

Recent Stud Mill Benchmarking Study Results Show Much Improved Performance from 2010

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A North America Stud Mill Benchmarking Study recently completed by The Beck Group revealed that stud mills are again operating at profitable levels. During the comparison period July 2012 to June 2013, the average mill in the study had an operating profit of over \$40 per thousand board feet of lumber produced. This compares to a similar 2010 stud mill study completed by BECK where the average mill was operating on a break-even level. The Top-Quartile mills (the best performers) in the 2012/13 study had profit margins nearly twice the average of all participants. This substantial difference between the industry average and top quartile performers is consistent with the results of nearly two decades of similar BECK benchmarking studies.

Much of the improved financial performance can be attributed to stronger lumber market conditions, which resulted in average lumber sales realizations about \$100 per thousand board feet higher in 2012/13 than during the 2010 study. Another factor leading to higher profits was that mills were able to slightly decrease their conversion cost (all costs excluding logs) in the 2013 study. Interestingly, the reduction in conversion cost was driven primarily by lower per unit fixed costs, which were the result of higher operating rates.

The study also showed that for some mills, focusing on premium grade studs for Home Centers was an effective management strategy. About a third of the mills in the study sold more than half of their production to Big Box accounts. The strategic decision on whether or not to produce premium grade products is not a simple one because of the trade-off between achieving a higher average sales realization (by selling premium grade) and the associated reduction in lumber recovery due to the need to produce a wane-free product. Independent stocking distributors and office wholesalers were other important distribution channels, combined they accounted for approximately 40 percent of all lumber sold by study participants. The study results also revealed that lumber exports substantially declined among study participants between the two time periods.

Another significant finding from the study was that there was a general decline in the value of mill by-products (mainly chips) between the 2010 study and the 2013 study. On a dollars per thousand board feet of lumber basis, the value of by-products declined by 17 percent between 2010 and 2013. This trend is caused by a combination of pulp mill closures, which reduced demand for mill by-products and increased pulp chip production as sawmills began producing more lumber. Mills responded to stronger lumber demand by operating about 20 percent more hours during the 2012/13 study than in 2010. One result of lower chips prices is that mills have begun producing and recovering more 1" lumber rather than producing chips.

With a forecast for better lumber markets, the level of capital investment among stud mills is expected to rise over the next four years. Between 2008 and 2011, capital expenditures were relatively low at about \$1.2 million per mill per year, as should have been expected during those difficult economic conditions. However, for the period 2014 to 2017, the planned capital investment is expected to be

substantially greater. Nearly all study participants had capital projects that were either under development or in the planning stages.

The study results also showed that Coastal mills are being heavily impacted by log exports. Overall, Coastal mills had log costs that were 9 percent higher than mills in other regions. But, for certain species, the costs were much higher. For example, for Douglas fir and fir/larch logs, the cost among Coastal mills was 18 percent higher than among Inland mills. About 50 percent of the logs purchased by all mills in the study were sourced from privately owned timberlands. It is worth noting, however, that the proportion of private timber is substantially higher when Canadian mills are excluded since virtually all of their timber is from government-owned holdings.

Mill safety performance for stud producers was quite good. The overall average lost time accident rate was less than 2, and four mills had no lost time accidents during the study period. Similarly, the recordable incident rate was less than 6.

A total of 17 stud mills participated in the study representing 14 companies. The participants were diverse in terms of: *mill size* – annual lumber production per mill ranged from a low of about 50 MMBM to a high of nearly 400 MMBM; *geography* – most participants were located in Oregon and Washington, but there were also 3 Canadian mills and one mill from the Midwest; and *ownership* – with a mix of privately owned and publicly held firms. The participants in the study produced more than 2.7 billion board feet of lumber during the survey period.

*The Beck Group is a forest products planning and consulting firm located in Portland, OR
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