

C I N T R A F O R

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China Treated Lumber Market Study

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Executive Summary

As China's economy has grown and personal income has risen over the past decade, spending on landscaping and public works projects has increased dramatically, and with it China's demand for treated softwood lumber. New luxury residential developments commonly include traditional Chinese landscape design, which includes man-made lakes and waterways traversed by footbridges and flanked by wooden fences, gazebos, and pavilions with decks. Government projects to revitalize shopping areas and tourist destinations has boosted demand for high-quality US treated southern yellow pine (SYP) lumber used to build walkways, bridges, stages, and landscaping elements.

Treated softwood lumber is a relatively new product in China, yet imports have increased steadily over the past several years. However, as demand for treated softwood lumber has increased, the number of domestic wood treaters has also increased. These new Chinese lumber treaters pose a competitive threat because many produce poor quality treated lumber which threatens to undermine the good reputation that US treated SYP has established.

This research is intended to provide US suppliers with a description of the Chinese treated softwood lumber market and strategic marketing recommendations. This report is based on information collected through interviews with treating plant managers, softwood lumber distributors, and other industry experts. Additional information was collected from surveys completed by Chinese architects, distributors, and other construction professionals.

The report consists of four parts: 1) an overview of the China's wood preserving industry, 2) a description of the Chinese treated softwood lumber market, 3) results of surveys about user perceptions and attitudes about various treated softwood lumber species used in China, and 4) strategic implications for US manufacturers, exporters and industry associations.

Key findings include the following:

- 1) China's treated softwood lumber market is extremely competitive and price dependent. The majority of the treated lumber used in China is supplied by local treaters offering low prices. Russian pine treated with Chromated Copper Arsenate (CCA) is by far the most widely used treated softwood lumber species in China, due to its low price. However, imported and Chinese treated US SYP is quickly establishing a niche in high-quality market segments and many Chinese treaters report that they would buy as much untreated US SYP as they have access to. The majority of treated SYP from the US is used in government-funded projects where interest in quality and durability is more important than low price.
- 2) Chromated Copper Arsenate (CCA) is the most widely used treating chemical used by Chinese treaters. A growing number of Chinese treaters have started to use Alkaline Copper Quaternary (ACQ) and several are developing their own environmentally responsible treating chemicals. Since China has no regulations governing the preservative treated lumber industry, most Chinese treaters develop their own chemicals or dilute purchased preservatives to reduce costs, and the quality and durability of lumber treated with these chemicals is reportedly poor. As China's government enacts more environmental standards and as more

Chinese manufacturers follow international environmental standards as a means of accessing international markets, interest in environmentally-friendly treating chemicals should increase. Survey responses indicate that Chinese construction professionals rate the importance of environmentally-friendly treating chemicals fourth highest in a list of ten quality and service attributes associated with preservative treated softwood lumber. With no regulatory body however, the majority of Chinese treaters will likely use substandard preservative treating chemicals and treating procedures to keep product costs low.

- 3) According to survey results, US treated SYP has established a reputation as a high-quality, durable and environmentally-friendly building material. As stated above, since China has no standards governing proper treating methods and chemicals, and no testing body to ensure the quality and durability of domestic treated lumber, US industry representatives are concerned that domestically treated softwood lumber may erode the reputation of US treated SYP.
- 4) While survey respondents rated softwood species from the western US highly, Chinese treaters have negative perceptions about the species. Primary concerns were that Douglas-fir lumber does not absorb preservative treating chemicals completely and the ends require re-treating if the lumber is sawn after initial treating. Conversely, treaters were resistant to using Hem-fir because it absorbs preservative treating chemicals too readily, which increases the price of treating.
- 5) According to interviews with Chinese lumber treaters and softwood lumber distributors, US exporters face several barriers to expanding their market share in China. The most significant of these obstacles is that most consumers do not understand the differences in performance and durability between imported US treated softwood lumber and less expensive domestically treated lumber. Second, US suppliers continue to face obstacles associated with not providing lumber in metric sizes. Finally, Chinese distributors report that not having ready access to US lumber prices hampers their ability to quote prices as readily as suppliers of domestic treated lumber.
- 6) Environmental regulations in China are few and enforcement is inconsistent. However, the Chinese government is reportedly investigating the feasibility of reducing environmental pollution by imposing legislative and economic measures on “dirty” industries. Industry experts anticipate that new environmental regulations applied to the Chinese wood treating industry may improve the competitiveness of US preservative treated lumber compared to locally treated lumber.
- 7) China’s distribution system for softwood lumber is regionally fragmented with hundreds of thousands of distributors, trading markets, and sales outlets across the country. This regional fragmentation makes it important for US suppliers to work with distributors in several regions of China or with a distributor who has a network of regional representatives. Chinese distributors who have become recognized as experts with a basic understanding of wood frame design and softwood lumber performance characteristics have gained a competitive edge over their less knowledgeable competitors.
- 8) As manufacturers and distributors work to differentiate themselves from their competition, survey respondents report an interest in naturally decay resistant and lesser used species such as Alaska yellow cedar, Sitka spruce and western red cedar from the western US and Canada.

The US softwood lumber industry has been successful in developing the Chinese market for preservative treated softwood lumber. To a large degree, this success has been based on educational programs that have raised construction professional’s awareness of the superior performance and durability of softwood lumber that has been properly treated to international wood treating standards. The results of this research clearly demonstrate that there is a brand awareness of US preservative treated southern yellow pine as the “gold standard” of treated softwood lumber products in the Chinese market. Like any successful branding effort, the rapid development of the preservative treated softwood lumber market has spawned low-cost domestically treated products with inferior performance and poor durability. Often, domestically treated SYP is marketed as US-treated SYP. In other cases, pine from South America is marketed as US SYP. In a price sensitive market like China, where markets tend to move towards a commodity focus, it is hardly surprising that these domestically treated, low-priced products have gained a surprising degree of market success.

The success of these inferior treated lumber products threatens to undermine the entire market for treated softwood lumber if consumers associate the poor performance and low durability of this domestically produced inferior treated lumber with all treated softwood lumber. To the extent that US preservative lumber

manufacturers and exporters allow the commoditization of treated softwood lumber, they stand the risk of having US treated lumber be subject to consumer perceptions based on the poor quality of domestic Chinese treated lumber. From a marketing perspective, it becomes important that the US industry adopt a branding strategy that allows consumers and end-users to differentiate high quality US treated lumber from low quality domestically treated lumber. Thus, it is imperative that the US treated lumber industry work with industry associations and their Chinese distributors to implement a promotion and education strategy to differentiate US preservative treated lumber from competing products.

Fundamentally, this marketing strategy would help prevent the commoditization of US treated lumber in the Chinese market and ensure that the poor performance of domestically treated lumber in China does not adversely affect the reputation or demand for US treated lumber. Failure to do this would seriously jeopardize the market for US treated lumber in China.

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