

nature.  
chiseled by technology

**The Western India Plywoods Ltd.**

Leadership Since 1945







**T**hree score and five years ago, a young engineer in South India started exploring alternatives to hardwood that taxed Mother Nature less and eliminated wastage of wood. He set up the Western India Plywoods Limited on the banks of Valapattanam river at Baliapatam in Kannur.

The young visionary was A K Kaderkutti, and the year was 1945. From the first product — tea chest boards — WIP has grown to

become the largest woodworking complex in India today. Its product bouquet comprises hardboard, plywood and industrial purpose densified wood. Furniture, moulding plastic, pre-compressed pressboard and engineered wood floorings are the later additions to the product range.

WIP's insistence on quality standards has its products finding increasing acceptance in the highly competitive markets of Europe, United States and the Middle East. It is today a Government-certified Export House, and has bagged the Capexil award for excellence in exports without an exception every year.

WIP has an excellent Research and Development Department which the Government of India has recognised as a 'Centre for Research'. Discerning customers trust WIP so much so, that when they require a specialty product, they approach WIP.

The management of WIP religiously follows the footsteps of its visionary founder, and strictly adheres to the guiding principle he had laid for it: cent per cent utilisation of wood.

The company gives utmost importance to corporate governance. Eminent professionals serve on the Board of Directors



The hardboard plant at Western India Plywoods Limited



while the day-to-day running is left with a professional management team, led by Managing Director P K Mohamed.

## THE WIP BOUQUET

- Hardboards (WESTON)
- Plywood and allied products (WESTIND, WESTONFLEX)
- Pre-finished boards (WIPLAC, WIPGLOSS)
- Pre-compressed Press Board for Electrical Industry (WIPRESS)
- Densified Woods for Electrical & Structural Purposes (WIPWOOD, WIPLAM, WIPROC, WIPBEAR, WIPCHEM, WIPCOM, WIPCHECK, COMPREG SLATS, COMPREG EMU CHAIRS)
- Furniture and furniture components
- Engineered Wooden Flooring (UITRAKLIK)
- DAP Moulding Compound (WIPON)





## HARDBOARDS

# WESTON



Weston is the largest selling hardboard brand in India.

WIP is India's first hardboard manufacturer, and also the first to bag ISO 9002 certification. Industry leaders world over shop at WIP for quality special grade hardboard. Cars from most top line auto makers don WIP hardboard.

The fully computerised control room of Hardboard Plant-3



Western India Plywoods Limited has been the undisputed leader in hardboards ever since production started in 1960. Manufactured to meet the Indian Standard 1658 for standard boards, the Weston products find extensive use in automobiles, interiors and the packaging industry. They are exported to 24 countries, including the highly competitive European, Middle East and North American markets.

- State-of-the-art Swedish production lines
- Uses only plantation timber/agro waste as raw material
- Capacity of 120 tonne a day
- Zero-waste process

## THE WESTON RANGE

### Features

- Engineered to meet IS:1658 norms
- Good mechanical properties due to high density
- No formaldehyde emission

### Applications

- Automotive interior trims ● Shoe heel manufacture
- Fibre drum lid manufacture ● Clock backing ● Photo frame backing ● Furniture elements ● Partitions ● Writing pads
- Door skins.

### STANDARD HARDBOARD



### OIL/HEAT TEMPERED



Oil-tempered hardboard is manufactured by impregnating hardboard with specially treated oil, making it moisture resistant and giving it higher bending strength values.

Heat tempered hardboard is manufactured by post-curing the finished hardboard at high temperatures in specially designed chambers. This process enhances the inter-fibre cross-linking of lignin-based natural binders.

### Features

- Enhanced mechanical properties
- Improved reduction in water absorption characteristics

### Applications

- Automobile interior door trims
- Shoe heels

### PERFORATED

### Features

- Pre-drilled with evenly spaced holes
- Available in standard and tempered form.
- Available pre-finished in the desired colour

### Applications

- Cladding material meeting acoustic requirements
- Embossed hardboard for interior partitions.



# WIPLAC

PRE-FINISHED BOARDS

## HARDBOARDS



WIP is the first Indian company to launch pre-finished boards with the most advanced surface finish technology. The WIPLAC brand, a product of German obsession for quality and precision and Italian penchant for art and beauty, comes with great finish, ease of work and longevity and enriches the beauty of wall panels, ceilings and all kinds of furniture.

The state-of-the-art production line is capable of coating unicolour and grain design on a range of substrates, including plywood, particle board, MDF, hardboard and HDF.

### WIPLAC – H

Specified unicolour or grain finish on one side.

### WIPLAC – HBSF

Pre-finished panel

### PERFORATED WIPLAC

Perforated in the specified design

### Why WIPLAC?

- Outstanding decorative surface akin to natural wood
- Ready-to-use: nail, cut or screw
- No need to bond to another substrate
- Saves money, time and effort
- Specially grooved for paneling and ceiling applications

**Colour:** Beige, white, silver grey, green, red, black, super white, bluish grey, ivory, golden yellow, light green, sky blue and pista green

**Design:** Teak, walnut, mahogany, walnut, ELM, birch and oak. Or a choice of the customer

### Applications

Furniture drawbottom, flush doors, panel doors, automotive coach building, handicraft, toys, partitioning, panel inserts, cladding of auditoriums and studios where acoustic properties and aesthetics are equally important

### Range

3 mm to 6 mm

*UV-cured WIPLAC is resistant to ageing and peeling and is protected against moisture and micro-organisms even in extreme climatic conditions. The result: it retains the vibrant natural looks for years.*



WIP is the only Indian company to manufacture pre-finished boards. WIPLAC is a product of the world's most advanced UV-curing line, supplied by Super Ficci of Italy. All the coatings are done by UV-curing over water-based paints.



# PLYWOODS

# WESTINDPLY



From ponding to packing, WIP has the world's best system to produce superior quality plywood. Every process—peeling, reeling, clipping, drying, gluing, pre-press, hot-press, trimming, sanding, and inspection—is undertaken by state-of-the-art equipment and technology.

Ponding and seasoning of timber at WIP



All Westind panels are products of path-breaking research, state-of-the art technology, superior raw materials and passionate workmanship. With quality check at every point of manufacture, they are crafted to perfection.

## THE WESTIND RANGE

### MARINE PLYWOOD



Westind Marine Plywood is the benchmark in its category today and is used in boatbuilding yards the world over. The panels are also used in high stress and load-bearing industrial applications.

#### Features

- Manufactured in ISO 9001-2008 certified plant
- Industrial grade panel with high resistance to mechanical stress and excellent dimensional stability, fully complying with BIS:710 and BS:1088.

**Varieties:** Marine Gold, Marine Esteem, Teak-faced Marine Plywood

**Applications:** Boat-building, kitchen cabinets, furniture and load and stress-bearing industrial uses.

Range: 3 mm-30 mm

Westind BWR Plywood is manufactured to meet the most demanding standards, including cyclic boiling tests. It is the most-trusted multi-purpose plywood panel available today.

#### Features

- Meets water resistance norms under IS:303 - 1989
- Excellent screw and nail holding properties
- Twin stage anti-borer, anti-termite treatment

#### Thickness

1 mm to 70 mm.

#### Applications

Quality furniture, structural work in interior design, automotive coach building, match-plates and pattern-making for foundries

### BWR PLYWOOD

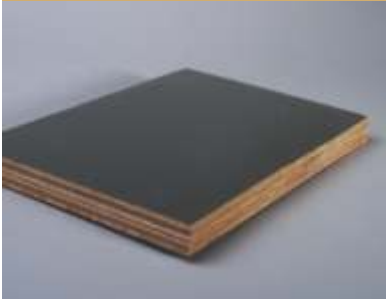




# WESTINDPLY

## PLYWOODS

### RESIN-SURFACED/FILM FACED SHUTTERING PLYWOOD



A cost-effective alternative to steel plates or wooden planks for concrete form work. Available in standard sizes and with smooth resin-coated or resin surface, it helps faster setting of the concrete and reduces plastering expenses. This fast-moving product from WIP stable can be re-used several times.

#### Features

- Conforms to IS:5509/BS-476 Part 5: 1968, Part 6: 1981 and Part 7: 1991
- Durable
- Low deflection on loading

**Applications:** Construction industry.

Range: 6 mm-30 mm

If you are looking for a solid alternative to hard wood for applications such as flat furniture elements or table tops, then find them at Weston Blockboards and Super Blockboards.

#### Features

- P.F. Resin bonded panel with kiln-seasoned and preservative- treated core.
- Extremely stable 3 ply construction for the surface skins as required. Decorative veneer facing panels on request.

**Applications:** Flat furniture elements, table tops

Range: 25 mm -55 mm

### BLOCKBOARDS, SUPER BLOCKBOARDS



The phenol formaldehyde resin used as glue in Westind brand plywood ensures that the indoor air quality does not suffer from emission of the hazardous Volatile Organic Compounds such as formaldehyde.

### DECKING PLYWOOD

Padauk and holly



Teak and holly



Rosewood and holly



Decking plywood is exclusively designed for decks and hulls in luxury boats / yachts. It is specially handcrafted with durable species of water-resistant timber. Available in teak, rosewood and padauk with holly interlining, they are abrasion-resistant and can withstand extreme weather conditions. Decking plywoods are now being popularly used for manufacturing high-end furniture.



## PLYWOODS

# WESTINDPLY



WIP uses raw material and processes that meet international quality standards. The company uses veneers of only compatible wood which are resistant to attacks by termites and borer. Excellent moisture control and the use of best quality bonding materials protect the panels against delamination.

Quality veneers are a precondition to the long life of the plywood



### DECORATIVE PLYWOOD



The decorative plywoods from WIP herald the arrival of class at affordable costs. They reproduce the timeless beauty of nature etched in exotic hardwood, but at lower costs. To you, and the environment.

They are available in choice species such as teak, rosewood, mahogany, padauk and oriental cherry. They are the best alternative to hard wood for home interiors, offices and furniture, giving them a touch of class.

### PANEL DOORS/SOLID FLUSH DOORS

The panel doors and solid flush doors are WIP's offer to those who care for quality and style for their homes and offices. The panel boards, made of plywood add superior value to the interiors and will surely be the point of attraction. Flush doors are made with carefully chemical treated solid wood core and hot-pressed with phenol formaldehyde resin to give water-resistant properties. They are available in a variety of natural veneer finishes.



### BAMBOOPLY



Western India Plywoods Limited was the first company to introduce bambooply in the Indian market way back in 1950s.

Made to meet IS standards, bambooply has excellent weathering properties and is used for exterior applications

**Thickness:** 4 mm, 6 mm

**Size:** 6'x4', 6'x3', 5'x3', 8'x4'

**Applications:** Interior design, doors, partitions, paneling, wall paneling and pre-fab structures

The ideal product for applications requiring flexibility, or to get desired curvature and contour. WIP has now introduced Westonflex, a flexible plywood specially designed for making curved products.

#### Features

- Good flexibility, can be bent or rolled
- Light weight, good strength characteristics

**Applications:** For cladding or forming curved surface

Range: 4 mm-8mm

### WESTONFLEX





# WIPRESS

## PRESSBOARD



WIP has a dedicated brand new production line for products such as WIPRESS

WIPRESS, a hard and rigid board having high purity with excellent electrical and mechanical properties, is specifically produced for the high voltage and extra high voltage transformer industry. The product is made from imported virgin softwood sulphate pulp at WIP's new production line using state-of-the-art technology. WIP's experience over four decades in producing fibre boards and densified wood, stands guarantee to product compliance with IEC 60641 B.3.1 grade pressboard.

Cellulose-based WIPRESS is produced from kraft unbleached softwood pulp having high chemical purity and low conductivity. WIP has separate conditioning and testing facilities for uninterrupted and speedy testing and evaluation of the raw materials and the product.

The water used in the process is made available from a dedicated treatment plant to eliminate conductive particles and impurities.



Raw material quality is key to determining the performance of pressboards. WIPRESS is made of imported virgin softwood pulp in a dedicated and controlled facility.

WIP also makes a variety of custom-designed machined components for use in oil-immersed transformers.



### FEATURES

- \*Thickness range 0.8 to 6 mm
- \*High density (1 to 1.3 g/cc)
- \*High purity
- \*Uniform thickness (within 5 to 7.5% tolerance)
- \*Dimensional stability, low compressibility, low shrinkage
- \*High dielectric strength (10 to 12 kV/mm in air and 30 to 40 kV/mm in oil)

### Applications

WIPRESS is used as insulating material in the form of winding cylinders, spacers, washers, key way strips etc. in different types of power and distribution transformers.

Compliance standards:  
IEC 60641. B 3.1 grade



**DENSIFIED  
WOOD**

# WIPLAM



WIPLAM is a homogenous material made from specified species of timber. It has exceptionally high mechanical properties coupled with oil absorption characteristics. After vacuum drying and impregnation with pyrochlor or transformer oil, the panels acquire the dielectric properties of transformer oil with enhanced mechanical properties. This quality makes it the most suitable material to be used as a component in a transformer.



**W**IPLAM is WIP's revolutionary product for applications in the oil-immersed transformer industry, made with carefully selected veneers of specified species of wood.

Dried in specialised conveyors after being impregnated with phenol formaldehyde resin, the veneer pack is weighed individually and pressed in sophisticated presses under a specified temperature and pressure. The sheets are then subjected to polymerisation and unloaded after bringing down the temperature to ambient. These processes ensure that the boards are perfect, have no dimensional variation, and offer excellent machinability.

WIPLAM is generally manufactured in two grades.

**Type 1:** In this range, all laminations have the grains in the same direction. Ideal for high tensile loads.

**Type 2:** In this range, adjacent laminations have grain direction at right angles to each other. Type 2 panels are recommended for higher bending load applications, higher compression loads and high shear strength applications.

#### Features

- Made of carefully selected veneers of specified species
- Impregnated with phenol formaldehyde resin
- Good machinability. No dimensional variation

**Thickness:** 3 mm-120 mm

**Application:** Oil-immersed transformers, switch gears, tap changers and induction furnaces





# WIPCHEK

## DENSIFIED WOOD



WIPCHEK is a premium quality compressed floorboard. It is developed for applications where panels of high strength and abrasion-resistance are required. Manufactured by impregnation of wood veneers with synthetic resins, WIPCHEK is one of the most durable flooring boards available today.

WIPCHEK has hardness and built-in scratch-resistance; even when the tread marks wear out, the laminate retains its strength and resistance to abrasion. This property makes it ideal for meeting the rigorous quality standards for use in buses, railway coaches and ship decks. A stabilised wood-based laminate with excellent resistance to moisture and corrosion, WIPCHEK is also available in non-skid surface designs.

### Features

- Resistant to abrasion, scratches, moisture, corrosion: superior to even steel and aluminium for specific applications
- Excellent thermal, electrical, acoustical and insulation properties
- Non-skidding
- Zero maintenance
- Excellent acid and alkali resistance

### Applications

Floor boards in buses, railway coaches, ship decks, chemical factories



WIPCHEK owes its toughness to the manufacturing process: Wood veneers are first impregnated with synthetic resins. The polymerisation process is completed under high pressure and temperature. The product is then stabilised by cooling under pressure.

# CHAIR SEATS



The EMU chairs are a product of the collaborative efforts by WIP and the Indian Railways with the help of West German technology for manufacturing ready-to-use chairs.

### Features

- Needs no polishing/maintenance
- Easy to spread, stack; washable with soap and water or organic solvents
- Durable, almost for a lifetime

### Applications

Dining, garden, auditorium, restaurant, theatre and waiting area



## DENSIFIED WOOD



Boron-incorporated WIPROC, a neutron shield, has been successfully used at Bhabha Atomic Research Centre and other nuclear plant installations. Physical and mechanical properties of WIPROC and boronated sheets are far superior to ordinary densified wood.

WIP is the only company in Asia having the technology to produce this new-generation composite material. The process know-how was developed in-house.

# WIPROC

**W**IPROC, a heavy-duty industrial laminate, is a tough material with rock-like characteristics: excellent resistance to compressive loads, shear properties and wear and tear. A plastic laminate, WIPROC can even replace steel and aluminium for tooling. WIPROC's density is only one-fifth that of steel, but its strength-weight ratio is more than half that of steel. This is achieved by adjusting the ratio of wood and synthetic resin content. WIPROC is also available as 3% boron-impregnated sheets specifically used for neutron-shielding purpose in nuclear reactors.

### Features

- Unique, versatile engineering material
- Excellent resistance to moisture, climatic changes, wear and tear.
- Can be machined to close tolerances

### Applications

- Tooling industry where thin gauge aluminium and steel are used.
- To make press-forming tools for aluminium alloy, thin steel sheets.
- To make drilling and router templates.
- Cryogenic supports for tankers

### Range

Thickness: 6-100 mm Size: 4' x 3' and 3' x 3'. (Up to 8' x 4', 50 mm.).



# WIPWOOD



### Features

For picking sticks, side levers, lags, and hackle drums for coir, textile and jute industries

### Range

Thickness: 6 mm -70 mm

### Density

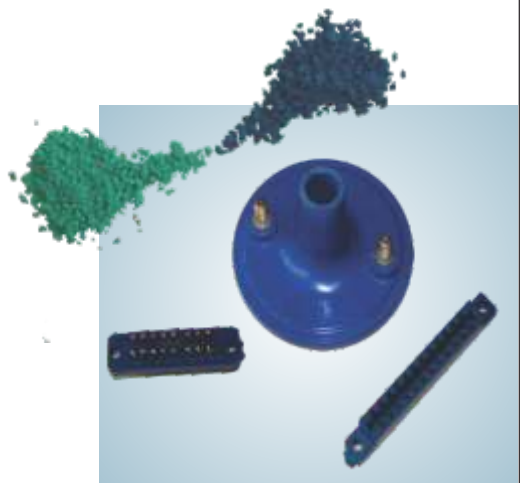
Ranging from 0.9 to 1.3

# WIPON DIALLYL PHTHALATE Moulding compound

WIP's product bouquet has a surprise element in it: plastic. A breakthrough product of the company's R&D division, Diallyl Phthalate (DAP) is a thermoset plastic moulding material, developed in-house.

### Features

Meets the highest international standard of MIL specification M 14G, Type SDG. High electric strength, excellent volume and surface resistivity, good arc resistance and low dissipation factor are the unique features of WIPON. Power losses in components made from DAP are negligibly low at high frequencies and have minimal post-mould shrinkage. Finds wide application in motor encapsulation, high precision connectors etc.





# WESTIND ULTRAKLIK

## ENGINEERED WOODEN FLOORS



WIP's engineered wood flooring range is technically a two-ply wood flooring consisting of a cross-laminated plywood base and a wear layer of the client's choice. This format is the most stable and mechanically resilient construction among all wood flooring variants available in the market today.

The flooring panels are finished using a high performance seven-layer UV floor coating system on a custom built Italian UV lacquering line.

A unique feature of Ultraklik is its micro-bevelled edges on all four sides which create an exquisite 'V' groove between the flooring elements, lending a touch of sophistication to the meticulously planned interiors. With a closed depth of 0.4 mm, it ensures that there is no collection of dust between the flooring panels. It also facilitates easy cleaning.

WESTIND ULTRAKLIK engineered wood floors exude a magical aura that is unique to wood flooring derived from mother nature's treasure chest of exotic hardwoods.

### Features

- Eco friendly construction
- Seven-layer UV-cured lacquer finish
- BWP panel construction
- Glueless installation with WIPKLIK system
- Micro-bevelled edges
- Easy laying, easy maintenance, affordable
- Wide range: suitable for homes and offices

Range: Teak, Maple, Padauk, Rosewood, Beech, Sapelli, Mahogany, Khaya and Oriental Cherry



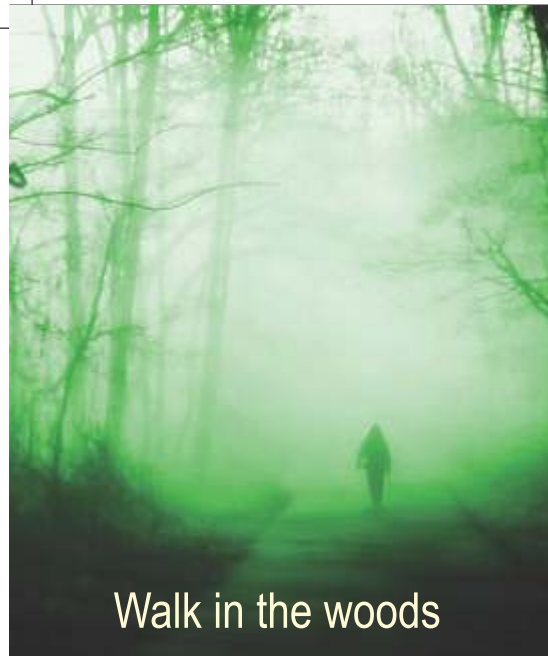
Westind Ultraklik uses no adhesives for installation; the unique WIPKLIK lock-in system does the job.

The glueless joints eliminate odour and emissions, the two problems generally associated with wooden floors.

The high precision profiling acts to pull the floor together eliminating the shut lines and lending a touch of class to the overall ambience of the interior.

### WIPKLIK lock-in system





## Walk in the woods



By Ajit Desai

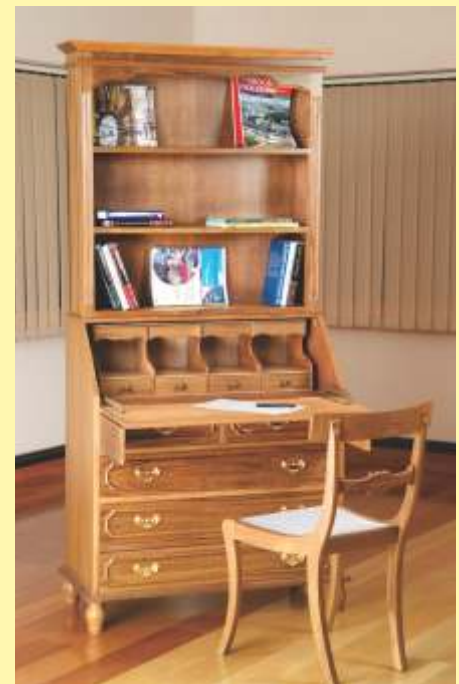
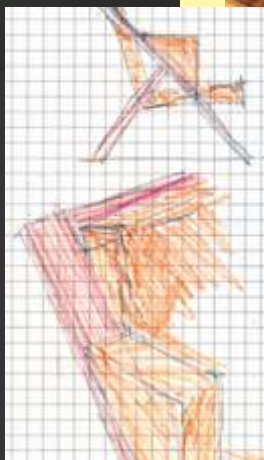
**It'**s more than five years to my association with Western India Plywoods. My brief was to inject fresh ideas into the furniture manufacturing unit, which was an adjunct to WIP's main activity of making plywood, hardboard, blockboards and floorings.

Happily, the collaboration has grown from the formal client-brief of concept-drawing-prototype-manufacturing into a spontaneous, and sometimes extempore, exchange of ideas. As an added advantage, I have at my disposal, the large pool of experience of the factory personal which combines the long tradition of Kerala craftsmanship and mass manufacturing practices.

While the underlying emphasis has been to make good quality and durable products, as a designer I have the freedom to explore new ideas. At the same time, I am conscious that I am working with a natural resource which has to be dealt with utmost responsibility.

It has been a journey that began as a usual one with a client. But now, it is more like walking in the woods to discover unknown paths.

*(The writer is a Mumbai-based well-known designer)*



### FEATURES

- Blend of solid wood and high quality plywood
- Traditional craft, modern taste
- Wide range of home, office furniture.
- Exquisite and extensive designs

If you ever wanted to possess furniture that looked simple and elegant and made the modern way, your search ends at the Westind Furniture showroom. The Ajit Desai-series of moulded plywood furniture blends solid timber and composite panels to optimise strength and costs. The exquisite pieces are sure to exceed your expectations regarding strength and durability. Each piece not only showcases WIP's deep knowledge in making durable, high quality wood furniture, but also sets it apart from other commercially available furniture pieces made of MDF/ particle board/film/laminate commercial furniture. And all these come from WIP, which has more than six decades of sterling performance in the woodworking industry.

So if you want to gift your near and dear ones, or yourself, the pleasures of wooden furniture, then welcome to Westind furniture.

*Unique blend\* Priced possession*



# R&D DIVISION

*The R&D block inaugurated in 1978*



The Research and Development department at WIP is manned by eminent scientists and has a well-stocked library with over 6000 titles. It helps the company come out with unique and innovative processes and products to suit customer needs at regular intervals.

The well-equipped department has German designed Weather-o-meter, sophisticated analytical equipment like spectrophotometer, gas chromatograph, FTA flammability unit, torque rheometer and gel permeation chromatograph, lab-scale UV coating and curing units, taber abraser, pendulum hardness tester, gloss meter, cross-cut testers and UV-cure plus.

- First to make irradiated wood
- First to make aircraft plywood
- First to make fire retardant plywood
- First to make high pressure industrial laminates
- First to develop weather-proof hardboards
- First to make metal-faced plywoods
- First to make pre-finished plywood and hardboards using UV-cured surface finishing technology
- First to obtain ISO 9000 certification for hardboards and pre-finished boards.
- First to manufacture DAP resin in the country with indigenously developed know how.

WIP is known the world over for its innovative products. And it is mainly due to a vibrant R&D department which has bagged several patents including those for:

1. Radiation induced polymerization of DAP & MMA
2. Manufacture of high impact ABS plastics
3. Manufacture of SAN plastics



The well-stocked library of WIP is one of the best in wood-working industry. With over 6000 titles, it is a point of scholastic pilgrimage for professionals and academics from all over India.



WIP is a zero solid-waste company: every piece of wood that enters the factory compound becomes a value added product. Even the tree bark becomes vermi-compost!



We care for nature



The Western India Plywoods Ltd is a wood working company that cares for nature. We ensure that we introduce eco-friendly technologies and practices available the world over.

- We use only plantation timber/agro waste as raw material
- We are a zero solid waste discharge company



## The Western India Plywoods Limited

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