reviewing aspects of the industry.

GENERAL REFERENCES

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4. "Principles of Sugar Technology" - edited by Pieter Honig, Volume I 1959 (reprinted 1962), Volume II 1959 (reprinted 1964), Volume III 1963, Elsevier, Amsterdam.

5. Handbook of Cane Sugar Engineering by E. Hugot, Revised Edition English translation by G.H. Jenkins, Elsevier, Amsterdam 1972.

6. Introduction to Cane Sugar Technology by G.H. Jenkins, Elsevier, Amsterdam 1966.

7. The Mechanics of Crushing Sugar Cane by C.R. Murry and J.E. Holt, Elsevier, Amsterdam 1966.

8. Manufacture and Refining of Raw Cane Sugar by V.E. Baikow, Elsevier, Amsterdam 1967.

9. Handbook of Sugar Cane Milling and Factory Practice by F.H.C. Kelly, UNDP, Bangkok 1973.

10. By-Products of the Cane Sugar Industry by J.M. Paturau, Elsevier, Amsterdam 1969.

11. Chemical Engineers Handbook edited by John H. Perry, IVth Edition, McGraw-Hill, New York 1963.

12. Sugar Technology Reviews edited by G.H. Jenkins, Elsevier, Amsterdam 1970 et seq.

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