



USDA Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Template Version 2.09

Required Report - public distribution

Date: 7/15/2005

GAIN Report Number: CH5052

China, Peoples Republic of

Solid Wood Products

Annual

2005

Approved by:

Maurice House

U.S. Embassy Beijing, Office of Agricultural Affairs

Prepared by:

James Butterworth & Zhang Lei

Report Highlights:

In 2006, China's logs, lumber and wood-based panels production is forecast to increase five, ten and 15 percent respectively driven by China's booming wood processing and construction sectors. China's supply of domestic solid wood production is increasing, but not as rapidly as demand due to China's booming economy. China's dependence on imported wood is expected to grow into the foreseeable future.

Includes PSD Changes: Yes
Includes Trade Matrix: No
Annual Report
Beijing [CH1]
[CH]

Table of Contents

Executive Summary	3
Production	3
Forest Situation & Outlook.....	3
Solid Wood Products Situation & Outlook.....	6
Trade.....	8
Overview/Outlook.....	8
Competition.....	9
Policy.....	10
Market Segment Analysis	10
Construction Sector	10
Overview	10
Marketing.....	11
Policy.....	11
Trade.....	11
Construction Sector Strategic Indicator Table	12
Furniture & Interiors Sector.....	12
Production, Consumption & Marketing	12
Trade.....	13
Material Handling Industry	13
Overview	13
Policy.....	14
Statistics Tables.....	15
Appendix 1 Notice on Forbidding the “Double Rebate” Policy on Border trade ..	19
Appendix 2 Mark of Wood and Wood Products in Trade	20
Appendix 3 Phytosanitary Treatment Measures for Entry WPM	26

Executive Summary

China's soaring demand for timber, driven primarily by its rapid economic expansion and booming wood processing sectors, is forecast to continue increasing in the next few years. China's domestic timber production is forecast to increase slightly in the next few years because of China's soon to be expanded logging quota and China's Fast-Growing-High-Yielding (FGHY) forests. However, China's forest management policies have changed to focus more on ecology protection and less on timber production, which will limit timber production expansion. More and more local timber is expected to come from plantations, instead of natural forests. China's imported timber is forecast to continue increasing driven by the strong demand. China is expected to import more temperate-zone timber as substitute for tropical timber because of price and concerns about future availability of tropical hardwoods. Russia is expected to retain its dominant position in China's imported timber products over the next few years because of its low price (lower freight, and preferential tax policies), and similar species to China. Indonesia's timber exports to China have decreased sharply because of the Indonesian government's restrictive policies toward logging and the December 2004 tsunami. U.S. hardwood exports are forecast to increase moderately, primarily driven by demand from the furniture and interior decorating sectors. U.S. softwood exports, especially Southern Pine, also are expected to increase rapidly, driven by demand from the construction industry, including real estate, infrastructure construction and outdoor landscaping. There are several market niches for U.S. softwood in addition to construction sector, such as pencils and instruments.

Production

Forest Situation & Outlook

Forest Resources: In January 2005, China released its Sixth Forest Inventory Report (covering 1999-2003). It estimated China's forested area to be 175 million of hectares, with the forest stocking volume at 12,456 million cubic meters, and its forest coverage increased to 18.21 percent from 16.55 percent in 1998. For more information on China's forest resources, including China's forest ownership, forest type, major species, age class, and distribution, please refer to GAIN Report CH5027, which is available at <http://www.fas.usda.gov/gainfiles/200503/146119239.pdf>

China's forestry production policy is undergoing transformation. The policy focus has shifted from maximizing harvesting natural timber stands to one that focuses more on ecological preservation. During the transformation, plantations will replace natural forests as the major timber source in China. Ecological forests, including shelterbelt and special-purpose forests, accounted for 75 percent of China's total area planted during 2004.

In December 2004, China launched a Forest Ecological Benefit Compensation Scheme (FEBCS). The Scheme began to fund forestry ecological improvement. In 2004, 26.67 million hectares of key ecological forests received RMB2 billion (US\$242 million) from the Chinese Central Government as compensation for planting trees. The Scheme stipulates that 90 percent of the fund must be used as compensation for the costs of planting trees, and the remaining 10 percent must be set aside for controlling forest fires, diseases and pests, or monitoring changes in the forest ecology.

Forest Certification: European consumers' demand for certified wood products is the primary driving force behind China's pursuit of forest certification. In response to that demand, China established the Forest Certification Division under the State Forestry Administration (SFA) in 2001. Progress moved slowly during the first two years because of a lack of market pressure. In 2004, however, the situation changed because more and more

European importers began requesting the use of certificated wood. China began to actively consider different schemes, including those advocated by the Program for the Endorsement of Forest Certification (PEFC), the Forest Stewardship Council (FSC), and the Sustainable Forestry Initiative (SFI).

China will release its Draft Regulations on Forest Certification by the end of 2005. Mutual-recognition of other schemes seems to be the largest difficulty. China is expected to incorporate FSC's principles and standards into its own scheme. The Wild World Fund (WWF) has actively promoted FSC in China, including with Chinese government forestry officials. The WWF/World Bank Alliance initiated and funded China's Forest Certification Working Group in 2001. FSC certified forest in China totaled 431,606 hectares as of April 2005. Sixty-two wooden product manufacturers have passed FSC Chain of Custody (CoC) certification by the end of 2004.

Forest certification brings both benefits and challenges to U.S. wood exporters because a lot of imported U.S. wood, especially hardwood, is further processed and re-exported to the United States, Europe, Japan, and other countries. The primary benefit is that forest certification will help to decrease illegal wood from entering China and thereby create more export opportunities for U.S. exporters. The main challenge lies in universal acceptance of the various certification schemes mentioned above. If, for example, the European market does not accept uncertified, or SFI certified wood, Chinese manufacturers would not use such wood for products destined to Europe, which means U.S. wood might lose this market. However, Post expects it will be a long time before certified wood becomes a major factor in the Chinese wood market, so the U.S. wood industry has time to solve the problem.

Logging Quota: China continues to enforce a logging quota to protect its forest resources. The annual allowable cut during the Tenth Five-Year (2001-2005) is 223.1 million cubic meters. China has started to work on a new logging quota plan for the 11th Five-Year (2006-2010). According to the latest forest resource inventory, China's stocking volume annual growth is about 497 million cubic meters. Industry sources expect China's State Council will approve increasing the new quota to about 250 million cubic meters, when it releases its decision at the end of 2005. This will be about half of the annual growth.

Special quota policies for commercial plantations: In an effort to encourage commercial plantations, the Government of China (GOC) allows the following special exemptions to the logging quota as detailed above: 1) managers of commercial plantations above a "certain size"¹, are allowed to develop their own annual logging quota²; 2) plantation managers can determine the harvesting age of plantation-grown timber for industrial raw material use; and, 3) the GOC will separately list commercial plantations' logging quotas and production plans.

Despite the GOC's efforts to enforce the logging quotas, excessive logging is still one of the biggest forestry-related problems in China. According to the latest inventory, annual logging has exceeded the quota by 75.54 million cubic meters, or 34 percent.

Fast Growing High Yielding (FGHY) Forest: Developing FGHY forests is China's major measure to protect its domestic natural forests and thereby decrease its reliance on imports.

¹ The provincial level forestry department determines what qualifies as a certain size.

² According to the Forest Law of the People's Republic of China, a county is the legal unit when developing a private forest logging quota. The new policy qualifies the forest manager (above a certain size) to be an independent unit to develop the quota. State Forestry Administration collects quotas from all units, adjusts according to local forest resources, and submits to the State Council.

China's goal is to plant 13 million hectares of FGHY forest by 2015. This would provide 133 million cubic meters of timber. However, Post questions whether China will be able to reach this ambitious target because of the following factors: 1) China does not have anywhere near 13 million hectares available for planting forests or any other commodity for that matter. As a point of comparison, 13 million hectares would account for about 60 percent of China's total corn planted area (22 million hectares). There are large tracts of desert in Western China, but they are not suitable for FGHY forests primarily because there is not enough water for irrigation, and irrigating forests are not the optimal use of China's limited water resources; 2) China needs to plant about one million hectares of FGHY annually from 2002 to 2015 to meet its target. During the period from 2002 to 2004, actual plantings fell far short of that goal -- less than 100,000 hectares were planted annually; and, 3) China's large-scale FGHY plantations need to overcome considerable ecological concerns. China's favorable investment environment has attracted large amounts of foreign direct investment from multinationals for pulp and paper processing facilities, which spurs pulp plantations in South China, especially in Yunnan, Hainan, and Guangxi Province. In early 2005, China's state-run media alleged that a major Indonesian paper manufacturer illegally logged natural forests in order to plant eucalyptus forests. Several non-governmental organizations (NGOs) highlighted the story as an example of how, in their view, single-specie plantations damage ecological diversity. These conflicting interests are forcing the GOC to balance FGHY forest expansion with environmental protection.

Post forecasts that China's FGHY program will not decrease U.S. wood imports because most timber from FGHY forests is for low-end use, such as paper & pulp production, inside layers of plywood, and laminated flooring. Most imported U.S. wood, on the other hand, is used for high-end furniture, interior decoration, and outdoor landscaping. Wood from FGHY forests is not a substitute for U.S. wood for those uses.

In addition to planting FGHY forests, China has planted small tracts of rare species forests. In Hainan province, for example, they planted teak. However, given the small quantity and slow growth rate of such species, timber from these forests will not be a measurable factor anytime in the near future.

Illegal Logging: Although most experts opine that China's domestic illegal logging is not as serious as in Russia or Indonesia, as mentioned above, it remains a considerable problem. Equally important, however, is that China is considered to be one of the largest buyers and millers of illegal logs. Post expects forest certification and the GOC's concern about potentially harmful pests that enter China on the illegal logs eventually will help reduce the flow of illegal logs into China. In the meantime, however, the illegal logs continue to flow in.

FOREST AREA			
Country: China People's Republic of			
Report Year:	2004	2005	2006
Total Land Area (million hectares)	960	960	960
Total Forest Area (million hectares)	177	180	183
--of which, Commercial ('000 hectares)	106,200	108,000	109,800
----of commercial, tropical hardwood ('000 hectares)	5,310	5,400	5490
----of commercial, temperate hardwood ('000 hectares)	49,900	50,760	51,600
----of commercial, softwood ('000 hectares)	50,990	51,840	52,710
Forest Type			
--of which, plantation ('000 hectares)	56,640	57,600	58,560

Total Volume of Standing Timber (thousand cubic meters)	13,773,600	14,007,050	14,240,500
--of which, Commercial Timber ('000 cum)	8,264,160	8,404,230	8,544,300
Annual Timber Removal ('000 cum)	385,000	392,700	400,550
Annual Timber Growth Rate ('000 cum)	512,000	522,200	532,640
Annual Allowable Cut ('000 cum)	223,100	223,100	250,100

Solid Wood Products Situation & Outlook

Production: Logs production is forecast to increase about 5 percent in 2006 because: 1) the new logging quota is forecast to increase slightly; 2) logging policies on plantations are more relaxed; and, 3) FGHY forests planted in 2000-2002 will be mature enough to harvest over the next few years. The estimates of softwood and hardwood log production in both 2005 and 2004 have been revised sharply because Post used what it considers more reliable sources this year than in the previous estimate.

China's lumber production from both imported and domestic logs has increased very fast over the past several years and is forecast to increase 20 percent in 2006 because logs' VAT is lower (13 percent) than lumber (17 percent), domestically milled lumber using imported logs is cheaper than imported lumber. And the transportation cost of lumber is lower than logs.

Wood-based panels production is forecast to increase 15 percent in 2006 driven by the growth of fiberboard, particleboard, and the block board sector. China's plywood production increase is forecast to slow down because of resources limitation. Plywood production needs large diameter timber, which has higher output than small diameter timber when peeled. Whereas fiberboard and particleboard production can use small timber and even wood scrap.

China's actual domestic industrial roundwood production is divided into two parts -- state-quota production, which accounts for about 50 million cubic meters, and production from illegal domestic logging, i.e., over-quota production, which accounts for about 40 million cubic meters¹. Post estimates China's total domestic industrial roundwood (not including fuelwood) production at 90 million cubic meters. Official statistics indicate that 60 percent of state-quota timber production comes from plantations. In 2004, China's imported wood and wood products (not including paper and pulp imports) totaled 39 million cubic meters (Round Wood Equivalent – REW). Thus, the total wood supply is estimated at 129 million cubic meters.

China's major wood products production in 2004

	2004 Production (million m3)	Yearly change (04/03)
Timber	51.97*	+9%
- Logs	47.12	+9%
- Softwood logs	19.68	--
- Fuel wood	4.85	+11%
Lumber	15.33	+36%
- Tropical lumber	1.05	+45%
Wood-based Panels	54.46	+20%
- Of tropical timber	3.93	+762%
- Plywood	20.99	-0.18%
- Fiberboard	15.60	+38%

¹ It comes from 75 (million cubic meters of over-quota logging) *0.8 (20 percent for fuelwood) * 0.65 (yield percentage).

- Particleboard	6.43	+17%
- Block board	8.81	+48%
- Others	2.68	+48%

Note: * Refers to state-quota production

(Source: Forestry Statistics by State Forestry Administration)

Price: Prices of wood products are expected to increase significantly in 2005 because of the strong demand, limited supply, and high freight rates.

	2003 Average Price	2004 Average Price	Yearly change (04/03)
Timber	? 449/m3	? 479/m3	+6.6%
Lumber	? 800/m3	? 812/m3	+1.5%
Chips	? 216/m3	? 298/m3	+38.3%
Wooden Flooring	? 67/m2	? 74/m2	+9.7%
Plywood	? 1947/m3	? 1655/m3	-15.3%
Middle Density Fiberboard (MDF)	? 1103/m3	? 1274/m3	+15.5%
Particleboard	? 883/m3	? 1043/m3	+18.1%

(Source: Forestry Statistics by State Forestry Administration)

The average plywood price decreased because more thick plywood, which is cheaper than thin plywood, was produced. However, industry sources do not believe the plywood price decreased 15 percent as shown above because the plywood sector's overall profit margin is below 10 percent in China, and production costs, especially to the cost of logs, is higher than in 2003.

Mills: Private mills dominate China's wood processing sector. Industry sources state that there are more than 200,000 mills in China, of which more than 90 percent are private. Most are located in the provinces of Hebei, Shandong, Jiangsu, Zhejiang, Guangdong and Fujian. These provinces have ample skilled workers and raw materials, together with good transportation infrastructure. However, most of the private mills are small and low tech which explains why China's timber conversion rate is only about 60 percent, which is below the 80 percent rate in most developed countries.

Besides numerous private mills, China's state-owned forestry enterprises also play an important role in managing state-owned forests. There are four leading forestry groups in China: 1) Inner Mongolia Forestry Industrial Co., Ltd.: <http://www.imfic.com.cn/>; 2) Longjiang Forestry Industrial Co., Ltd.: <http://www.ljforest.com:9009/qybl/jtjj.htm>; 3) Jilin Forestry Industrial Co., Ltd. (listed company): <http://www.forestindustry.com.cn>; and, 4) Daxing'anling Forestry (Group) Co., Ltd. These four enterprises' logs production account for 20 percent of China's total state-quota logs production.

	Name	Forestland Area (Million ha)	Stocking Volume (Million m3)	2003 Production (thousand m3)		
				Logs	Lumber	Wood-based panels
1	Inner Mongolia Forestry Industrial Co., Ltd.	8.1	682	2,479	28	232
2	Daxing'anling Forestry (Group) Co., Ltd.	6.5	520	2,115	122	49
3	Longjiang Forestry Industrial Co., Ltd.	7.6	630	3,999	103	334
4	Jilin Forestry Industrial Co., Ltd. (listed company)	1.2	157	967	98	433

(Source: China Forestry Yearbook 2004)

Trade

Overview/Outlook

China's log imports ¹ in 2006 are forecast to increase 5 percent to 28.9 million cubic meters, of which 65 percent are expected to come from Russia. Lumber imports ² in 2006 are forecast to increase 10 percent to 7.3 million cubic meters. Russia, Thailand, Indonesia, and the United States are top lumber suppliers to China. The forecast assumes that China's wood market will stabilize to a more sustainable growth rate than it has experienced in over the past several years. Also, lumber imports have been increasing faster than logs because more and more exporting countries, such as Russia, have encouraged lumber exports instead of log exports.

Post's 2005 estimate of temperate hardwood logs imports has been revised downward while the 2005 estimate of tropical hardwood logs imports both have been revised upward sharply because last year Post classified the whole H.S. Code 44039900 (Others) as temperate hardwood logs, whereas this year Post reclassified them according to the country of origin. Imports from Indonesia, for example, are classified as tropical hardwood, while imports from the United States are classified as temperate hardwood. The same methodology was used for lumber imports and explains the changes in the import numbers.

Russia's log and lumber exports to China are expected to continue increasing because of their low prices, Russia's close proximity to China, and Russia's vast unexploited wood supply. Although Russia is expected to remain the number one wood exporter to China, U.S. wood exports to China also are expected to increase because: 1) good credit; 2) strong Chinese demand which is driven by increasing exports of manufactured wood products; and, 3) a 20-25 percent reduction of Indonesia's lumber exports. This reduction is expected because the Indonesian government has taken strict measures to reduce illegal logging and the illegal wood trade. Also, the December 2004 tsunami damaged Indonesia's transportation infrastructure, and, more importantly, destroyed so many structures that need to be rebuilt that strong domestic wood demand has left little for export. Tropical hardwood lumber³ accounts for more than 70 percent of Indonesia's total lumber exports to China. Most of Indonesia's tropical hardwood lumber that is exported to China is used to produce flooring. The shortfall of Indonesian lumber, together with strong demand, have driven up the price of China's wood flooring by approximately 20 percent in the first half of 2005 as compared to the same period in 2004.

Indonesia's loss could be U.S. exporters' gain, if U.S. exporters can convince their Chinese buyers that U.S. temperate hardwoods⁴ are suitable substitutes for Indonesian tropical hardwoods. In general, Chinese buyers like U.S. hardwoods because of their good quality, and reliable suppliers. Exporters of U.S. hardwoods will have to overcome the high price of their product relative to other substitutes. Many Chinese consumers cannot afford products made from U.S. hardwoods. This is why many of those products are re-exported.

China's wood imports from other major suppliers, including Malaysia, Thailand, and Myanmar (Burma), are forecast to remain stable in the near term. In the long term, however, they are

¹ H.S. Code 4403

² H.S. Code 4407

³ H.S. Code 440724, 440725, 440726, 440729, and part of 44079990

⁴ Oak, maple and cherry are the major flooring species from the United States used in China

expected to decrease because these countries' past unsustainable forest management practices will limit the supply.

A new fumigation facility, which will help increase exports of large diameter logs from Alaska, is expected to be completed and operational very shortly. Exporting these Alaska logs to China has been difficult because fumigation facilities do not exist in the remote areas of Alaska where these logs are harvested, so they would have to be fumigated in Japan, which is costly. The new facility is located the southern province of Fujian in the port of Putian Xiuyu. The project was approved by China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) in September 2004. This is the first and only combined quarantine and treatment facility for imported timber. The municipal government reportedly is eager to benefit from the economic activity that the new facility brings to the area. It has promised to simplify procedures for timber transportation and quarantine certifications.

China Lumber Imports January-April 2005

Unit: Cubic Meters

	Russia	Thailand	Indonesia	United States
Lumber	342,885	284,235	242,612	241,010
- Hardwood Lumber	52,003	284,235	241,879	229,713
- Tropical Hardwood	240	283,223	238,064	3,099
- Temperate Hardwood	51,763	1,012	3,815	226,614
- Softwood Lumber	290,882	0	733	11,297

China Lumber Imports 2004

Unit: Cubic Meters

	Indonesia	Thailand	Russia	United States
Lumber	961,959	834,656	799,126	782,409
- Hardwood Lumber	940,684	834,608	150,423	718,273
- Tropical Hardwood	942,525	828,642	135	15,649
- Temperate Hardwood	19,251	5,966	150,288	702,624
- Softwood Lumber	2,024	48	648,703	64,136

Competition

As of January 2005, Russia replaced Indonesia to be the largest lumber supplier (by volume) to China and the growth of these exports is expected to continue into the foreseeable future. They compete with U.S. hardwood exports in the furniture manufacturing and interior decoration sectors. Russian hardwood is very competitive because of its low price, which in turn is the result of low raw materials cost, low transportation costs, and the preferential tax treatment enjoyed by Russian wood exports to China. Although in June 2004 China's State Administration of Taxation released a notice that eliminated the "double rebate"¹ (See Appendix 1 for an unofficial translation of the notice), Post's sources have indicated that it has not been eliminated and that border trade still is granted preferable tax policies - "half duty and half Value Added Tax (VAT)". According to local Customs statistics, about 90 percent of Russia's logs and 70 percent of its lumber enter China through border trade. The other 30 percent of Russian lumber is exported by ship directly to South China, primarily to the Changjiang Delta and Pearl River Delta regions, which is the heart of China's furniture manufacturing region.

¹ "Double rebate", for example, Russia logs importers only need to pay 6.5 percent of imports value as VAT according to border trade policies. However, they can get 13 percent VAT rebate after selling logs.

Russia has actively promoted its forest products in China, both through government to private industry efforts. Sino-Russian cooperation in the forest products market is mutually beneficial because China has skilled workers, idle machinery², and a large market and Russia has vast forest resources. These natural synergies, together with improvements in Russian lumber production capacity, are expected to keep Russia as a formidable competitor to U.S. exporters into the foreseeable future.

Policy

On January 1, 2005, China's Ministry of Commerce released a voluntary industry standard – "Commercial Wood & Products Mark." It entered into force in August 2004. Although it currently is a voluntary standard, some industry sources expect it will become a mandatory standard. The standard requires the mark to include the name, species, grade, moisture, and other factors (See Appendix 2 for unofficial translation of the document). The standard was drafted by the China Wood Preservation Center.

See the Production section above for details on China's forestry production policies.

Market Segment Analysis

Construction Sector

The construction sector is the largest wood consumer in China. Based on industry sources, Post estimates this sector consumed 80 million cubic meters (round wood equivalent) of wood in 2004, or 60 percent of China's total wood supply (excluding imported paper and pulp). Within the construction sector, the three sub-sectors that account for the most U.S. wood consumption are interior decoration (including flooring), which uses primarily hardwoods, wood frame building, and outdoor landscaping materials. The latter two sub-sectors consume mostly softwoods.

Overview

China's marketable housing¹ starts in 2005 are estimated to increase about 5 percent to 630 million square meters from 604 million square meters in 2004. The latter consisted of 479 million m² residential starts and 125 million m² commercial starts. Post is forecasting this modest growth rate because it expects the measures taken by the Chinese government to cool the overheated real estate sector will have their desired effect. These measures include increasing the interest rate for home loans and collecting higher business taxes on the housing industry. The government is concerned that speculation in the market is driving housing prices up beyond the reach of too many consumers, which could lead to social unrest and damage the economy as a whole. The housing market in Shanghai has witnessed the highest growth rate of anywhere in China. Please refer GAIN CH4826 for more information on Shanghai's housing sector, which is available at: <http://www.fas.usda.gov/gainfiles/200410/146117843.pdf>

The Olympic Games, World Expo, China's continued urbanization process, development projects in China's Western region, and the revival of China's northeast industrial base will continue to drive China's construction sector.

² Especially in Northeast China because of the significant reduction of China's domestic timber production after China's implemented its Natural Forest Protection Program.

¹ Not including farmers' self-constructed homes. Very few of these houses will use U.S. wood.

These reasons for future construction growth notwithstanding, it should be noted that China's long-term national construction debt in 2005 decreased to RMB80 billion from RMB110 billion in 2004.

Marketing

Hardwoods: U.S. hardwoods are widely used for interior decoration because of their beautiful color, texture, and desirable grain patterns. In most cases, manufacturers use U.S. hardwoods only as a facing material or veneer because solid wood is too expensive. U.S. walnut, for example, is very popular in China. However, very little solid walnut is used for flooring. Most of what is sold in walnut-faced wood flooring. Cities with higher incomes, such as Shanghai, Beijing, Guangzhou, Shenzhen, Hangzhou, Nanjing, and Suzhou, present the best market opportunities for U.S. hardwood exporters.

U.S. exporters are encouraged to contact the American Hardwood Export Council in Hong Kong or Shanghai for assistance in exporting U.S. hardwoods to China.

Softwoods: With more and more affluent people in China, demand for villas, town houses, and other high-end housing is increasing. This presents market opportunities for U.S. softwoods in the form of wood framing and outdoor landscape timber. The hot sales of Beijing's first wood frame villas indicates that the potential market demand for wood frame housing may be more than many experts expected.

Several niche markets for U.S. softwoods have developed over the past several years. China's first wood frame bridge indicates a new market opportunity for U.S. softwood products. The 33 meter glued laminated timber (glulam) bridge was built by the Engineered Wood Association (APA) in Sheshan, Shanghai. The American Forest & Paper Association (AF&PA), which is the largest U.S. forestry association, also supported the project. It has also actively promoted the use of U.S. wood for walkways in several of China's public parks. U.S. exporters are encouraged to contact AF&PA's Beijing office for detailed marketing information at telephone: +(86 10) 8526-3150; fax: +(86 10) 8526-3151

For general information about export opportunities for both hardwoods and softwoods, U.S. exporters can also contact USDA/FAS's Agricultural Trade Offices in Beijing (atobeijing@usda.gov), Shanghai (atoshanghai@usda.gov), and Guangzhou (atoguangzhou@usda.gov).

Policy

China is actively developing new architectural technologies and establishing standards for energy-saving buildings. Industry sources indicate that these technologies and standards will use more wood products to improve energy efficiencies in buildings. Given China's limited forest resources and limited knowledge of wood architectural technologies, these changes may present opportunities for the U.S. wood building industry to expand in China.

Trade

Canada is one of the biggest and most effective competitors to U.S. softwoods in the Chinese market, especially in the wood frame construction sector. It has actively promoted its wood frame housing technology in China. The British Columbia provincial government funded a demonstration project named Dream Home Canada (DHC) in Shanghai. The 888 square meter-building features advanced wood technology, architecture and wide application of solid wood. DHC also offers training to Shanghai builders, architects, engineers, and traders.

Canada also built a demonstration home cooperating with Chinese Academy of Forestry in Beijing. In addition to Canada, New Zealand also actively promotes its wood structural products in China. After Canada's success with its DHC project, New Zealand will also build a demonstration wood-frame house in Shanghai.

Construction Sector Strategic Indicator Table

Construction Market			
Country: China, People's Republic of			
Report Year:	2004	2005	2006
Total Housing Starts (thousand units)	15,600	16,380	18,020
-- of which, wood frame (thousand units)	10	10	11
-- of which, steel, masonry, other materials (thousand units)	15,590	16,370	18,009
-- of total starts, residential (thousand units)	14,118	14,825	16,305
---- of residential, single family (thousand units)*	10,010	10,510	11,560
---- of residential, multi-family (thousand units)	4,108	4,315	4,745
-- of total starts, commercial (thousand units)	1,482	1,555	1,715

* All housing starts in China's rural area are classified as single family.

Furniture & Interiors Sector

Production, Consumption & Marketing

China's furniture production is forecast to increase 20-30 percent in 2005 because of strong domestic demand and rapidly increasing exports. Increasing consumers' income and more young families that are buying their first home are driving the domestic demand growth.

Furniture made of natural materials, such as wood, bamboo, and rattan, has become more popular in recent years because more people believe natural products are healthier than man-made materials. Furniture made from panel products is a more affordable alternative for many consumers who like wood furniture, but cannot afford the relatively high price of solid wood furniture.

Multi-functional furniture is welcomed in China's furniture market because it is more flexible, functional, and space efficient. These factors are important because the average Chinese apartment is small, about 75 m² by Western standards, so space is at a premium. For example, a raised bed with storage space underneath maximizes floor space. Furniture of simple design and neutral colors is expected to be the main trend in furniture styles.

Furniture is one of the largest consumers of imported U.S. hardwood in China. However, a lot of furniture made of U.S. wood is exported to the United States, not locally consumed. This is because U.S. wood furniture is relatively expensive for most Chinese consumers.

Regarding the interiors sector, China's measures to limit speculation in the housing sector could have the unintended effect of increasing demand for U.S. hardwoods because buyers of homes as their primary residence tend to spend more on interior decoration, including quality trim, than buyers of homes for speculation or rental purposes.

Trade

Exports: China's furniture exports are forecast to increase 20 percent to US\$15 billion in 2006 compared to 2005. This increase is driven by Chinese furniture producers' low production costs, especially labor. The main destinations for Chinese furniture are the United States, Japan, and Europe (mostly the United Kingdom and Germany.) Most of China's exported furniture is produced according to foreign brands' custom specifications. There are very few nationally recognized Chinese furniture brands.

Looking several years into the future, Post expects the rate of growth in China furniture exports will slow to a more sustainable rate than has occurred in recent years. The political fallout of China's flood of furniture exports may prompt Chinese officials to impose some form of voluntary restraint, such as export tariffs, like they did for textiles, rather than face the prospect of more anti-dumping cases.

China's tariffs on most furniture products (H.S. Code 9401, 9402, 9403, not including 94012010, 94012090, and 94019011) were reduced to zero since January 1, 2005.

Imports: Although China's total furniture imports, which include wood and upholstered furniture, decreased about 20 percent in first four months of 2005, imports of wooden furniture increased about 30 percent during the same period. Europe is one of the main sources of China's furniture imports. This increase occurred even though the Euro's appreciation has increased the cost European furniture in China. This increase is also surprising because some Chinese manufacturers cannot export furniture to the United States at competitive prices because of the U.S. antidumping duties and some of these producers are selling their furniture in China and displacing European imports in China's high-end furniture market.

Most of the decrease in total furniture imports can be attributed to the decreased imports of motor vehicles seats (H.S. Code 940120), which are considered furniture. The quantity fell from 94 million to 24 million. The tariff on this category is 10 percent, not zero like many other categories.

Material Handling Industry

Overview

The material handling industry annually consumes about six million cubic meters of wood in China, of which two million cubic meters go to wood pallets. Wood packing is the major packing material for exporting large and medium sized machinery and electrical products.

China's material handling industry is forecast to continue expanding in the next few years due to China's booming trade and growing logistics and express delivery industry. According to China's Ministry of Communications, China's ports are expected to handle 100 million standard containers by 2010 and that volume could even double by 2020.

This forecast growth does not mean the wood packing materials industry will grow at the same rate. Although wood currently is one of the major packing materials in China, its application is forecast to shrink as a percentage of the total in the future because of the following factors: 1) the Chinese government is encouraging the use of wood substitutes to save its forest resources; 2) quarantine requirements for wood packing material in international trade are becoming more stringent; and, 3) wood substitutes, such as honeycomb boards, plastics, and metal, are increasingly popular because they do not have the quarantine requirements of wood packing material and still offer the same functionality.

Given the high price of U.S. wood, and the low added value of wood packing material, very little imported U.S. wood are used for wood packing material.

Policy

China released its new quarantine requirements on entry wood packing material (WPM) in January 2005. It is scheduled to enter into force on January 1, 2006. Please refer to GAIN Report CH5014 for detail information of quarantine requirements on entry WPM, which is available at <http://www.fas.usda.gov/gainfiles/200502/146118706.pdf>. Also see Appendix 3 herein for details on proposed phytosanitary treatment measures.

Statistics Tables

Table 1. Softwood Logs PS&D Table

Country	China, Peoples Republic of					
Commodity	Softwood Logs				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	29760	19681	32736	20665	0	21700
Imports	11920	15961	13112	16760	0	17600
TOTAL SUPPLY	41680	35642	45848	37425	0	39300
Exports	1	0	1	0	0	0
Domestic Consumption	41679	35642	45847	37425	0	39300
TOTAL DISTRIBUTION	41680	35642	45848	37425	0	39300

Table 2. Temperate Hardwood Logs PS&D Table

Country	China, Peoples Republic of					
Commodity	Temperate Hardwood Logs				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	13740	24700	14840	25935	0	27230
Imports	7120	3298	7832	3465	0	3640
TOTAL SUPPLY	20860	27998	22672	29400	0	30870
Exports	8	6	8	5	0	5
Domestic Consumption	20852	27992	22664	29395	0	30865
TOTAL DISTRIBUTION	20860	27998	22672	29400	0	30870

Table 3. Tropical Hardwood Logs PS&D Table

Country	China, Peoples Republic of					
Commodity	Tropical Hardwood Logs				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	2290	2740	2520	2880	0	3025
Imports	2990	6984	3440	7335	0	7700
TOTAL SUPPLY	5280	9724	5960	10215	0	10725
Exports	0	0	0	0	0	0
Domestic Consumption	5280	9724	5960	10215	0	10725
TOTAL DISTRIBUTION	5280	9724	5960	10215	0	10725

Table 4. Softwood Lumber PS&D Table

Country	China, Peoples Republic of					
Commodity	Softwood Lumber				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	8450	6425	10980	7710	0	9250
Imports	1190	1700	1370	1870	0	2060
TOTAL SUPPLY	9640	8125	12350	9580	0	11310
Exports	0	187	0	180	0	180
Domestic Consumption	9640	7938	12350	9400	0	11130
TOTAL DISTRIBUTION	9640	8125	12350	9580	0	11310

Table 5. Temperate Hardwood Lumber PS&D Table

Country	China, Peoples Republic of					
Commodity	Temperate Hardwood Lumber				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	4930	7850	6400	9420	0	11300
Imports	3055	1395	3300	1535	0	1690
TOTAL SUPPLY	7985	9245	9700	10955	0	12990
Exports	350	274	380	300	0	320
Domestic Consumption	7635	8971	9320	10655	0	12670
TOTAL DISTRIBUTION	7985	9245	9700	10955	0	12990

Table 6. Tropical Hardwood Lumber PS&D Table

Country	China, Peoples Republic of					
Commodity	Tropical Hardwood Lumber				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	705	1050	910	1260	0	1510
Imports	1380	2909	1650	3200	0	3520
TOTAL SUPPLY	2085	3959	2560	4460	0	5030
Exports	10	11	10	10	0	10
Domestic Consumption	2075	3948	2550	4450	0	5020
TOTAL DISTRIBUTION	2085	3959	2560	4460	0	5030

Table 7. Softwood Plywood PS&D Table

Country	China, Peoples Republic of					
Commodity	Softwood Plywood				1000 CUBIC METERS	
	2004	Revised	2005	Estimate	2006	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2004		01/2005		01/2006
Production	3780	3148	4725	3620	0	4165
Imports	230	279	280	295	0	310
TOTAL SUPPLY	4010	3427	5005	3915	0	4475
Exports	1100	2368	1200	2600	0	2860
Domestic Consumption	2910	1059	3805	1315	0	1615
TOTAL DISTRIBUTION	4010	3427	5005	3915	0	4475

Appendix 1 Notice on Forbidding the "Double Rebate" Policy on Border trade**Public Notice on Strictly Complying by the Taxation Laws, Forbidding the "Double Rebate" Policy on Border Trade**

No. 830 [2004] of the notice of State Administration of Taxation
June 21, 2004

Heilongjiang, Jilin, Liaoning, Inner Mongolia, Ganxu, Xinjiang, Guangxi, Yunnan Taxation Bureau:

To encourage the development of border trade, Central Government applied preferential policy of Half VAT Collection to the goods imported under border trade. However, in some regions, the VAT rebate was not according to the actual amount indicated by the Customs documents, but "Double Rebate". The "Double Rebate" disobeyed the current VAT collection policy, injured the integrity and severity of the Taxation System, and brought hidden trouble to the tax collection. The "Double Rebate" was also very easily to induce the crime of tax dodging and evasion, therefore, it must be totally forbidden and corrected. It is hereby restated as below:

1. In accordance with the regulations of Article three and Article 13 of the Law of People's Republic of China on Tax Collection Management, taxation departments at different levels should strictly comply with the current tax collecting laws and regulations, constituting taxation policies without authorization is not allowed. The taxation departments should not implement the decisions made by other departments, organizations or individuals, which are conflict with the current tax collection laws and administrative laws. And the taxation departments should report to the superior departments. Those organizations or individuals who disobey the regulation and implement incorrectly without authorization should be found out their responsibilities according to related regulations.
2. The taxation departments at different levels and region should overall inspect the operation of import VAT rebate, and cease the "Double Rebate" policy immediately. The reduced and remitted VAT during importing could not be rebated in next stage.
3. The State Administration of Taxation will inspect the VAT rebate operation in the border trade region irregularly. The "Double Rebate" and other irregular management would be seriously punished.

It is hereby announced.

Appendix 2 Mark of Wood and Wood Products in Trade

SB

Domestic Trade Industry Standard of the People's Republic of China

SB/T 10383-2004

Mark of wood and wood products in trading

Issued on 2004-08-04

Executed on 2005-01-01

Issued by Ministry of Commerce, the People's Republic of China

Foreword

This standard mainly stipulates the contents and use method of mark of wood and wood products in trading. To avoid repetition in the standard, contents for general mark are included in general stipulations and those for special mark are listed separately. Considering the great variety of wood products, this standard can be referenced for the wood products uncovered hereby.

This standard was proposed by Ministry of Commerce, the People's Republic of China.

This standard was drawn up by Wood Saving and Development Center.

This standard mainly drafted by Yu Xiqiu, Tao Yiming, Ma Shouhua, Hao Lihua, Chen Zhimin, Wang Hongli, Zhang Xizhong.

This standard was entrusted to Wood Saving and Development Center for interpretation.

Mark of Wood and Wood Products in Trading

1 Scope

This standard stipulates the contents and use method of mark of wood and wood products in trading.

The wood and wood products in trading referred to in this standard include such wood materials as raw log, saw timber, artificial board as well as semi-finished products and finished products made from mountain wood materials.

This standard shall be applicable to the production, distribution, storage and transportation, quality inspection and use of wood and wood products in trading.

2 Normative Reference Documents

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. For dated reference, subsequent amendments (not including text corrections) or revisions of, any of these publications are not applicable to this standards. However, all parties of agreement based on this standard are encouraged to discuss if the latest version of those documents are applicable. All the latest editions of the referenced documents without date indication are applicable to this standard.

GB/T 4822-1999 Saw timber inspection
GB/T 4897.1—2003 Chipboard, common requirements for all types
GB/T 5849 ? 1999 Lumbercore plywood
GB/T 9846.7-1988 Plywood, mark, package, transport and storage of ordinary plywood
GB/T 11917-1989 Terminology of wood making process
GB/T 12626.2-1990 Hardboard technical requirements
GB/T 14019-1992 Terminology of wood preservation
GB/T 14732-1993 Urea formaldehyde, phenolic aldehyde and melamine formaldehyde resin used in adhesives for wood industry
GB/T 15035-1994 Terminology of wood drying
GB/T 15787-1995 Terminology of raw log inspection
GB/T 16734-1997 Names of wood in China
GB/T 18107-2000 Redwood
GB/T 18513-2001 Names of wood imported to China
GB 18580 Interior decoration materials, Limit of formaldehyde emission from artificial board and its products
GB 18584 Interior decoration materials, Limit of harmful substances in wood furniture
LY/T 1280-1998 Terminoloty of adhesives in wood industry
LY/T 1511-2002 Raw log Mark Label
LY/T 1580-2000 Directional chipboard

3. Terminology and Definitions

The terminology and definitions in GB/T 11917-1989, GB/T 14019-1992, GB/T 15035-1994, GB/T 15787-1995, LY/T 1280-1998 shall be applicable to this standard.

4. Mark Contents

4.1 General provisions

4.1.1 Tree species

Wood and wood products in trading shall be identified with tree species in both Chinese and Latin languages.

The names of domestic tree species shall conform to GB/T 16734-1997, that of imported tree species to GB/T 18513-2001, and that of redwood to GB/T 18107-2000. The names of tree species not stipulated herein shall be in Latin language.

Wood products made from materials of several tree species shall be marked with the name of main materials.

SB/T 10383-2004

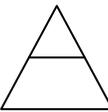
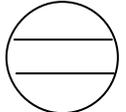
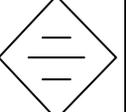
4.1.2 Product name and trade marks

Wood and wood products in trading shall be indicated with normalized product names (title) and trademarks in Chinese. Using commodity names shall not be allowed.

4.1.3 Grade symbols

Grade symbols for wood and wood products in trading shall conform to the corresponding product quality grades (See Table 1):

Table 1 Grade Symbols

Grade	Super quality	High quality	Qualified	Grade 1	Grade 2	Grade 3	Off grade
Symbol							

4.1.4 Measuring unit

For wood and wood products in trading, legal measuring units shall be used.

4.1.5 Producers (factory or plant)

Wood and wood products in trading shall be stated with the full name of producer (factory or plant), or the ID code or bar code of producer.

4.1.6 Production date

Wood and wood products in trading shall be marked with production date in Arabic numbers.

4.1.7 Moisture content

Wood and wood products in trading through drying processing shall be indicated with moisture content ex-work.

4.1.8 Processing method

Wood and wood products in trading processed with chemicals shall be indicated with the name of chemicals used in Chinese or English.

4.1.9 Mark of quality inspection authority

Wood and wood products in trading passed through quality inspection shall be marked with the full name of the quality inspection authority in Chinese, or with the ID code or bar code of the trademark of the authority.

4.1.10 Certification mark

Wood and wood products in trading passed through certification shall, within the validity period, be marked with the corresponding mark of certification.

4.1.11 Points for attention

Wood and wood products in trading subject to decay, inflammation, damage, molding or dangerous to environment and human health shall be indicated with points for attention in transportation and storage, processing, use and disposal after use. For wood and wood products that are complicated in performance, structure and usage, or uneasy in installation and use, detailed instructions of installation, maintenance and use shall be provided as stipulated by national standards, industry standards and provincial standards.

4.2 Mark for raw log

The diameter, length, grade, species and code of raw log shall conform to the stipulations of LY/T 1511-2002.

4.3 Saw timber

4.3.1 Specifications

Saw timber shall be marked with the length, width and thickness in Arabic numbers and conform to the stipulations of GB/T 4822-1999.

4.3.2 Grade

Saw timber shall be marked with the grade in Chinese or grade symbol and conform to the stipulations of GB/T 4822-1999.

4.4 Mark of artificial board

4.4.1 Applicable varieties

Mark of artificial board is applicable to such decorative boards as plywood, hardboard, chipboard (including OSB) and Lumbercore plywood.

SB/T 10383-2004

4.4.2 Specifications

The length, width and thickness of artificial board shall be indicated in Arabic number in mm.

4.4.3 Grade

The grade of artificial board shall be marked in Chinese or grade symbol as stipulated in the standard and conform to the stipulations of GB/T 9846.7-1988, GB/T 12626.2-1990, GB/T 4897.1-2003, LY/T 1580-2000, GB/T 5849-1999.

4.4.4 Adhesives

Artificial board shall be indicated with name of adhesives used in production in Chinese and English and conform to the stipulations of GB/T 14732-1993 and LY/T 1280-1998.

4.4.5 Limit of formaldehyde emission and executive standard

Artificial board shall be indicated with the limit of formaldehyde emission and executive standard and conform to the stipulations of GB 18580.

4.5 Mark of wood products

4.5.1 Applicable varieties

Mark of wood products is applicable to finger jointed lumber, laminated lumber, solid wood flooring, solid wood compound flooring, varnished wood pressboard flooring, wood structure, wood molding, sleeper, mine timber, wood electric pole, furniture, doors and windows, fishing boats, stationery, toys, chopsticks, toothpicks, etc.

4.5.2 Specifications

Wood products shall be marked with specifications for the respect type in general dimensions.

4.5.3 Grade

Wood products shall be marked with the quality grade and conform to the inspection by quality inspection authorities in Chinese or in unified symbols.

4.5.4 Limit of harmful substances

Wood products shall be indicated with content of harmful substances and conform to the stipulations in GB 18584.

4.5.5 Producer's address and contact method

For wood products for direct use such as furniture, doors and windows, floors, fishing boats, stationery, toys, chopsticks, toothpicks, etc., producer's detailed address, postcode and telephone number shall be marked.

5. Mark Indicate Method

5.1 Mark of wood and wood products in trading shall be indicated in the way based on the type of the product mark with precondition that the product quality and use are not affected.

5.2 Mark of wood and wood products in trading can be indicated in such forms as nameplate, label and stamp. Their shape and size shall conform to the relevant standards. Those with no stipulated standards may be determined according to their size of products.

5.3 Mark of wood and wood products in trading shall use standardized Chinese characters. Bar codes shall conform to the national standard of bar code for commodities. The height of characters, numbers and letters shall be not less than 1.8 mm.

6 Use of Mark

6.1 Mark of wood and wood products in trading shall be shown in a visible place without affecting the product quality and use.

6.2 Mark on raw log shall be made on the sectional side or on the log body near one end.

6.3 Mark on saw lumber shall be made on the sectional side or on the log body near one end.

6.4 Mark on artificial board shall be made on the end surface or on the back side.

6.5 Wood and wood products for market retailing shall have the mark shown in a visible part of the product, provided the appearance and use of the product are not affected. With consent by the buyer, wood and wood products for whole sale and direct use in production and processing can use the mark on the sample of the same kind of products, or indicate the mark content as stipulated in this standard in contract or product instructions.

6.6 Wood and wood products with external package shall indicate the mark on a visible position in the external package. For those having no package, being small in size or unsuitable for bearing the mark, mark shall be shown in instructions or on a sign at the stack.

Appendix 3 Phytosanitary Treatment Measures for Entry WPM

NO. 32 Notice

By the General Administration of Quality Supervision, Inspection and Quarantine
(AQSIQ)

(February 22, 2005)

In order to prevent the introduction of harmful forest organisms into the People's Republic of China that are associated with the entry of wood packing material and to protect domestic forests, the ecological environment, and tourism resources, in accordance with the Law of the People's Republic of China on Entry and Exit Animal and Plant Quarantine and with reference to the International Standards for Phytosanitary Measures Publication No. 15 of the International Plant Protection Convention (IPPC) "Guidelines for Regulating Wood Packing Material in International Trade," AQSIQ, the Customs General Administration, the Ministry of Commerce and the State Forestry Administration released the No. 11 Joint Announcement 2005. The Announcement claims that the entry cargo wood packing should be subject to phytosanitary treatment in exporting countries or territories and be issued special mark. Hereby release the requirements for wood packing phytosanitary treatment measures and marks as following:

I. Quarantine Phytosanitary Treatment Measures

1. Heat Treatment (HT)

1.1 The wood packing material must achieve a minimum wood core temperature of 56°C for a minimum of 30 minutes.

1.2 Kiln drying (KD), chemical pressure impregnation (CPI) or other treatments may be considered to the extent that these can meet the HT specifications. For example, CPI may meet the HT specification through use of steam, hot water, or dry heat.

2. Methyl Bromide (MB) Fumigating Treatment

2.1 The wood packing material shall be treated as per the below criteria at normal atmospheric pressure:

Temperature	Dosage rate (g/m ³)	Minimum concentration (g/m ³) at			
		0.5 hour	2 hours	4 hours	16 hours
≥21°C	48	36	24	17	14
≥16°C	56	42	28	20	17
≥11°C	64	48	32	22	19

2.2 The minimum temperature should be no lower than 10°C, and the minimum fumigating time should be no less than 16 hours.

2.3 Coniferous wood packing from Pine Wood Nematode (PWN) infected countries/territories should be subject to MB fumigating treatment according to the following requirements temporarily.

Temperature	MB Dosage (g/m ³)	Minimum concentration (g/m ³) in 24 hours
≥21°C	48	24

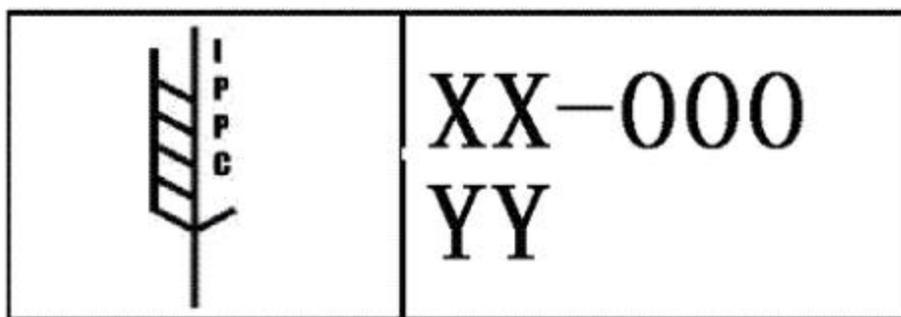
=16°C	56	28
=11°C	64	32
Note: The minimum temperature should be no lower than 10°C, and the minimum fumigating time should be no less than 24 hours. The PWN infected areas include: Japan, the United States, Canada, Mexico, South Korea, Portugal, China Taiwan and Hong Kong.		

After IPPC amends its MB fumigation standard, China will implement the new standard.

3. Other phytosanitary treatments recognized by International Standards for Phytosanitary Measures or accepted by AQSIQ.
4. Based on the Pest Risk Analysis, AQSIQ may request export countries or territories to take other pest-removal measures when the above phytosanitary treatment measures cannot effectively kill the harmful organisms cared by China.

II. Requirements for mark

1. Sample of marking



Where:

IPPC — Abbreviation of “International Plant Protection Convention”;

XX —International Standardization Organization (ISO) two letter country code;

000 —Wood packing producing enterprise code approved by official plant quarantine authorizations in export counties or territories;

YY — The phytosanitary treatment measures, Methyl Bromide Fumigating – MB, Heat Treatment – HT;

2. Official plant quarantine authorizations in export counties/territories or wood packing producing enterprise may provide other information on request, for example, DB means debarking.
3. The mark should be placed in a visible location of wood packing, preferably on at least two opposite sides. The mark should be legible, permanent and not transferable.
4. The use of red or orange should be avoided.