# White Cement Manufacturing Industry. How to Start a Cement Manufacturing Factory?

# **Cement Industry Poised for Faster Growth**



# Introduction

White cement, as the name indicates, is a kind of cement with white color. White cement is similar to ordinary, gray Portland cement in all aspects except for its high degree of whiteness. Obtaining this color requires substantial modification to the method of manufacture, and because of this, it is somewhat more expensive than the gray product. The color of a structure is very important in the perspective of architectural point of view.





White cement produces a concrete with perfect and uniform color throughout. It is possible to produces very light shades of pastels and other colors by adding pigments with white cement which are not possible with normally used gray Portland Cement. Besides, there are various uses of White Portland Cement.

White cement is extensively used as an alternative to gray cement owing to its value-added properties such as its ability to reflect heat and improved aesthetic appearance. The demand for white cement is higher among countries with hot environment conditions as more heat is reflected from the resulting white concrete surface when compared to standard gray concrete. In addition, it also serves as a readily available concrete ingredient that works well in many applications.



It offers aesthetic and performance benefits to pavements, buildings, and other structures. It is also demanding in countries with advanced economies, where it is often used for the construction of innovative buildings and future landmarks. Furthermore, white cement serves as an integral part in structural designing such as in high rise buildings, bridges, and parking structures.





# **Applications of White Cement:**

### **1. Architectural Decorative Designs**

White cement helps in making marvelous architectural designs. White cement mixed with Colour pigments can give beautiful Colour combinations while retaining the strength of the design structure. They are used in false ceiling, decorative pillar structures, etc.

### **2. Designer Flooring**

White cement, marble powder, marble chips / aggregates, Colour pigments combined together gives you a freedom of creating exclusive designer flooring.





### **3. Tile Grouting**

White cement is used for filling the gaps in ceramic tiles, vitrified tiles and marble flooring. Mixing the white Cement with Colour pigments can help you match the tile Colour by creating an illusion of a single floor piece slab.

### 4. Sealants

They are used as sealants to fill in the gaps after installing ceramic bathroom fixtures.





## **Market Outlook**

The white cement market is expected to register a significant growth during 2018 to 2023 (the forecast period). This tremendous growth is supported by the increasing construction activities in emerging economies.

White cement is produced from non-iron containing raw materials such as China clay and white limestone as well as with materials containing a low content of coloring elements such as Fe, Mn, Cr, and Ti. Moreover, white cement is manufactured in a separate kiln and is therefore more expensive than standard Portland cement. The most important property of white cement is its whiteness content. It is also manufactured in strength classes of 325, 400, and 475.

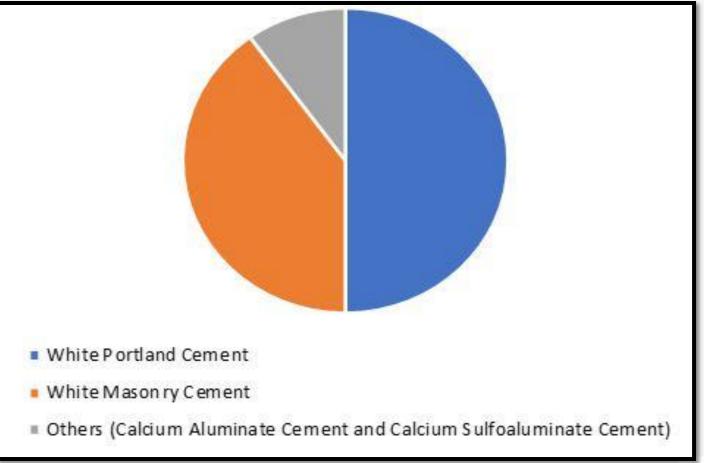


It exhibits excellent aesthetic, decorative, and hydraulic binding features which improves its durability and strength as compared with gray cement. Furthermore, white cement finds enhanced utilization in the manufacture of architectural and decorative concrete, which is further utilized in applications such as terrazzo tiles, paints, pavers, as well as in pre-fabricated products such as artificial walls and tile adhesives.





# White Cement Market Share, By Type, 2016 (%)





At present, the global white cement market registers significant growth, owing to the increase in major applications of white cement for decoration. Moreover, growth in tradition of white buildings in countries such as Spain and Italy also augments the market demand. In addition, white cement-based prefabricated products such as tiles and pavers coupled with growth of tile industry have effectively helped to save time and labor, which further escalates the market growth. In addition, the need for buildings with distinctive style of vernacular architecture also boosts the production of global white cement. However, the lesser strength of white cement in comparison with ordinary Portland cement is expected to impede the market during the forecast period.



The white cement market can be segmented based on type, application, end-user, and region. In terms of type, the white cement market can be divided into white masonry cement, white Portland cement, and others. White masonry cement is mixed with masonry grade sand to produce mortar for usage in brick, block, and stone masonry construction. Portland cement is manufactured using chalk and clay. It hardens quickly when in contact with water. Other types of white cement are calcium aluminate cement and calcium sulfoaluminate cement. White cement is used in building and construction activities. It is combined with inorganic pigments that tend to produce bright colored concrete and mortar. The ability of white cement to be cast in any shape makes it ideal for usage in monuments, sculptures, and restoration of archeological sites. Based on end-user, the white cement market can be segregated into residential, industrial, and commercial. White cement is widely used for construction purposes in the residential industry. It is also employed in the development of infrastructure.

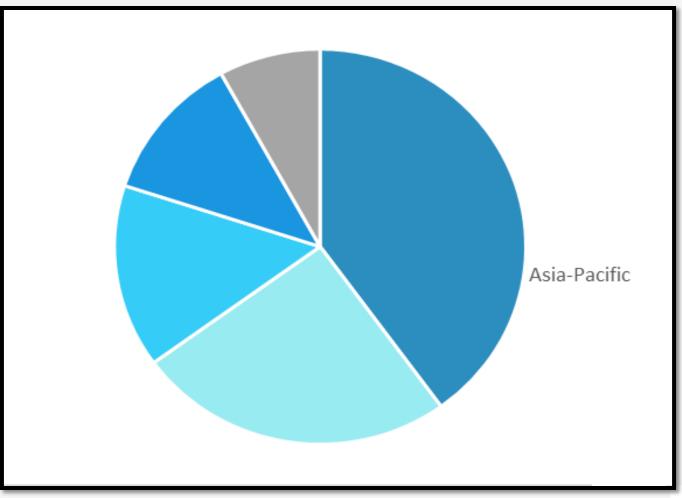


The Asia-Pacific construction sector is the largest in the world, and it is increasing at a healthy rate, due to the rapid industrialization of India, China, Japan, and Australia. Asia-Pacific is even anticipated to exhibit highest market growth during the forecast period, due to the presence of India, which is the second largest market for white cement with emerging infrastructure growth.





# White Cement Market, by Geography (in %), Global, 2017



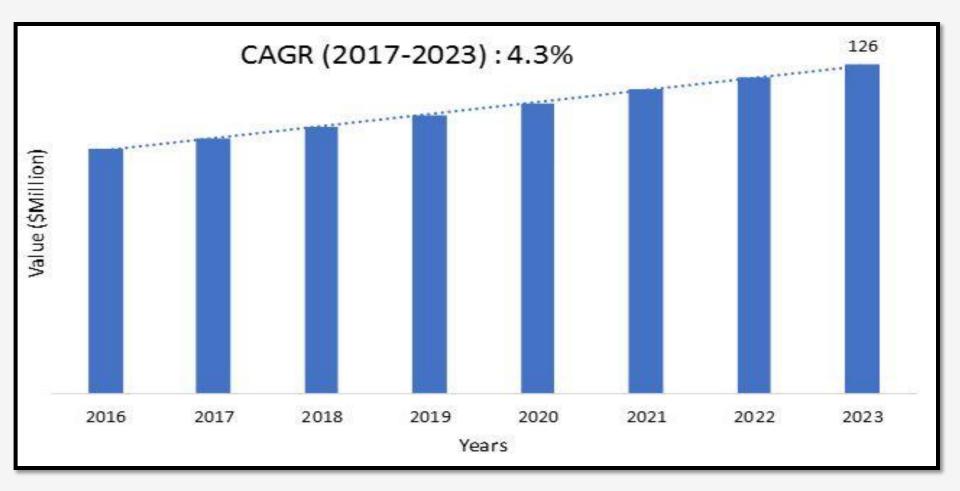


The growth of the global white cement market is driven by increase in demand for white cement in countries with hot climates, owing to its heat reflecting properties. In addition, rise in usage of white cement in construction of designer buildings and future landmarks fuels the market growth. Moreover, white cement finds extensive applications in the developing economies such as India and China, owing to high purchasing power, increase in per capita GDP, and rise in expenditure by the governments.





# India White Cement Market Value, 2016-2023 (\$million)





India exported about 6.22 million tonnes cement valued at `1,659 crore (including 2.85 million tonnes clinker, 2.28 million tonnes of portland grey cement and 0.03 million tonnes white cement) in 2015-16 to Sri Lanka, Nepal, Bhutan, Bangladesh and Myanmar, etc.





# Exports of Cement (Portland White) (By Countries)

Country	2014-15		2015	2015-16 (P)	
Country	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)	
All Countries	71246	536679	34351	241477	
Nepal	28757	168457	21488	118974	
Nigeria	7145	68092	4257	48072	
Oman	6524	46840	4284	33460	
South Africa	18694	162203	1530	14046	
Uganda	318	3040	351	3627	
Philippines	2910	22688	362	3078	
Bahrain	405	3027	324	2708	
Yemen Republi	c 280	2251	280	2611	
Bhutan	53	947	219	2111	
Ethiopia	243	2575	189	2072	
Other countries	s 5917	56559	1067	10718	



# **Major Queries/Questions Answered in the Report?**

- 1. What is White Cement Manufacturing industry?
- 2. How has the White Cement Manufacturing industry performed so far and how will it perform in the coming years ?
- 3. What is the Project Feasibility of White Cement Manufacturing Plant ?
- 4. What are the requirements of Working Capital for setting up White Cement Manufacturing plant ?



5. What is the structure of the White Cement Manufacturing Business and who are the key/major players ?

- 6. What is the total project cost for setting up White Cement Manufacturing Business?
- 7. What are the operating costs for setting up White Cement Manufacturing plant ?
- 8. What are the machinery and equipment requirements for setting up White Cement Manufacturing plant ?



9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up White Cement Manufacturing plant ?

- **10.** What are the requirements of raw material for setting up White Cement Manufacturing plant?
- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up White Cement Manufacturing Business?
- 12. What is the Manufacturing Process of White Cement?



13. What is the total size of land required for setting up White Cement Manufacturing plant ?

14. What will be the income and expenditures for White Cement Manufacturing Business?

**15. What are the Projected Balance Sheets of White Cement Manufacturing plant ?** 

16. What are the requirement of utilities and overheads for setting up White Cement Manufacturing plant?

17. What is the Built up Area Requirement and cost for setting up White Cement Manufacturing Business?



18. What are the Personnel (Manpower) Requirements for setting up White Cement Manufacturing Business?

**19.** What are Statistics of Import & Export for White Cement?

20. What is the time required to break-even of White Cement Manufacturing Business?

21.What is the Break-Even Analysis of White Cement Manufacturing plant?

22.What are the Project financials of White Cement Manufacturing Business?



23. What are the Profitability Ratios of White Cement Manufacturing Project?

24. What is the Sensitivity Analysis-Price/Volume of White Cement Manufacturing plant?

25. What are the Projected Pay-Back Period and IRR of White Cement Manufacturing plant?

26. What is the Process Flow Sheet Diagram of White Cement Manufacturing project?



**27.** What are the Market Opportunities for setting up White Cement Manufacturing plant?

28. What is the Market Study and Assessment for setting up White Cement Manufacturing Business?

29. What is the Plant Layout for setting up White Cement Manufacturing Business?



# Table of Contentsof theProject Report



# **Our Detailed Project Report contains**

- Introduction
- Properties
- Uses & Applications
- List of Plant & Machineries
- Miscellaneous Items and Accessories
- Instruments, Laboratory Equipments and Accessories
- Electrification, Electric Load and Water
- Maintenance, Suppliers/Manufacturers of Plant and Machineries
- Process of Manufacture
- Flow Sheet Diagram
- List of Raw Materials
- Availability of Raw Materials
- Requirement of Staff & Labour



- Skilled & Unskilled Labour
- Requirement of Land Area
- Built up Area
- Plant Layout.

### Along with financial details as under:

- Assumptions for Profitability workings
- Plant Economics
- Production Schedule
- Land & Building
- Factory Land & Building
- Site Development Expenses
- Plant & Machinery
- Indigenous Machineries



- Other Fixed Assets
- Furniture & Fixtures
- Pre-operative and Preliminary Expenses
- Technical Knowhow
- Provision of Contingencies
- Working Capital Requirement Per Month
- Raw Material
- Packing Material
- Lab & ETP Chemical Cost
- Consumable Store
- Overheads Required Per Month And Per Annum
- Utilities & Overheads (Power, Water and Fuel Expenses etc.)



- Royalty and Other Charges
- Selling and Distribution Expenses
- Salary and Wages
- Turnover Per Annum
- Share Capital
- Equity Capital
- Preference Share Capital



# **Project Financials**

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•	Production Schedule	3
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•	Plant & Machinery
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<b>Overheads Required Per Month and Per Annum</b>
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Royalty and Other Charges
Selling and Distribution Expenses

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# **Reasons for Buying our Report:**

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- This report provides vital information on the product like it's characteristics and segmentation
- This report helps you market and place the product correctly by

identifying the target customer group of the product



• This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials

- The report provides a glimpse of government regulations applicable on the industry
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions





• Our research reports broadly cover Indian markets, present analysis,

outlook and forecast for a period of five years.

- The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players
- We use reliable sources of information and databases. And information from such sources is processed by us and included in the report



### Scope of the Report

The report titled "Market Survey cum Detailed Techno Economic Feasibility Report on White Cement." provides an insight into White Cement market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of White Cement project. The report assesses the market sizing and growth of the Indian White Cement Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:



- Good Present/Future Demand
- Export-Import Market Potential
- Raw Material & Manpower Availability
- Project Costs and Payback Period

We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in the White Cement sector in India along with its business prospects. Through this report we have identified White Cement project as a lucrative investment avenue.



# Tags

#White\_Cement\_Manufacturing\_Process, #Cement\_Manufacturing, #White\_Portland\_Cement, #White\_Cement\_Manufacture, #White\_Cement, White Cement Manufacturing Process Pdf, Advantages of White Cement, White Cement Composition, White Cement Formula, White Cement, #White\_Cement\_Manufacturing\_Industry, Manufacturing Process of Manufacturing of White Cement, White Cement Industry, Cement Manufacturing Process, How to Start a Cement Manufacturing Factory, Cement Manufacturing Plant, How to Start a Mini Cement Plant, Cement Manufacturing Industry, Cement Manufacturing Business Plan, Cement Plant Setup Cost in India, Cement Plant Investment Cost, Cost to Set up Cement Factory in India, Cement Factory Setup Cost, Cement Business Plan Pdf, Cement Industry in India. #Project Report on White Cement Manufacturing Industry, #Detailed\_Project\_Report\_on\_White\_Cement\_Manufacturing, Project Report on White Cement Manufacturing, Pre-Investment Feasibility Study on White Cement Manufacturing, #Techno\_Economic\_feasibility\_study\_on\_White\_Cement\_Manufacturing,

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**Cement Industry Poised for Faster Growth** 

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# **Reports:**

#### Detailed Project Reports

NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our Market Survey cum Detailed Techno Economic Feasibility Report provides an insight of market in India. The report assesses the market sizing and growth of the Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.



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The detailed project report covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,



Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market research and analysis are supported by a panel of experts and digitalized data bank.

We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in India along with its business prospects......<u>Read more</u>



# **Contact us**

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# An ISO 9001:2015 Company



# Who are we?

- One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services
- We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad



We at NPCS want to grow with you by providing solutions scale to suit your new operations and help you reduce risk and give a high return on application investments. We have successfully achieved top-notch quality standards with a high level of customer appreciation resulting in long lasting relation and large amount of referral work through technological breakthrough and innovative concepts. A large number of our Indian, Overseas and NRI Clients have appreciated our expertise for excellence which speaks volumes about our commitment and dedication to every client's success.



We bring deep, functional expertise, but are known for our holistic perspective: we capture value across boundaries and between the silos of any organization. We have proven a multiplier effect from optimizing the sum of the parts, not just the individual pieces. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensures a high quality product.



### What do we offer?

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- Market Research Reports
- Business Plan
- Technology Books and Directory
- Industry Trend
- Databases on CD-ROM
- Laboratory Testing Services
- Turnkey Project Consultancy/Solutions
- Entrepreneur India (An Industrial Monthly Journal)



### How are we different ?

- We have two decades long experience in project consultancy and market research field
- We empower our customers with the prerequisite know-how to take sound business decisions
- We help catalyze business growth by providing distinctive and profound market analysis
- We serve a wide array of customers, from individual entrepreneurs to Corporations and Foreign Investors
- We use authentic & reliable sources to ensure business precision



# **Our Approach**

**Requirement collection** 

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

**Report Compilation** 



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