

by WARD WILLIAMS

## International Wood Composites Symposium in Seattle

# New technology poised to rescue the wood products industry in troubled times



President and CEO of Dieffenbacher with headquarters located in Eppingen, Germany. The Dieffenbacher group consists of 18 companies worldwide, with annual sales in excess of 400 million (\$US).

The company provides innovative press lines and process technology for the composite panel, automotive, plastics, and components industries.

## A German keynoter shares his views on the current economy and what manufacturers look forward to in the long-term.

**K**eynote Speaker Wolf-Gerd Dieffenbacher, president & chief executive officer of the Dieffenbacher GmbH machinery, technology and equipment firm located in Eppingen, presented a practical message to the 43rd annual International Wood Composites Symposium in Seattle, Washington, USA, 31 March - 1 April 2009.

He urged the industry to take pro-active steps amid the current economic downturn, to turn from despair over today's recession and to prepare for the eventual upturn by taking advantage of the readily available new technological developments.

One goal of his address was "to recognise the pressures on the raw material supply side, pointing out that the composites industry's traditional sources of raw material are the sawmill and plywood mills.

But on the "down side," these plants have reduced output, which translates into less available wood waste, or the purchase of more-expensive fiber to keep operating. This means competing with government-sponsored biomass power plants for the same wood source, thus raising the cost. It can also mean less available and overly expensive raw material for industry.

Environmental protection costs are higher now but cheaper resin costs are a "plus" factor for mills - thanks to lower oil prices.

He stressed the practical and, indeed necessary, step of reducing resin usage in today's panelboard factories. This is vital, because resin and all its uses and applications constitute one of the largest single expenses in the manufacture of today's vast product line of wood composites.

Furthermore, if wood-using mills can take advantage of today's technology, they will be well prepared to reap the financial benefits of their far-sighted investments when the economic needle swings into recovery. For example, he encouraged the search for new panel products to fill "lucrative niches."

Mr. Dieffenbacher's remarks were echoed by numerous other speakers in Seattle, especially in the realm of improved technical controls in the fields of medium density fiberboard ("MDF"), particleboard, plywood and laminated veneer lumber ("LVL").

These are the most-important of the so-called "wood composites," which also include value-added panel processing, which is one of largest and most-important sectors of today's wood products industry.

### Panel potential in Asia

He remarked on the "huge potential for additional consumption of wood based panels in Russia, China, India and SE Asia" whereas Europe and North America had "topped off" in per capita panel demand without further growth from 2003 - 2006.

Taking a look at today's global crisis, Mr. Dieffenbacher said that the answer is the short-term reduction of production costs by using alternate raw materials and lowering resin consumption.

Long-term, he foresees "very favorable conditions for wood products with growth on a global scale as the world's population increases."

**PFA**

# The wood panel in crisis – is any optimism justified?

*The question was asked by Keynoter Wolf-Gerd Dieffenbacher. Some observations follow, as reported by Ward Williams who was on hand to learn the answer*

The answer at the moment, as seen from Seattle and from my home city in Oregon, is a resounding **NO!**

New housing project numbers are way down. Many building projects of all types have been put on “hold” till the future looks brighter. There is a great backlog of unoccupied homes, old and new.

Government assistance to homeowners is under way but

will be slow to take effect.

New housing is the bedrock of the North American panel and wood products industries, but until building resumes on a decent scale, the mills are hurting.

When I say “mills,” I’m including sawmills, wood based panel mills making MDF, PB, hardboard, OSB and plywood, as well as LVL and value-added panel-processing plants.

# India is moving ahead rapidly on panels

While Mr. Dieffenbacher's remarks were certainly a highlight of the Symposium, there were others as well.

One was the fascinating description by Shobhan Mittal, executive director of Greenply Industries Limited, of "Specialty Panels in India: Production, Markets & Applications."

A spellbound Symposium audience learned about the market provided by the seventh-largest country in the world having a population of 1.6 billion, comprising 28 states, 7 territories and over 200 languages (29 of which with more than a million speakers!).

On the economic side, the GDP exceeds one trillion dollars, with a steadily rising per capita income.

In the case of resources, India rates highly, too, with 20.6% of its total land area in forest: 68 million hectares (World No. 10).

## A varied panel sector

Indian wood based panel industries run the full range from plywood to particleboard to MDF. Mills come in all sizes - from the 100 cubic meters/day of particleboard of Bhutan Boards to 570 cbm/day for Bajaj Hundustan MDF (equal to 160,00 cbm/yr).

Two new PB plants will have expected capacities of 285 cbm/day (Balaji Action) and 600 cbm/day (Star Panel), while Greenply MDF (under way) is being designed to turn out 600 cbm/day (180,000 cbm on a yearly basis).

In all, there are approximately 20 mills (PB & MDF, present and future) with a range of capacities roughly comparable to European plants. The wood based panels market amounts of a total of USD 2 billion per year.

India's panel industry dates back to the first PB mill in 1950, followed by hardboard mills in the late '50s and MDF in 1989. The nation's legendary plywood (noted for its tea chests) is virtually in the history book, with capacity declining from 62,520 m.tons /day in 1961 to the present 1,461 m.tons/day. (The drop was attributed to the Supreme Court's Order of 1996 to halt forest activities.)

Greenply and others are helping to bring the Indian industry into the 21st century as modern panels gain market share, serving such sectors as pre-fab DIY furniture and as the expatriate population and multinationals companies shows their preferences for the new board types.

In actuality, a "vacuum of supply" has been created as the economy grows and total demand for panels increases. The present and future MDF capacity total of the eight present and future MDF mills is 600,000 cbm/yr.

**PFA**

## More about Greenply

Greenply Industries Limited (GIL), a Rs. 630 core, dynamic, professionally managed, Interior Infrastructure Company, a leader in the plywood and laminate industry in India. Greenply accounts for 25 per cent of its organized plywood and 15 percent of its organized laminate market. Incorporated on 9th August 1984, the company over the years has grown as an interior infrastructure solutions provider.

Greenply Industries currently manufactures a host of renowned brands such as Greenply Plywood, Green

Club Premium Ply which comes with a life time Guarantee, Greenlam Laminates, Green Decowood & Green Lamieboard, Pre-laminated particle board and MDF. The product range comprises of all range Plywood & boards, Flush doors, Decorative veneers, Decorative laminates and Pre lam MDF and Particleboard.

Export contributed to around 22% of the total laminate turnover during year ended 31st March 2007. Greenply exports its laminate products to more than 25 countries.

Many such operations have closed down; some have probably gone out of business forever. Furniture is in bad shape. Logging operators have been hit hard.

Companies have trouble meeting their payrolls and have had to downsize on personnel and investment.

### Some observations

Over the years, each Symposium has drawn several hundred wood products specialists to exchange views on the newest technology and products, but this year had the lowest numbers in my memory - stretching back over to the "good times" of 20 or more years ago - as cash-strapped wood companies and institutions feel the budget pinch.

This year, 150 delegates turned up in Seattle, including a handful from outside USA: Australia, Belgium, Canada, Chile, Germany, India, Italy, Malaysia, New Zealand, Pakistan, Russian Federation, Slovakia and Sweden.

The Symposium (the 43rd such event sponsored by Washington State University, Pullman, Wash., USA, and the WSU

Wood Materials & Engineering Laboratory) still managed to be one of the best-ever in terms of the quality of speakers and in the technological advances presented.

Publicly funded, wood industry and supplier company labs are coming up with new and exciting findings - many of them very "future-oriented."

By that I mean, the results from today's forward-innovating thinkers in the university, government and supplier-industry R&D labs may not bring us commercial successes in the immediate future, but "down the road," there is cause for hope.

**"Yes, Mr. Dieffenbacher, there is some optimism justified!"**

**PFA**

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Readers wishing further information on the papers presented in Seattle may contact Mr. Vik Yadama, Asst. Prof. at: [vyadama@wsu.edu](mailto:vyadama@wsu.edu)