

# The Present Situation and Future Development in Quality Assurance for Wood Protection in China

Prof. Kang Hua Cheng  
Nanjing Forestry University  
Institute of Chemical Engineering



# 1) The Present Situation in Quality Assurance for Wood Protection in China

more than **1000** wood protection enterprises. the pressure treatment facilities using various wood preservatives have increased from **30 to 340** since year 2000. These enterprises are distributed in 21 provinces and are mainly concentrated in Beijing, Shanghai, Jiangsu, and other parts of country..



an annual capacity of **6 millions** m preservative treated wood. In the last two years, about average **1.5 millions** m/year of treated wood has been supplied for the domestic uses which accounts for about 2% of domestic wood output in China



China wood protection Quality  
Supervision and Testing Center was  
established in Beijing in 2005 under the  
jurisdiction of Timber Value Promotion  
and Substitution Administration Center  
P.R.C.



The Institute of Wood Protection in Nanjing  
Forestry University,  
the College of Material Science & Applied  
Technology of Northeast Forestry University,  
the College of Material Science & Technology of  
Beijing Forestry University,  
the Research Institute of Wood Industry of the  
Chinese Academy of Forestry in Beijing and  
Guangdong Forest Research Institute



Shanghai Dabutong Wood Protection  
Science & Technology Company、  
Dongguang Taibao Science & Technology  
Company

Yintan Preservative Wood Factory of China  
Railway Material General Company.



(1) there is still not an integrated system of quality assurance and inspection for wood protection in China. There are no official requirements for a third party or authoritarian organizations to inspect all products entering the market.



- (2) Products quality has not be emphasized enough with manufactures, building or construction designers, end users
- (3) Some small enterprises do not have quality inspection centers and lack necessary equipments in products inspection.



(4) There are not enough qualified technicians in wood protection products measurement. Some present technicians move into wood protection industry from chemistry and biological engineering areas.

(5) The existing quality assurance programs are mainly for the preservative treated wood. Other wood protection products have not been given much attention in China



(6) the lack of the knowledge of the quality requirements and enforcement on standards on wood protection products may have lead to some of the misconducts within the industry. The consciousness/responsibilities for products quality either from manufactures or from consumers are low and issue needs to be addressed.



## **2. The future development needs of quality assurance for wood protection products in China**



The forest coverage is **18.21%** in China and it is only **61.5%** of that for the average forest coverage in the world . The average forest area and wood volume per capita is **22%** and **14.6%** of the world average level respectively.

The wood comprehensive utilization rate is merely **63%** in China. it is predicted that wood supply in China will have a shortage of about **140 millions m<sup>3</sup>** up to the year 2010 and about **150-200 millions m<sup>3</sup>** by 2015.



- A.** Developing wood protection technology; prolonging the life of wood products.
- B.** Promoting the commercialization of preservative treated wood and modified wood rapidly.



**C** . Developing and producing highly effective and low toxic wood preservatives. and establishing the standardization and serialization of wood protection products.

**D**. Refining the system of product inspection/assurance for wood protection.



- E.** Encouraging researches on anti-mould, preservative treated wood, drying wood, fire proof wood, modified wood, multi-function wood, et al.
- F.** Focusing the attention on the wood applications for building structures, door and window, landscape, crossties, mining timber, fishing boat, structural uses in agriculture and so on.



**G.** Increasing the ratio of wood protection products in wood products; making the ratio of wood protection products in wood products reach 5% by 2010.



- (1) Draw up the complete laws & regulations which govern quality assurance program for wood protection industry and market in China.
- (2) Establish or appoint national quality inspection agencies which certify the products of wood protection based on defined quality standards. The inspection should include both routine and random inspection of the final products.



(3) The quality inspection information can also be used to identify the quality producers, assist the non-certified producers to improve their product quality

(4) The process of formation “China Wood Protection Association” and establishment of corresponding “China Wood Protection Standard Technology Committee” need to be completed. Committee members should include professionals in forestry and wood products, building engineering/practice and environmental and consumer protections.



(5) warning should be issued to any companies producing unqualified products or causing environment pollution with a given time to resolving the problems. If no effective actions have been taken to remediate the quality, procedures should be developed to enforce discontinuation of production and eventually to consolidate or close down such companies.



(6) Provide research funding for Universities, professional schools and Research institutes to fully engage in the activities in research and development of advanced chemistry and treatment technologies.



(7) Encouraging the research and technical corporations with the regional and international organizations. The quality assurance standards should be integrated with the international standards. The quality assurance methods for domestic and exporting business inspection should meet the advanced international standard by 100% as well.



In summary, the quality assurance program for wood protection products in China has been established by establishing certain national standards and at its early stage of implementation. With the guidance of the government policy and support; the active involvement of The Timber Value Promotion and Substitution Administration Center of China, universities and research institutes; and participation of the industry members, future works in the area can be expected to intensify to meet the demands in the country's rapid economic developments and to ensure the quality of the wood protection products.



thanks

