

Manufacture of Value Added Products from Rice Husk (Hull) and Rice Husk Ash (RHA) (3rd Edition)

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About the Book

Rice husk hull and rice husk ash are byproducts that are derived from the processing of rice grains. Rice husk hull is the outer layer of the rice grain, while rice husk ash is the residue that remains after the husk is burned. These byproducts may seem insignificant at first, but they have numerous applications and offer immense potential for various industries. Rice husk hull is composed mainly of cellulose, lignin, and silica. Its high silica content makes it a suitable raw material for manufacturing eco-friendly building materials such as boards, bricks, and panels. On the other hand, rice husk ash is rich in silica, potassium, and carbon. It can be processed into silica powder, which finds applications in the production of silicon carbide, silicon nitride, and other ceramic materials.

The market outlook for value-added products derived from rice husks and hulls is incredibly promising. As industries and consumers become more environmentally conscious, the demand for sustainable alternatives continues to rise. This presents a great opportunity for manufacturers who are looking to capitalize on the versatility and eco-friendly properties of rice husks and hulls.

The global rice husk ash market size was USD 1.39 billion and is expected to register a revenue CAGR of 6.3%. The market revenue growth is also driven by the increasing use of rice husk ash in the production of various industrial chemicals such as sodium silicate and activated carbon. The unique chemical composition of rice husk ash makes it an ideal raw material for the production of these chemicals, which find application in various industries such as water treatment, pharmaceuticals, and food and beverage. The increasing demand for rice husk ash from various end-use industries, is expected to drive the market growth.

This book provides comprehensive details regarding Precipitated Silica Manufacturing, Cement Production from Rice Husk Ash, Activated Carbon Production, Electricity Generation, Ethanol Production, Hardboard Manufacturing, Oxalic Acid Manufacturing, Paper Production, Particle Board Manufacturing, Rice Husk Briquettes, Rice Husk Pellet (RHP) Production, Silicon Production, Hollow Blocks Production, Sodium Silicate Manufacturing, Charcoal Production, Disposable Cutlery and Tableware Production, Red Clay Bricks Production from Rice Husk, Packaging, Manufacturing Process, Machinery, Equipment Details, and Photographs with Suppliers Contact Details are also given.

This book serves as an exhaustive guide to the manufacturing and start-ups aspects of the Rice Husk (Hull) and Rice Husk Ash (RHA) Value Added Products industry. It presents itself as a singular resource for all information related to this sector, highlighting its vast potential for manufacturers, traders, and business innovators. This guide stands alone in its coverage of commercial Rice Husk (Hull) and Rice Husk Ash (RHA) Value Added Products manufacturing, offering a comprehensive journey from the initial idea to the acquisition of equipment. It is a treasure trove of practical insights and step-by-step guidance in this field.

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