Handbook on Gypsum and Gypsum Based Products (Mining, Processing, Transportation, Handling & Storage, Gypsum Board, Plaster of Paris with Machinery & Equipment Details)

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Gypsum is chemically known as calcium sulfate dihydrate and it contains calcium and sulfur, which is bound to oxygen and water. Gypsum is an abundant mineral and takes various forms including alabaster, which is a material, used in decoration and construction. This is a non-toxic mineral and it can be helpful to humans, animals, plant life, and the environment. The majority of gypsum produced is used to manufacture gypsum board or building plasters and it is used in many other ways.

Gypsum products are used in dentistry, medicine, homes, and industry. In homes, gypsum plaster is used to make walls; in industry, it is used to make molds. Three types of gypsum products are plaster, stone, and high-strength or improved stone. The Gypsum and the Gypsum products are used for construction purposes. It is also used in industry for making pottery, moulds etc. It is used by orthopedics to make plaster casts and helps the dentist for the cast preparation, models and dies, impression material, investment material, mounting of Casts, as a mold material for processing of complete dentures etc.

The global gypsum board market size is anticipated to exhibit a CAGR of 11.9% in terms of revenue. Increasing utilization of gypsum boards in decorative and partitioning applications in residential constructions is anticipated to drive the market. The demand for gypsum boards is driven by the residential sector, where the product is widely used in multi-family constructions for room partitioning. Durability and lightweight coupled with easy handling of the product are some of the factors anticipated to propel the demand.

The major contents of the book are Mining, Processing, Transportation, Handling & Storage, Gypsum Board, Plaster of Paris for gypsum, Plant Layout, Process Flow Chart and Diagram, Plant & Machinery Suppliers and Photographs of Machineries.

This book is one-stop guide to one of the fastest growing sector of the Gypsum and Gypsum based Products, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on gypsum and gypsum based Products. It serves up a feast of how-to information, from concept to purchasing equipment.

1. INTRODUCTION

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Gypsum

Plaster of Paris

Calcium Sulfate

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- 2. Gypsum Products' Unique Properties

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Fire Resistant

Non-Combustible

Effective in Fire

Acoustic Properties

Thermal Properties

Aesthetics and Design

Ease of Installation

From Products to Solutions

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Dehydration: Rock into Plaster

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Gypsum Regulates Sound

Gypsum equilibrates Humidity and Heat Peaks

Gypsum is Easy to Install and to Dismantle

Gypsum Acts as a Thermal Insulator when

Combined with Insulation Materials

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Gypsum is Multifaceted, Multipurpose, Supple and

Aesthetic

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Manufacturing Variables

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- 2. Gypsum Decreases Bulk Density of Soil
- 3. Gypsum Stops Water Runoff, Erosion and Soil Crusting
- 4. Gypsum Improves Swelling Clays
- 5. Gypsum Increases Value of Organics
- 6. Gypsum Counteracts Subsoil Acidity
- 7. Gypsum Helps Reclaim Sodic Soils
- 8. Gypsum Decreased ph of Sodic Soils
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- 13. Gypsum Helps with High Bicarbonate Irrigation Water
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Step 2 - Rehydration

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Step 3 - Setting

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Product)

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Gypsum for Landscape and Sports Field Use

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Gypsum Rotary Dryer

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Pulveriser **Automatic Corrugated Board Making Machine** Corrugated Board Making Machine **Rotary Calciner** Rotary Die Cutting Machine Die Cutting Creasing Conveyor Belt **Blower** VSI Crusher Scrubber Making Machine Semi-Automatic Hammer Mill Gypsum Plaster Spraying Machine Plaster Spray Machine Semi-automatic Bandage Machine Gypsum Powder Production Line **Gypsum Board Production Line Machine**

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