Cane Sugar Engineering

Right here, we have countless books **Cane Sugar Engineering** and collections to check out. We additionally pay for variant types and afterward type of the books to browse. The good enough book, fiction, history, novel, scientific research, as capably as various supplementary sorts of books are readily understandable here.

As this Cane Sugar Engineering, it ends happening visceral one of the favored books Cane Sugar Engineering collections that we have. This is why you remain in the best website to see the unbelievable ebook to have.

Standard Fabrication Practices for Cane Sugar Mills E. Delden 2015-07-14 Sugar Series, Vol. 1: Standard Fabrication Practices for Cane Sugar Mills focuses on the processes, methodologies, and principles involved in standard fabrication practices for cane sugar mills. The publication first tackles the storage and transportation of cane, separation of juice from cane, use and behavior of bagasse, and juice weighing or measuring. The book then elaborates on liming, clarification, carbonatation, and sulfitation processes, and special clarification agents and their history. Topics include phosphate, magnesium compounds, clay, bauxite, charcoal and carbon, blankit, lime kiln, sulfur dioxide, and sample calculation of a sulfur burner. The text examines ion-exchange, evaporation, evaporator cleaning, measurement of heat-transfer coefficient, boiling house operation, seeding and crystallization, molasses centrifugation, and crystallizers. Discussions focus on water circulation, powdered-sugar preparation, crystallization procedure in practice, soda and acid facilities, cleaning shut-down, and variations on chemical cleaning. The manuscript is a vital source of data for researchers wanting to study the standard fabrication practices for cane sugar mills.

Handbook of Cane Sugar Engineering Paul Zindel 1972

Manufacture and Refining of Raw Cane Sugar V. E. Baikow 2013-09-03 Manufacture and Refining of Raw Cane Sugar provides an operating manual to the workers in cane raw sugar factories and refineries. While there are many excellent reference and text books written by prominent authors, there is none that tell briefly to the superintendent of fabrication the best and simplest procedures in sugar production. This book is not meant to replace existing books treating sugar production, but rather to supplement them. All that is written in this book, each chapter of which deals with a separate station in a raw sugar factory and refinery, is also based on material already published and known to many in the sugar industry. The book is organized into two parts. Part I covers raw sugar and includes chapters on the harvesting and transportation of sugar cane to the factory; washing of sugar cane and juice extraction; weighing of cane juice; boiling of raw sugar massecuites; and storing and shipping bulk sugar. Part II on refining deals with processes such as clarification and treatment of refinery melt; filtration; and drying, cooling, conditioning, and bulk handling of refined sugar.

Sugar Technology Pieter W. van der Poel 1998

Fuel Ethanol Production from Sugarcane Thalita Peixoto Basso 2019-01-23 This book offers a broad understanding of bioethanol production from sugarcane, although a few other substrates, except corn, will also be mentioned. The 10 chapters are grouped in five sections. The Fuel Ethanol Production from Sugarcane in Brazil section consists of two chapters dealing with the first-generation ethanol Brazilian industrial process. The Strategies for Sugarcane Bagasse Pretreatment section deals with emerging physicochemical methods for biomass pretreatment, and the non-conventional biomass source for lignocellulosic ethanol production addresses the potential of weed biomass as alternative feedstock. In the Recent Approaches for Increasing Fermentation Efficiency of Lignocellulosic Ethanol section, potential and research progress using thermophile bacteria and yeasts is presented, taking advantage of microorganisms involved in consolidating or simultaneous hydrolysis and fermentation processes. Finally, the Recent Advances in Ethanol Fermentation section presents the use of cold plasma and hydrostatic pressure to increase ethanol production efficiency. Also in this section the use of metabolic-engineered autotrophic cyanobacteria to produce ethanol from carbon dioxide is mentioned.

Cane Sugar Engineering Peter Rein 2017

Sugar: User's Guide To Sucrose Neil L. Pennington 1990-10-31

Sugarcane Biorefinery, Technology and Perspectives Fernando Santos 2019-11-21 Sugarcane Biorefinery, Technology and Perspectives provides the reader with a current view of the global scenario of sugarcane biorefinery, launching a new expectation on this important crop from a chemical, energy and sustainability point-of-view. The book explores the existing biorefinery platforms that can be used to convert sugarcane to new high value added products. It also addresses one of today's most controversial issues involving energy cane, in addition to the dilemma "sugar cane vs. food vs. the environment", adding even more value in a culture that is already a symbol of case study around the world. Focusing on the chemical composition of sugarcane, and the production and processes that optimize it for either agricultural or energy use, the book is designed to provide practical insights for current application and inspire the further exploration of options for balancing food and fuel demands. Presents the productive chain of sugarcane and its implications on food production and the environment Includes discussions on the evolution of the sustainable development of the sugar-energy sector Contextualizes and premises for the technological road mapping of energy-cane Provides information on new technologies in the sugar-energy sector

Sweet Cane Lucy B. Wayne 2010-07-01 A look at the antebellum history and architecture of the little-known sugar industry of East Florida. From the late eighteenth century to early 1836, the heart of the Florida sugar industry was concentrated in East Florida, between the St. Johns River and the Atlantic Ocean. Producing the sweetest sugar, molasses, and rum, at least 22 sugar plantations dotted the coastline by the 1830s. This industry brought prosperity to the region—employing farm hands, slaves, architects, stone masons, riverboats and their crews, shop keepers, and merchant traders. But by January 1836, Native American attacks of the Second Seminole War, intending to rid the Florida frontier of settlers, devastated the whole sugar industry. Although sugar works again sprang up in other Florida regions just prior to the Civil War, the competition from Louisiana and the Caribbean blocked a resurgence of sugar production for the area. The sugar industry would never regain its importance in East Florida—only two of the original sugar works were ever rebuilt. Today, remains of this once thriving industry are visible in a few parks. Some are accessible but others lie hidden, slowly disintegrating and almost forgotten.

Archaeological, historical, and architectural research in the last decade has returned these works to their once prominent place in Florida's history, revealing the beauty, efficiency of design, as well as early industrial engineering. Equally important is what can be learned of the lives of those associated with the sugar works and the early plantation days along the East Florida frontier.

Sugar Fredrick Caras 2019-03-29 A variety of analytical techniques have been developed to determine the content of sugars in honey, such as spectroscopic, chromatographic, and electrochemical ones. In this collection, the authors present the cross-section of results on sugar composition, obtained by contemporary analytical methods used in honey authentication. The following chapter addresses how sago fronds can be used to produce sugar, which contains cellobiose and glucose as the main sugars at about 10 g/L and 5 g/L, respectively. SFS has been used as the complete fermentation medium for the production of L-lactic acid using L. lactis IO-1 without the need for further amendment. Next, the authors address the impact of processing on the physicochemical characteristics and elemental composition of brown sugar produced in Brazil. 15 brown sugar samples of 5 distinct brands in 3 different were evaluated, and the moisture contents of the samples were determined by Karl Fischer titration, and thermogravimetric analysis determined the melting point. The typical process of producing solid sugar from sugarcane and mapping by-products and residues that are generated at each stage is presented. By-products are characterized and the technologies prominent in energy reuse are addressed. Recent studies, applications, trends, challenges and constraints for the future use of sucrose and sucrochemistry derivatives are also discussed. This represents a diversification-promising productive concept of green organic chemistry, based on an accessible, low-priced, ecological and renewable source, which stands in the short and long terms as the best opportunity to compete economically with petrochemicals. In addition, several factors related to the sustainability production of sugar as a raw material, that include innovative production processes, natural and artificial substitute sweeteners, geopolitics, medical research and new end uses are discussed. The concluding work seeks to examine the changes in the properties of elastomeric compounds as a consequence of conventional additives such as zinc oxide and stearic acid by sugar cane bagasse, a green option for obtaining environmentally friendly elastomeric compounds.

Principles of Sugar Technology Pieter Honig 2013-10-22 Principles of Sugar Technology focuses on the principles, methodologies, and processes involved in sugar technology, including properties of sugar and agents involved in its manufacture. The selection first offers information on the chemical and physical properties of sucrose, as well as decomposition, structure of the sucrose molecule, sucrose derivatives, crystallized and amorphous sucrose, and solvents. The book then takes a look at the physical and chemical properties of reducing sugars and non-nitrogenous organic acids of sugarcane. The publication ponders on nitrogen-containing nonsugars (amino acids and proteins), complex organic nonsugars of high molecular weight, and lipids of sugarcane. Discussions focus on the distribution of nitrogen in sugarcane, amino acids in cane juice and leaves, lignin, pectin, proteins, and significance of waxy and fatty lipids in sugar manufacture. The text also examines color and colored nonsugars, inorganic nonsugars, and agents used in sugar manufacture. The selection is a dependable reference for readers interested in sugar technology.

The Growing of Sugar Cane Roger P. Humbert 2013-09-24 The Growing of Sugar Cane develops the fundamental principles of the growing of cane in the hope that cane culture throughout the world will benefit by it. The tremendous strides made in recent years in the knowledge of how to improve the growing of sugar cane, form the subject of this treatise. Cane growing is not a science. As the results of research replace tradition and guesswork, yields are expected to continue to rise. The book opens with a chapter on the factors that affect sugar cane growth. This is followed by separate chapters on seedbed preparation, sugar cane planting, the nutrition and irrigation of sugar cane, drainage, weed control, flowering control, ripening and maturity, harvesting and transportation, and pest and disease control.

Recent Trends in Sustainable Engineering Karen Lizbeth Flores Rodríguez 2021-11-03 The book is a multidisciplinary space and serves as a platform to share and learn about the frontier knowledge between different areas related to "Recent trends in sustainable engineering." Sustainable engineering promotes the responsible use of resources and materials involved in the different manufacturing processes or the execution stages of a service. An interdisciplinary approach is required in all aspects of engineering. In this sense, engineers, researchers, and the academic community will play a fundamental role in developing new technologies that respect the environment, still, at the same time, that considers social and economic factors.

Cane Sugar Handbook James C. P. Chen 1993-12-16 In print for over a century, it is the definitive guide to cane sugar processing, treatment and analysis. This edition expands coverage of new developments during the past decade--specialty sugars, plant maintenance, automation, computer control systems and the latest in instrumental analysis for the sugar industry.

Sugarcane Alexandre De Oliveira 2018-05-16 Sugarcane (Saccharum officinarum L.) is considered one of the major bioenergy crops grown globally. Thus, sugarcane research to improve sustainable production worldwide is a vital task of the scientific community, to address the increasing demands and needs for their products, especially biofuels. In this context, this book covers the most recent research areas related to sugarcane production and its applications. It is composed of 14 chapters, divided into 5 sections that highlight fundamental insights into the current research and technology on this crop. Sugarcane: Technology and Research intends to provide the reader with a comprehensive overview in technology, production, and applied and basic research of this bioenergy species, approaching the latest developments on varied topics related to this crop.

Handbook of Sugar Refining Chung Chi Chou 2000-08-14 This book provides a reference work on the design and operation of cane sugar manufacturing facilities. It covers cane sugar decolorization, filtration, evaporation and crystallization, centrifugation, drying, and packaging,

Handbook of Cane Sugar Engineering Emile Hugot 1972

Cane Sugar Engineering Peter Rein 2007

Energy efficiency in sugar manufacturing process Yasabie Abatneh 2013-04-17 Project Report from the year 2013 in the subject Engineering - Chemical Engineering, Wollo University (Kombolcha Institute Of Technology), course: Sugrar Technology, language: English, abstract: People were arguing that whether sugarcane is native to India or New Guinea. They do agree that ancient people liked it and carried with them in their migration and spread throughout south pacific area. Although sugar cane was possibly known in the holy land in biblical time only syrups could be obtained from it. In the 7th- 10th centuries AD, the Arabs spread sugarcane throughout their region of influence in the Mediterranean and eastwards. By the 12th century sugarcane reached Europe and Marco polo reported advanced sugar refining in china

toward the end of 13th century. The ancient process for obtaining sugar consisted of boiling the juice until solids formed as the syrup cooled. Egyptians were using lime as purifying agent and carrying out recrystallization, which is still the main step in refining. The development of the sugar industry from the 16th century onward is closely associated with slavery, which supplied the largest amount of labor used at the time. The law cost of labor and price for sugar made many fortunes. The abolition of slavery introduces steam power as a replacement for the animal or human power that drove the cane mills. The use of steam in steady of direct firing was soon applied for evaporating the cane and following this vacuum pans and centrifuge were applied. The manufacturing of sugar is an energy intensive process which was the cause for deforestation, and then later replaced by bagasse burning and using energy efficiently by designing a multiple effect evaporators.

Sugar-cane Diseases Hideo Koike 1988

Spencer-Meade Cane Sugar Handbook George Peterkin Meade 1963

Handbook of Canesugar Engineering E. Hugot 1872

Unit Operations in Cane Sugar Production J.H. Payne 2013-10-22 An indispensable, practical guide for everyone involved in the processing of sugar cane. Confined to essentials, the book is a compact and concise delineation of the unit processes in the manufacture of raw sugar from sugar cane, giving recommended procedures for achieving optimum results.

Cogeneration in the Cane Sugar Industry J.H. Payne 2012-12-02 The cane plant is probably the most efficient utilizer of sun energy for food production, and at the same time provides an equivalent quantity of biomass. The purpose of this book is to set down the unique position of sugar cane in the cogeneration field. Simultaneous with the development of distance-transmission of electricity, sugar cane processors started cogeneration, making use of the cane plant to supply the power for its own processing, and in recent years excess power for export. A broad view of cogeneration in the cane industry, covering the energy available in a crop, the technology of processing for optimum recovery of energy as well as sugar is presented here. The book describes the most practicable processes for recovering energy in the form of process steam and electricity. Cogeneration in the Cane Sugar Industry should be of interest to a broad spectrum, including government agencies, biomass interests, power generators, public utilities as well as sugar producers and technologist.

Modelling and Analysis of Hybrid Supervisory Systems Emilia Villani 2007-05-18 This book introduces a formalism for modeling complex and large-scale systems that merges Petri nets, differential equation systems, and object-oriented methods. It describes a method that starts from the requirements of a supervisory system and results in a proposal for such a system. The book also presents a validation procedure that allows verification of the formal properties of the hybrid model.

Model Cane Sugar Factory Exhibited in the Palace of Engineering, Etc. [With Plates.]. 1938

The Complete Book on Sugarcane Processing and By-Products of Molasses (with Analysis of Sugar, Syrup and Molasses) H. Panda 2011-10-01 Sugarcane grows in all tropical and subtropical countries. Sucrose as a commercial product is produced in many forms worldwide. Sugar was first manufactured from sugarcane in India, and its manufacture has spread from there throughout the world. The manufacture of sugar for human consumption has been characterized from time immemorial by the transformation of the collected juice of sugar bearing plants, after some kind of purification of the juice, to a concentrated solid or semi solid product that could be packed, kept in containers and which had a high degree of keep ability. The efficiency with which juice can be extracted from the cane is limited by the technology used. Sugarcane processing is focused on the production of cane sugar (sucrose) from sugarcane. The yield of sugar & Jaggery from sugar cane depends mostly on the quality of the cane and the efficiency of the extraction of juice. Other products of the processing include bagasse, molasses, and filter cake. Sugarcane is known to be a heavy consumer of synthetic fertilizers, irrigation water, micronutrients and organic carbon. Molasses is produced in two forms: inedible for humans (blackstrap) or as edible syrup. Blackstrap molasses is used primarily as an animal feed additive but also is used to produce ethanol, compressed yeast, citric acid, and rum. Edible molasses syrups are often blended with maple syrup, invert sugars, or corn syrup. Cleanliness is vital to the whole process of sugar manufacturing. The biological software is an important biotechnical input in sugarcane cultivation. The use of these products will encourage organic farming and sustainable agriculture. The book comprehensively deals with the manufacture of sugar from sugarcane and its by-products (Ethyl Alcohol, Ethyl Acetate, Acetic Anhydride, By Product of Alcohol, Press mud and Sugar Alcohols), together with the description of machinery, analysis of sugar syrup, molasses and many more. Some of the fundamentals of the book are improvement of sugar cane cultivation, manufacture of Gur (Jaggery), cane sugar refining: decolourization with absorbent, crystallization of juice, exhaustibility of molasses, colour of sugar cane juice, analysis of the syrup, massecuites and molasses bagasse and its uses, microprocessor based electronic instrumentation and control system for modernisation of the sugar industry, etc. Research scholars, professional students, scientists, new entrepreneurs, sugar technologists and present manufacturers will find valuable educational material and wider knowledge of the subject in this book. Comprehensive in scope, the book provides solutions that are directly applicable to the manufacturing technology of sugar from sugarcane plant.

Sugarcane Improvement Through Breeding D.J Heinz 2015-08-11 This book is a comprehensive survey of breeding principles and practices employed by sugarcane growers and researchers throughout the world. Included within its scope are important genera and species concepts, morphological information, clarification of certain generic names, a description of germplasm collection and utilization, discussion of the complex issues involved in genetic manipulation, and a summary of sugarcane improvement through breeding over the past century. The book is compiled so that information proceeds from the general to the specific. Basic concepts of evolution, taxonomy, morphology, and anatomy form the groundwork for information regarding germplasm collection, cyto-genetics, genetics, and flowering. Methods of practical application are presented in the ensuing chapters, which deal with hybridization, tissue culture, seed handling, selection criteria, and breeding for tolerance. Figures, tables, and photographs accompany text where appropriate. All key words are indexed and extensive bibliographies follow each chapter.

Selected Readings in Chemical Kinetics Margaret H. Back 2013-09-11 Selected Readings in Chemical Kinetics covers excerpts from 12 papers in the field of general and gas-phase kinetics. The book discusses papers on the laws of connexion between the conditions of a chemical change and its amount; on the reaction velocity of the inversion of the cane sugar by acids; and the calculation in absolute measure of velocity constants and equilibrium constants in gaseous systems. The text then tackles papers on simple gas reactions; on the absolute rate of reactions in condensed phases; on the radiation theory of chemical action; and on the theory

of unimolecular reactions. Papers on the theories of unimolecular reactions at low pressures; on the reaction between hydrogen and bromine; and on the oxidation of phosphorus vapor at low pressures are also considered. The book further describes papers on the thermal decomposition of organic compounds from the standpoint of free radicals; as well as on a single chain mechanism for the thermal decomposition of hydrocarbons. The book will be invaluable to students of chemical kinetics.

Beet-Sugar Handbook Mosen Asadi 2006-06-23 The first all-in-one reference for the beet-sugar industry Beet-Sugar Handbook is a practical and concise reference fortechnologists, chemists, farmers, and research personnel involvedwith the beet-sugar industry. It covers: * Basics of beet-sugar technology * Sugarbeet farming * Sugarbeet processing * Laboratory methods of analysis The book also includes technologies that improve the operation andprofitability of the beet-sugar factories, such as: * Juice-softening process * Molasses-softening process * Molasses-desugaring process * Refining cane-raw sugar in a beet-sugar factory The book ends with a review of the following: * Environmental concerns of a beet-sugar factory * Basics of science related to sugar technology * Related tables for use in calculations Written in a conversational, engaging style, the book is userfriendly and practical in its presentation of relevant scientificand mathematical concepts for readers without a significantbackground in these areas. For ease of use, the book highlightsimportant notes, defines technical terms, and presents units inboth metric and British systems. Operating problem-solving relatedto all stations of sugarbeet processing, frequent practicalexamples, and given material/energy balances are other specialfeatures of this book.

Book of Cane Sugar Engineering Kolli Satyanarayana 2003 With reference to India.

The Sugar Cane Industry J. H. Galloway 2005-11-10 This book is a geography of the sugar cane industry from its origins to 1914. It describes its spread from India into the Mediterranean during medieval times, to the Americas and its subsequent diffusion to most parts of the tropics. It examines the changes in agricultural and manufacturing techniques over the centuries, and its impact in forming the multicultural societies of the tropical world.

Chemistry and Processing of Sugarbeet and Sugarcane M.A. Clarke 2013-10-22 The world of sugar production has undergone massive changes in the last decade which have resulted in the emergence of many technological changes as technologists strive to develop more efficient and cheaper processes. This is the first book to be published for several years which describes the current state of sugar technology. It presents the recent developments in beet and cane sugar manufacturing; describes the chemistry of sugar processing and products; and considers trends and future possibilities in sugar production systems and products. The book comprises two sections: beet and cane. The overview of the crop and the production systems that begins each section serves as a framework for the papers that follow. Several papers, i.e. those on sucrose chemistry - are relevant to both sugarcane and sugarbeet. The authors of the papers are all invited speakers well known in their respective fields. The book should be on the shelf of all sugarcane and sugarbeet factories and refiners around the world as well as those companies who are sugar users or who supply goods and services to the sugar industry. It can also be used as a text by universities offering training courses in sugar processing technology.

Gene Editing in Plants 2017-08-31 Gene Editing in Plants, Volume 149 aims to provide the reader with an up-to-date survey of cutting-edge research with gene editing tools and an overview of the implications of this research on the nutritional quality of fruits, vegetables and grains. New chapters in the updated volume include topics relating to Genome Engineering and Agriculture: Opportunities and Challenges, the Use of CRISPR/Cas9 for Crop Improvement in Maize and Soybean, the Use of Zinc-Finger Nucleases for Crop Improvement, Gene Editing in Polyploid Crops: Wheat, Camelina, Canola, Potato, Cotton, Peanut, Sugar Cane, and Citrus, and Gene Editing With TALEN and CRISPR/Cas in Rice. This ongoing serial contain contributions from leading scientists and researchers in the field of gene editing in plants who describe the results of their own research in this rapidly expanding area of science. Shows the importance of revolutionary gene editing technology on plant biology research and its application to agricultural production Provides insight into what may lie ahead in this rapidly expanding area of plant research and development Contains contributions from major leaders in the field of plant gene editing

Handbook of Cane Sugar Engineering Emile Hugot 1960

Sugar Cane Cultivation and Management H. Bakker 2012-12-06 This volume is intended for reference by the commercial sugar cane grower. Disciplines are covered for the successful production of a sugar cane crop. A number of good books exist on field practices related to the growing of sugar cane. Two examples are R.P. Humbert's The Growing of Sugar Cane and Alex G. Alexander's Sugarcane Physiology. Volumes of technical papers, produced regularly by the International Society of Sugar Cane Technologists, are also a source of reference. Perhaps foremost, local associations, such as the South African Sugar Technologists' Association, do excellent work in this regard. In my forty-five years of experience with the day-to-day problems of producing a satisfactory crop of sugar cane, deciding what should be done to produce such a crop was not straightforward. Although the literature dealing with specific subjects is extensive, I tried to consolidate some of the material to provide the man in the field with information, or an overview of the subject matter.

The Sugar Masters Richard Follett 2007-02-01 Focusing on the master-slave relationship in Louisiana's antebellum sugarcane country, The Sugar Masters explores how a modern, capitalist mind-set among planters meshed with old-style paternalistic attitudes to create one of the South's most insidiously oppressive labor systems. As author Richard Follett vividly demonstrates, the agricultural paradise of Louisiana's thriving sugarcane fields came at an unconscionable cost to slaves. Thanks to technological and business innovations, sugar planters stood as models of capitalist entrepreneurship by midcentury. But above all, labor management was the secret to their impressive success. Follett explains how in exchange for increased productivity and efficiency they offered their slaves a range of incentives, such as greater autonomy, improved accommodations, and even financial remuneration. These material gains, however, were only short term. According to Follett, many of Louisiana's sugar elite presented their incentives with a "facade of paternal reciprocity" that seemingly bound the slaves' interests to the apparent goodwill of the masters, but in fact, the owners sought to control every aspect of the slaves's lives, from reproduction to discretionary income. Slaves responded to this display of paternalism by trying to enhance their rights under bondage, but the constant bargaining process invariably led to compromises on their part, and the grueling production pace never relented. The only respite from their masters' demands lay in fashioning their own society, including outlets for religion, leisure, and trade. Until recently, scholars have viewed planters as either paternalistic lords who eschewed marketplace values or as entrepreneurs driven to business success. Follett offers a new view of the sugar masters as embracing both the capitalist market and a social

ideology based on hierarchy, honor, and paternalism. His stunning synthesis of empirical research, demographics study, and social and cultural history sets a new standard for this subject.

The Encyclopaedia Britannica 1911

Introduction to Cane Sugar Technology G. H. Jenkins 2013-09-03 Introduction to Cane Sugar Technology provides a concise introduction to sugar technology; more specifically, cane sugar technology up to the production of raw sugar. Being intended originally for use in a post-graduate university course, the book assumes a knowledge of elementary chemical engineering as well as adequate knowledge of chemistry. In the field of sugar manufacture itself, the object of the book is to place more emphasis on aspects which are not adequately covered elsewhere. In accordance with this objective, attention has been concentrated mainly on processes and operation of the factory, and description of equipment is made as brief as possible, with numerous references to other books where more detail is available. The emphasis on operation rather than equipment has also been prompted by observation of quite a few factories in different countries where good equipment is giving less than its proper performance due to inefficient operation and supervision. The book is confined to the raw sugar process, which has been the author's main interest. Refining is discussed only to the extent required to explain refiners' requirements concerning quality of raw sugar.

Handbook of Cane Sugar Engineering E. Hugot 2014-05-12 Handbook of Cane Sugar Engineering focuses on the technologies, equipment, methodologies, and processes involved in cane sugar engineering. The handbook first underscores the delivery, unloading, and handling of cane, cane carrier and knives, and tramp iron separators. The text then examines crushers, shredders, combinations of cane preparators, and feeding of mills and conveying bagasse. The manuscript takes a look at roller grooving, pressures in milling, mill speeds and capacity, and mill settings. Topics include setting of feed and delivery openings and trash plate, factors influencing capacity, formula for capacity, fiber loading, tonnage records, linear speed and speed of rotation, sequence of speeds, hydraulic pressure, and types of roller grooving. The book then elaborates on electric and turbine mill drives, mill gearing, construction of mills, extraction, milling control, purification of juice, filtration, evaporation, sugar boiling, and centrifugal separation. The handbook is a valuable source of data for engineers involved in sugar cane engineering.