TECHNICAL DATA SHEET FOR EXPORTING TEAK LOGS

Product Name

Product: Teak Logs (Tectona grandis)

Presentation: Raw Teak Logs (Unprocessed)

Size: Varies (diameter and length according to specifications)

Product Description

Description: Teak logs are raw, unprocessed wood harvested from mature teak trees. The logs are known for their high durability, resistance to weather, and aesthetic appeal, making them ideal for furniture, flooring, and boatbuilding applications.

Wood Species: Tectona grandis (Teak)

Origin: (Specify the country of origin, e.g., Indonesia, India, Myanmar, etc.)

Wood Quality: Premium quality, free from defects such as cracks, insect infestations, and rot.

Physical Characteristics

Color: Light golden-brown with a characteristic darker stripe pattern.

Grain: Straight or slightly interlocking grain, with a coarse texture.

Density: 600 - 700 kg/m³ (depending on moisture content).

Moisture Content: 15-20% (depending on the harvesting method and time of drying).

Dimensions:

Length: Typically ranges from 3 meters to 6 meters (can vary based on customer

specifications).

Diameter: 30 cm to 100 cm (depending on availability and customer demand).

Physical Properties

Hardness: High, with a Janka hardness of around 1,070 lbf (4,760 N). Durability: Excellent natural resistance to decay, insects, and termites. Workability: Moderate; requires appropriate tools for cutting and shaping.

Dimensional Stability: Good; however, it may shrink or expand slightly due to changes in humidity.

Nutritional Properties

Note: Generally, teak is not used for nutritional purposes, but it is highly valued in industrial uses, especially in construction and furniture-making.

Quality Standards

Certification:

FSC Certification (if applicable): Ensuring sustainable sourcing.

CITES Compliance (if applicable): Adherence to the Convention on International Trade in Endangered Species, if required by the origin country.

Moisture Content Standards: Conforming to international standards for export quality (typically between 15% and 20%).

Deviations / Tolerances

Tolerances: There may be slight deviations in diameter and length depending on the harvest and availability of logs.

Defects Allowed: Logs should be free from significant defects such as large cracks, mold, rot, or termite damage. Minor defects may be acceptable based on customer specifications.

Packaging

Packaging Type: Logs are typically packed in bundles or loaded in containers for export.

Load Types: Logs may be stacked and secured with appropriate materials to avoid damage during transport.

Containerization: Logs can be loaded into 20-foot or 40-foot containers depending on the size and number of logs being shipped.

Transport and Shipping

Shipping Terms: (Specify Incoterms, such as FOB, CIF, etc.)

Transport Mode: Sea freight is the most common method for exporting logs.

Estimated Shipping Time: Depends on the destination country. Typically 15-30 days for

international shipments.

Port of Loading: (Specify the port in the origin country)
Port of Discharge: (Specify the destination port)

Storage and Handling Instructions

Storage Conditions: Logs should be stored in a cool, dry place, protected from rain and direct sunlight to avoid moisture absorption or deterioration. Use tarps or covers to protect the logs during storage or transportation.

Shelf Life: Teak logs can be stored for several months without significant degradation if properly handled.

Required Documentation

Export Certificate: Issued by the relevant governmental authority in the origin country. Certificate of Origin: Verifying the origin of the teak logs.

Fumigation Certificate (if applicable): If required by the destination country to ensure logs are free from pests.

Bill of Lading (BOL): Provided by the shipping company as proof of transport.

Packing List: Detailing the quantity, size, and weight of the logs.

Customs Declaration and Import Permits: Required for clearance at the destination country.

Regulations and Compliance

Export Regulations: Must comply with the export regulations of the origin country and the import regulations of the destination country.

Sustainability Requirements: Adherence to international sustainability standards (e.g., FSC, PEFC, etc.) is encouraged.

CITES Compliance: If applicable, ensure that the shipment complies with the CITES regulations for protected species.

Pricing and Payment Terms

Pricing: Pricing for teak logs depends on various factors such as quality, size, moisture content, and market conditions.

Payment Terms: (Specify the payment terms, e.g., 50% advance, 50% upon delivery, or letters of credit, etc.)

Currency: (Specify the currency for the transaction, e.g., USD, EUR, etc.)

Additional Notes

Teak Wood Uses: Teak is renowned for its use in outdoor furniture, decking, flooring, shipbuilding, and high-end interior furniture due to its durability, resistance to termites, and beautiful grain.

Sustainability: Ensure sustainable practices are followed, especially if exporting teak from regions that require certification (e.g., FSC-certified teak).

TECHNICAL DATA SHEET FOR GMELINA ARBOREA (MELINA) WOOD

General Information

- Common Name: Melina
- Scientific Name: Gmelina arborea
- Family: Lamiaceae
- **Origin**: Tropical Asia (India, Myanmar, Sri Lanka, and parts of Southeast Asia). Widely introduced in Latin America, Africa, and other tropical regions.
- **Main Uses**: Lightweight construction, carpentry, furniture, boat building, musical instruments, veneers, and paper.

Physical Properties

- · Color:
 - o Sapwood: Light yellow to nearly white.
 - o **Heartwood**:Golden yellow to light brown, often with darker streaks.
- Texture: Moderately fine and uniform.
- Grain: Straight or slightly interlocked.
- Density:
 - o Air-dry: 450-600 kg/m³ (lightweight wood).

Mechanical Properties

- Compression Strength (parallel to grain): 33-37 MPa.a.
- Modulus of Elasticity (MOE): 8,000-12,000 MPa.
- Janka Hardness: 3.2 kN (soft to moderately hard wood).

Drying Properties

- **Drying Speed**: Fast, with minimal risk of warping or cracking.
- **Dimensional Stability**: Low shrinkage, with volumetric shrinkage between 6-8%.

Workability Properties

- Machining: Easy to saw and plane due to its uniform texture.
- Nailing and Screwing: Excellent, with minimal risk of splitting.
- **Gluing**: Strong adhesion, making it ideal for joinery.
- Turning and Molding: Suitable for detailed finishes.
- **Finishing**: Accepts varnishes, paints, and stains well, though sealing may be required for a uniform appearance.

Durability and Treatment

- Natural Durability:
 - o Sapwood: Susceptible to insect and fungal attacks.
 - o **Heartwood**: Moderately durable.
- Preservative Treatment:
 - o **Sapwood**: Highly permeable and easy to treat.
 - o **Heartwood**: Moderately resistant to impregnation.
- Weather Resistance: Requires additional protection for outdoor use.

Main Applications

- Light Construction: Frames, roofing, and non-load-bearing structures.
- Furniture: Chairs, tables, cabinets.
- Decorative Veneers: Wall panels and plywood.
- Packaging: Crates, pallets, and shipping boxes.
- Musical Instruments: Frames or body components.

Competitive Advantages for Export to Europe

- Sustainability: Sourced from sustainable plantations, complying with environmental regulations like the **EU Timber Regulation (EUTR).**
- Fast Growth: With a rotation cycle of 8-12 years, it ensures a steady supply.
- **Lightweight and Strong**: Ideal for furniture and packaging, optimizing transportation costs.
- **Aesthetic Quality**: Its light, uniform appearance fits modern furniture and customizable finishes.
- **Versatility**: Meets requirements across multiple sectors, from furniture to construction and packaging.

EXPORT REQUIREMENTS FOR EUROPE

Regulations and Certifications

- EUTR (EU Timber Regulation):
 - o Ensures the wood is not from illegal logging.
 - o Requires traceability from plantation to final product.
- Recommended Certifications:
 - o **FSC (Forest Stewardship Council)**: Ensures the wood is responsibly sourced.
 - o **PEFC (Programme for the Endorsement of Forest Certification)**: Recognized as an alternative in Europe.
- Phytosanitary Treatment:
 - o Mandatory for exported wood products under ISPM 15 standards.
 - o Requires HT (Heat Treatment) marking to prevent pest transmission.

Logistics and Shipping

- **Transport Conditions**: Protect from excessive humidity to prevent deformation or mold during shipping.
- Packaging and Presentation: Commonly exported as sawn timber, veneers, plywood, or semi-finished furniture.

Target Markets

- **Germany, France, Italy, and the Netherlands**: High demand for ecofriendly furniture and lightweight wood.
- **Scandinavia**: Focus on sustainable wood for lightweight construction and packaging.

Tariffs and Costs

- Developing countries may benefit from tariff preferences under the EU Generalized Scheme of Preferences (GSP).
- Verify specific taxes based on HS code (e.g., sawn wood or finished products).

Environmental and Competitive Considerations

- Carbon Footprint: Melina is ideal for markets prioritizing low-impact materials
- Circular Economy: Wood residues can be used for paper production or biomass energy.
- **Differentiation**: Highlight sustainability and responsible management to appeal to environmentally conscious European clients.



TECHNICAL DATA SHEET FOR BOMBACOPSIS QUINATUM (PACHIRA QUINATA / CEDAR MAHOGANY)

General Information

- Common Name: Cedar Mahogany, Pochote, Cedro Espino (Spanish)
- Scientific Name: Bombacopsis quinatum (syn. Pachira quinata)
- Family: Malvaceae (Bombacoideae subfamily)
- **Origin**: Native to Central and South America, primarily in tropical dry forests from Mexico to Colombia.
- **Main Uses**: High-quality furniture, cabinetry, flooring, construction, boatbuilding, veneers, and decorative purposes.

Physical Properties

- · Color:
 - o Sapwood: Pale yellow to white.
 - o **Heartwood**:Light reddish-brown to deep golden brown, often darkening with age.
- **Texture**: Medium to coarse, with a slightly lustrous surface.
- Grain: Straight to interlocked, occasionally wavy.
- Density:
 - o Air-dry: 450-600 kg/m³ (moderately lightweight).

Mechanical Properties

- Compression Strength (parallel to grain): 50-65 MPa.
- Modulus of Elasticity (MOE): 10,000-12,000 MPa.
- Bending Strength: 70-90 MPa.
- Janka Hardness: 5.6 kN (moderately hard).

Drying Properties

- **Drying Speed**: Moderate to fast, with a slight risk of checking or warping if not carefully controlled.
- **Dimensional Stability**: Good, with volumetric shrinkage around 6-8%.

Workability Properties

- **Machining**: Generally easy to work with hand or machine tools, though interlocked grain can cause minor tearing.
- Nailing and Screwing: Good, with a low tendency to split.
- Gluing: Excellent bonding properties.
- Turning and Molding: Performs well, suitable for intricate designs.
- **Finishing**: Accepts varnishes, stains, and paints beautifully, resulting in a polished and refined look.

Durability and Treatment

- Natural Durability:
 - o **Sapwood**: Susceptible to insect and fungal attack.
 - o **Heartwood**: Moderately durable to durable, resistant to decay and termites.
- Preservative Treatment:
 - o Sapwood: Easy to treat.
 - o **Heartwood**: Moderately durable to durable, resistant to decay and termites.
- Weather Resistance: Performs well in outdoor applications with proper finishing.

Main Applications

- High-End Furniture: Tables, chairs, and cabinets.
- Construction: Beams, joists, and posts for interior and exterior structures.
- Flooring: Suitable for parquet and strip flooring.
- Boatbuilding: Used for planking and small boat components.
- Decorative Veneers: Panels, wall coverings, and luxury interiors.
- Carvings: Suitable for artisanal and decorative objects.

Competitive Advantages for Export to Europe

- **Sustainability**: Frequently sourced from managed plantations or agroforestry systems, aligning with European demand for responsibly harvested timber.
- **Aesthetic Appeal**: Its reddish-brown heartwood and fine finish make it highly desirable for luxury furniture and decorative uses.
- **Durability**: Naturally resistant to decay, making it ideal for long-lasting applications.
- **Strength-to-Weight Ratio**: Offers excellent mechanical properties for its density, making it competitive for both structural and aesthetic purposes.
- **Versatility**: Applicable across various high-value markets such as furniture, flooring, and decorative veneers.

EXPORT REQUIREMENTS FOR EUROPE

Regulations and Certifications

• EUTR (EU Timber Regulation):

o Compliance is mandatory, requiring proof of legal sourcing and traceability.

Recommended Certifications:

- o **FSC (Forest Stewardship Council)**: Preferred certification for sustainable wood in Europe.
- o **PEFC** (**Programme for the Endorsement of Forest Certification**): An acceptable alternative.

Phytosanitary Treatment:

o Products must comply with ISPM 15 standards, requiring HT (Heat Treatment) for wood exports to prevent pest infestations.

Logistics and Shipping

- **Transport Conditions**: Protect from excessive humidity and temperature fluctuations to avoid damage during transit.
- Packaging Options: Commonly exported as sawn timber, veneers, or finished products like furniture and flooring.

Target Markets

- Germany, Italy, and France: Strong demand for high-end furniture and veneers.
- United Kingdom and Scandinavia: Focus on durable wood for flooring and decorative purposes.

Tariffs and Costs

- Wood products from developing countries may benefit from reduced or zero tariffs under the **EU Generalized Scheme of Preferences (GSP).**
- Confirm applicable HS codes (e.g., sawn timber, veneers, or finished goods) for accurate tariff calculations.

Environmental and Competitive Considerations

- **Sustainability**:Promoting the sustainable management and reforestation efforts of Bombacopsis quinatum can improve market appeal.
- Carbon Sequestration: : Acts as a carbon sink during its growth, aligning with Europe's environmental goals.
- **Market Differentiation**: Highlight its durability, aesthetic quality, and versatility to attract environmentally conscious buyers in Europe.
- **Circular Economy**: Residues can be repurposed for bioenergy or other by-products like wood chips or pulp.

