Wood Plastic Composite (WPC)

Composite Materials made of Wood Fiber/Wood Flour and Thermoplastic(s) (includes PE, PP, PVC etc.)

Introduction

Wood plastic composites (WPCs) are roughly 50:50 mixtures of thermoplastic polymers and small wood particles. The wood and thermoplastics are usually compounded above the melting temperature of the thermoplastic polymers and then further processed to make various WPC products. WPC can be manufactured in a variety of colors, shapes and sizes, and with different surface textures. Depending on the processing method, WPCs can be formed into almost any shape and thus are used for a wide variety of applications, including windows, door frames, interior panels in cars, railings, fences, landscaping timbers, cladding and siding, park benches, molding and furniture.
This product is part of the composites to be named wood polymer composite (WPC), wood fiber composite (WFC), poly wood and pall wood, poly board, wood flex, stock wood and wood plastic. WPC is manufactured by dispersing wood particles into molten plastic with coupling agent or additives to form composite material through various techniques of processing such as extrusion, compression or injection moulding.
Due to the main problems in providing forest resources and petrochemical raw materials, and high share of procurement costs and purchasing raw materials in production of lingo-cellulose and plastic materials, especially the environmental problems of polymer, various approaches in the production of wood-polymer nano-composites has been created.
It can be used to make pallets. It can be used for making deck. It can be use for making outdoor furniture like park benches. It can be used for making school benches, Door and windows frames. It can be used for making of windows and door shutter frames. It can be used for making items floor teak and indoor furniture. It can be used for making laminated sheets. It can be used for making room partition. Wood in the garden: garden furniture, fences and other applications in the garden.
<table>
<thead>
<tr>
<th>Particulars</th>
<th>Existing</th>
<th>Proposed</th>
<th>Total</th>
<th>Particulars</th>
<th>Existing</th>
<th>Proposed</th>
<th>Total</th>
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<td>173.20</td>
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<td>Debentures / Bonds</td>
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## PROJECT AT A GLANCE

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<th>Annualised</th>
<th>Book Value</th>
<th>Debt</th>
<th>Dividend</th>
<th>Retained Earnings</th>
<th>Payout</th>
<th>Probable Market Price</th>
<th>P/E Ratio</th>
<th>Yield Price/Book Value</th>
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## PROJECT AT A GLANCE

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<th>Debt / - Deposit</th>
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<th>Total Net Worth</th>
<th>Return on Net Worth</th>
<th>Profitability Ratio</th>
<th>Assets Turnover Ratio</th>
<th>Current Ratio</th>
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<td>1-2</td>
<td>1.32</td>
<td>1.32</td>
<td>1.59</td>
<td>1.59</td>
<td>1.93</td>
<td>32.29%</td>
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<td>0.13</td>
<td>39.30%</td>
<td>26.95%</td>
<td>17.05%</td>
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</table>
## PROJECT AT A GLANCE

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<th>BEP</th>
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<td>BEP - Maximum Utilisation Year</td>
<td>5</td>
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<tr>
<td>Cash BEP (% of Installed Capacity)</td>
<td>50.85%</td>
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<tr>
<td>Total BEP (% of Installed Capacity)</td>
<td>54.70%</td>
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### IRR, PAYBACK and FACR

| Internal Rate of Return (%age)           | 25.67%|
| Payback Period of the Project (In Years)| 2 Years 3 Months|
| Fixed Assets Coverage Ratio (No. of times)| 3.942 |
1. What is Wood Plastic Composite industry?
2. How has the Wood Plastic Composite industry performed so far and how will it perform in the coming years?
3. What is the Project Feasibility of a Wood Plastic Composite Plant?
4. What are the requirements of Working Capital for setting up a Wood Plastic Composite plant?
5. What is the structure of the Wood Plastic Composite Business and who are the key/major players?
6. What is the total project cost for setting up a Wood Plastic Composite plant?

7. What are the operating costs for setting up a Wood Plastic Composite project?

8. What are the machinery and equipment requirements for setting up a Wood Plastic Composite plant?

9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up a Wood Plastic Composite plant?

10. What are the requirements of raw material for setting up a Wood Plastic Composite project?
11. Who are the Suppliers and Manufacturers of Raw materials for setting up a Wood Plastic Composite plant?

12. What is the Manufacturing Process and Formulations of a Wood Plastic Composite Industry?

13. What is the total size of land required for setting up a Wood Plastic Composite project?

14. What will be the income and expenditures for a Wood Plastic Composite project?

15. What are the Projected Balance Sheets of a Wood Plastic Composite plant?
16. What are the requirement of utilities and overheads for setting up a Wood Plastic Composite plant?

17. What is the Built up Area Requirement and cost for setting up a Wood Plastic Composite Business?

18. What are the Personnel (Manpower) Requirements for setting up a Wood Plastic Composite Business?

19. What are Statistics of Import & Export for Wood Plastic Composite?

20. What is the time required to break-even?
<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. What is the Break-Even Analysis of a Wood Plastic Composite plant?</td>
</tr>
<tr>
<td>22. What are the Project financials of a Wood Plastic Composite plant?</td>
</tr>
<tr>
<td>23. What are the Profitability Ratios of a Wood Plastic Composite plant?</td>
</tr>
<tr>
<td>24. What is the Sensitivity Analysis-Price/Volume of a Wood Plastic Composite project?</td>
</tr>
<tr>
<td>25. What are the Projected Pay-Back Period and IRR of a Wood Plastic Composite plant?</td>
</tr>
</tbody>
</table>
26. What is the Process Flow Sheet Diagram of a Wood Plastic Composite project?

27. What are the Market Opportunities for setting up a Wood Plastic Composite plant?

28. What is the Market Study and Assessment for setting up a Wood Plastic Composite plant?

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   1.1.2. Area & Population
   1.1.3. Administrative Set Up
   1.1.4. Industry At A Glance
   1.1.5. Growth Trend
   1.1.6. Potential For New Msmes-
   1.1.7. Transport
   1.1.8. Map

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3. Properties
   3.1. Mechanical Properties Of Wood-polymer Composites

4. Use Of Wooden Plastic Composites
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5.2. Disadvantages

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6.2. Applications
6.3. PVC Crust Foam Board
   6.3.1. PVC Crust Foam Board Features:
   6.3.2. PVC Crust Foam Board Application:

6.4. Rigid PVC Foam Board
   6.4.1. PVC Rigid Foam Board Excellent Features:
   6.4.2. PVC Rigid Foam Board Applications:

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7. Codes & Standards

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   8.1. Global Market For Wpc
   8.2. Technological Trends

9. Import Statistics Data Of India
   9.1. Import Statistics Data On Wood Plastic Composite

10. Raw Material

11. Formulation

12. Manufacturing Process
13. Types Of Extrusion System


15. Schematic Flow Diagram Of The WPC

16. Suppliers Of Raw Material
17. Suppliers Of Plant & Machinery
   17.1. Complete Machinery Suppliers

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   18.1. Product Photographs
   18.2. Machinery Photographs
   18.3. Raw Material Photographs

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- Resultant DER
- Resultant ROI
- Resultant BEP
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Niir Project Consultancy Services (NPCS) can provide Detailed Project Report on Wood Plastic Composite

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- We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients’ in India & abroad.

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- Market Research Reports
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- Databases on CD-ROM
- Laboratory Testing Services
- Turnkey Project Consultancy/Solutions
- Entrepreneur India (An Industrial Monthly Journal)
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- 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

1. Requirement collection
2. Thorough analysis of the project
3. Economic feasibility study of the Project
4. Market potential survey/research
5. Report Compilation
Who do we serve?

- Public-sector Companies
- Corporates
- Government Undertakings
- Individual Entrepreneurs
- NRI’s
- Foreign Investors
- Non-profit Organizations, NBFC’s
- Educational Institutions
- Embassies & Consulates
- Consultancies
- Industry / trade associations
Sectors We Cover  cont...

- Bamboo And Cane Based Projects
- Building Materials And Construction Projects
- Biodegradable & Bioplastic Based Projects
- Chemicals (Organic And Inorganic)
- Confectionery, Bakery/Baking And Other Food
- Cereal Processing
- Coconut And Coconut Based Products
- Cold Storage For Fruits & Vegetables
- Coal & Coal Byproduct
Sectors We Cover

- Ayurvedic And Herbal Medicines, Herbal Cosmetics
- Alcoholic And Non Alcoholic Beverages, Drinks
- Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin
- Activated Carbon & Activated Charcoal
- Aluminium And Aluminium Extrusion Profiles & Sections,
- Bio-fertilizers And Biotechnology
- Breakfast Snacks And Cereal Food
- Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling
Sectors We Cover  cont...

- Copper & Copper Based Projects
- Dairy/Milk Processing
- Disinfectants, Pesticides, Insecticides, Mosquito Repellents,
- Electrical, Electronic And Computer based Projects
- Essential Oils, Oils & Fats And Allied
- Engineering Goods
- Fibre Glass & Float Glass
- Fast Moving Consumer Goods
- Food, Bakery, Agro Processing
Sectors We Cover cont...

- Fruits & Vegetables Processing
- Ferro Alloys Based Projects
- Fertilizers & Biofertilizers
- Ginger & Ginger Based Projects
- Herbs And Medicinal Cultivation And Jatropha (Biofuel)
- Hotel & Hospitality Projects
- Hospital Based Projects
- Herbal Based Projects
- Inks, Stationery And Export Industries
Sectors We Cover  cont...

- Infrastructure Projects
- Jute & Jute Based Products
- Leather And Leather Based Projects
- Leisure & Entertainment Based Projects
- Livestock Farming Of Birds & Animals
- Minerals And Minerals
- Maize Processing (Wet Milling) & Maize Based Projects
- Medical Plastics, Disposables Plastic Syringe, Blood Bags
- Organic Farming, Neem Products Etc.
Sectors We Cover cont...

- Paints, Pigments, Varnish & Lacquer
- Paper And Paper Board, Paper Recycling Projects
- Printing Inks
- Packaging Based Projects
- Perfumes, Cosmetics And Flavours
- Power Generation Based Projects & Renewable Energy Based Projects
- Pharmaceuticals And Drugs
- Plantations, Farming And Cultivations
- Plastic Film, Plastic Waste And Plastic Compounds
- Plastic, PVC, PET, HDPE, LDPE Etc.
Sectors We Cover  cont...

- Potato And Potato Based Projects
- Printing And Packaging
- Real Estate, Leisure And Hospitality
- Rubber And Rubber Products
- Soaps And Detergents
- Stationary Products
- Spices And Snacks Food
- Steel & Steel Products
- Textile Auxiliary And Chemicals
Sectors We Cover  cont...

- Township & Residential Complex
- Textiles And Readymade Garments
- Waste Management & Recycling
- Wood & Wood Products
- Water Industry (Packaged Drinking Water & Mineral Water)
- Wire & Cable
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