

HARDY SMITH™
wood plastic composite technologies

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Hardy smith designs pvt. limited

J-301 & 302, Swaminarayan park, Vishwakarma marg, New Wadaj,
Ahmedabad - 380013, Gujarat, India. P. +91 79 2752 4090 M. +91 98790 89494

Email: info@hardysmith.org | Website: www.hardysmith.org

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Philosophy

We respect the mother earth. We keep faith in the rules of the nature.
We believe in principles of karma (Work).
We admire humanity as first above all principles.

Values

We value vision. We value knowledge.
We value experience. We value positive attitude.

Vision

To become the most prominent technology & consulting organization for wood plastic composites products, application and formulations in Asia.

Mission

To develop applications and markets for wood plastic composite products in Asia with total technical support to customers. To develop consulting network across Thailand, Malaysia, Africa, Australia, New Zealand, Saudi Arabia, America, Vietnam, Canada, UK, China & Italy.

We, hardy smith are doing business with a sole purpose of saving the mother earth; saving her lush green patches those are full of woods, saving the mankind which cannot be thought of 'without green' and saving world forests finally. We have accepted a mission of spreading use of green products made out of agriculture waste, wood waste and plastic waste. We are trying to engage ourselves more into research, development and economization of bio Polymer composite products. We want to create an era of 'Bio Polymer composites' on the earth with highly technical and engineered products.

We have our business presence in Canada, UK, China, Russia & Southeast Africa. We are spreading our business network across all underdeveloped and developing countries for supporting the infrastructure industries respectively. We have already developed several product applications taking from a mother board to railway sleepers and still we are in process of developing some more.

Company

Hardy smith operates as an organisation for innovative technologies for Bio Composite products. Being the only recognised player, our management team involves many polymer technologists and engineers. Having a very specific focus of business, we are just doing 'wood plastic composite' technology and consulting for various products, materials and polymer formulations. We are engaged with IWSIT (Indian wood science and technology institute) for several academic and industrial application development projects.

We believe in our people, their strength and we believe in giving sky for their growth. With an absolute dedication of developing cluster based production systems for 'Wood plastic composites', we are continuously working on several application development for wood and furniture industry from WPC. We have successfully developed WPC Flush doors, WPC boards, WPC lumber, WPC hollow boards, WPC filler boards, WPC moulding strips and many other products.

We have plans for our expanding our business operations into America, Africa, Russia, Saudi Arabia, Vietnam, New Zealand, Romania and Turkey.

We provide technology solutions for wood plastic composites

WPC Product lines

Hardy smith provides consulting and supply for technology and machinery for wood plastic composite products. With reference to its strong mechanical and weather properties, WPC can replace many direct materials like Solid/Natural wood, Plywood, MDF boards, Particle boards, Steel in various applications. Finished Products can be made out with Wood plastic Composite and HARDY SMITH supplies following product lines:

WPC Board lines

- WPC MDF board lines
- WPC Filler board lines
- WPC hollow MDF board lines

WPC Door lines

- WPC PVC hollow door lines
- WPC PE/PP flush door lines

WPC Decking lines

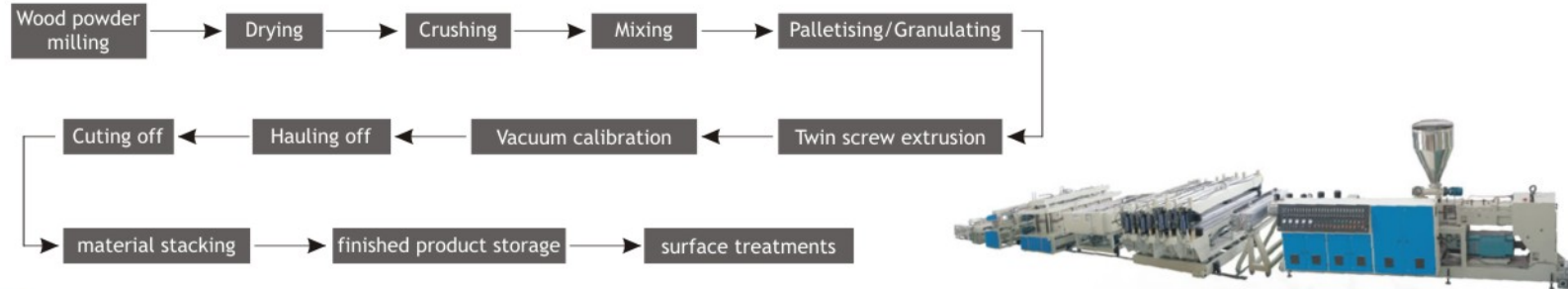
- WPC Flooring lines
- WPC Wall cladding lines
- WPC Pallet lines
- WPC lumber lines
- WPC Moulding strip lines
- WPC Door frame lines

WPC Granulation lines

WPC Surface treatment lines

- Embossing
- Sanding
- CNC routing
- Vacuum lamination
- Printing & UV Coating
- Brushing
- Transfer printing

WPC, Wood plastic composite, a product with a class, can help meeting global demand of wood products and wood panels. It is a new kind of synthetic material made from waste plastic & wood discharged from mills & factories as well as agriculture residues. It is a natural fit with primary and secondary forest product industries. By construction this product is formulated from - plant fibres as fillers and reinforcements - for polymers. This is one of the fastest growing types of polymer additive. Wood plastic composite manufacturing is a critical technology based on extrusion and injection moulding processes. Extrusion technology is a continuous process where products are having linear dimensions. Injection moulding is a batch process and having customised shapes and sizes.

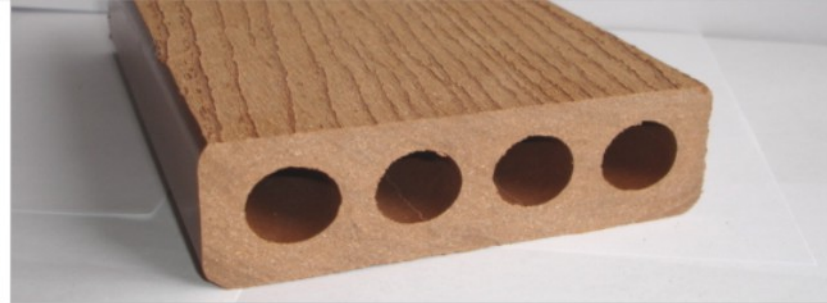


WPC advantages

- 100% environ-friendly product
- Non-toxic, non-pollution & energy saving
- Very similar to Natural wood in appearance & feel
- Saw-able, plane-able, drillable as like a natural wood, MDF, PB
- Can withstand extreme cold & heat
- Elastic enough to mould into various shapes
- highly water resistant
- Resistant to bacteria & insects such as Termite & fungus
- Can be easily shaped using heat
- Can be shaped through molds & extrusion technology
- Extruded WPC is a highly eco-friendly product
- Versatile building material
- 100% safe manufacturing
- No waste of materials using WPC, as waste is also recyclable

Hardy Smith provides

- Complete technology solutions for WPC products like WPC boards, WPC Doors & WPC decking from raw material preparation to finished product handling
- Marketing and branding support for new entrepreneurs
- Value added products and surface treatment solutions for WPC
- Building and plant layouts
- For Raw materials like Wood Waste, Sawmill Waste, Bagasse, Agro Waste, Plywood mill waste
- Material preparation and recipe consulting
- Installation, commissioning, production and start up services
- After services for technology management
- Spares and repair services



Advantages

- Best to stand with high moisture and humidity level
- High tensile strength, High screw holding capacity
- Better machinability
- Can be processed like natural wood, MDF, Plywood on any panel processing machine
- Best for sandwich construction
- Highest bending property
- 100% environ friendly product
- Corrosion resistance, Non toxic and borer free
- Easy to cut and saves tooling life almost 30 % than
- MDF and particle boards

Surface treatment

- PU coating and UV coating can be done
- Paper lamination can be done easily
- Entire board can be post formed like HPL
- Can treated with HPL lamination
- Surface can be printed
- Best routed with CNC router
- PVC foil lamination on Vacuum press
- Surface can be painted
- PVC edge bending can be applied nicely

Applications

- Modular kitchen partitions
- best fit for water and humidity conditions
- Modular kitchen doors
- Post formed components
- Modular furniture making
- Back paneling for wardrobes, office furniture
- Door frame making
- Sandwich panels for windows
- Partitions
- Windows

WPC Hollow Board lines

Product specifications:

- Panel width : 1220 mm (maximum)
- Panel length : as per requirement through online cutting system
- Panel sizes : 8' x 4', 4' x 4', 6' x 4', 1' x 4', 2' x 4', 3' x 4', & customized sizes
- Panel density : 650 Kg/m³ to 800 Kg/m³
- Panel thickness range : 5 mm to 18 mm
- Panel colors : Multiple solid colors, as per requirement

Plant capacity: (based on thickness of boards)

- 300 boards/day with board size of 8 ft x 4 ft
- 500 boards/day with board size of 8 ft x 4 ft
- 700 boards/day with board size of 8 ft x 4 ft

Raw materials

- Natural fibers : wood waste, saw mill waste, wood powder, wood flour, wood chips, bagasse, bamboo, coir fibers, rice husk, cotton stalks
- Polymers : PVC virgin or PVC recycled