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Writing sample: KADANT, INC.

Kadant, Inc.—a major player in the pulp and paper industry—recently had one of its best years ever, and we helped them create an annual report (through research and writing) that would showcase their noteworthy successes. Here are some excerpts from that report:

[inner spread sample 1]

REALIZING POTENTIAL: ASIA

As countries in Asia continue to remove barriers to free trade, business development is booming. India's economy grew 9 percent last year, and China's economy—which exceeded 10 percent growth in 2006—is expected to hit double digits again in 2007. With leading paper producers in the region preparing for major capacity expansion projects, Kadant's innovative fiber-processing products and technologies are in demand.

Global demand for paper and paperboard is expected to reach 490 million tons by the year 2020 (compared to 359 million tons in 2004), with China, India, and Russia accounting for up to 70 percent of the increase. In India, the paper industry is projected to grow at about 7 percent annually, and India's paper consumption is projected to increase by more than 30 percent to reach 19 pounds per capita by 2010. Given the fact that paper consumption in the US is currently about 660 pounds per capita, the Asian market has room for more growth.

China's rapidly expanding manufacturing base needs an increasing supply of packaging materials for both the export and domestic markets. To date, most of China's papermaking capacity has focused on linerboard to support its booming export economy. More recently, the country's communications sector is showing signs of growth, sparking a need for newsprint and white grade paper. China's large-scale investments in new paper- and board-making capacity have established it as the world's fastest-growing market for paper and board production, and Kadant is playing a central supply role in this expansion.



We have been operating in China since the early 1980s. Kadant now has nearly 700 employees there and is China's leading supplier of stock-preparation and fluid-handling systems. With our acquisition of the Kadant Jining business in 2006, we added significant stock-preparation manufacturing capabilities in China.

Kadant's market-leading position in China opens up significant opportunities for long-term success in the Asian market. As a respected leader with a highly recognizable name, we are well positioned to leverage our stock-preparation reputation. The capital equipment orders we have received are expanding our installed base throughout China, laying the groundwork for potential future sales in higher-margin aftermarket products and service offerings. We plan to support accessories and water-management products at our Shanghai fluid-handling facility, and Kadant Jining should enable us to deliver stock-preparation systems, parts, and consumables in a more cost-effective manner.

Our applications expertise and technology continue to distinguish us in this market. Overall, 2006 was a record revenue year for us in China, resulting in a total of \$63 million of revenue for stock-preparation systems. In the first quarter of 2007, we received three orders totaling \$18 million for stock-preparation systems from a leading linerboard producer in China.

With our proven track record of successful installations in China, we believe Kadant will continue to be the supplier of choice for customers looking to add capacity in this rapidly growing market.

[caption with photo:]

In 1939, Kadant Black Clawson invented and patented the first pressure screen—and we now offer some of the most advanced screen cylinders available. As the most important consumable in stock preparation systems, Kadant high-performance cylinders have multiple pulp and paper mill applications, and they have made their way into other industries as well. Today, with an entire facility in China dedicated to the manufacturing of screen baskets, we are realizing new opportunities for low-cost manufacturing and penetration into untapped markets.

[caption above world map:]

Paper technology began in China and migrated westward over hundreds of years.



With four facilities operating in Asia, Kadant is bringing that technology back around the globe as paper production ramps up in this region.

[caption under world map:]

Throughout the world, countries are expected to add 24 million tons of recycled-fiber papermaking capacity annually between 2005 and 2009—and close to two-thirds (16 million tons) of this is expected to be added in China.

[inner spread sample 2]

REALIZING POTENTIAL: ENERGY

Among today's industries, improving efficiency is a high priority. Lower energy use can result in lower costs, less pollution, and greater productivity. By minimizing waste and streamlining operations, companies not only protect the surrounding environment—they can also achieve a competitive edge. Kadant's energy-saving products are proving invaluable to a wide spectrum of companies seeking to become more efficient.

Global sensitivity to the depletion of energy resources is increasing its impact on business practices every year. The pulp and paper industry is a massive energy consumer, and paper producers around the world need products that will cut energy use and lower costs.

For paper customers in the more mature markets of North America and Europe, increased efficiency helps them compete with the newer, high-speed paper machines in Asia. This makes the search for energy-efficient solutions even more critical in these high-energy-cost regions. Yet state-of-the-art systems in Asia need to be energy efficient as well. For domestic and international customers alike, Kadant is providing the expertise and technologies that help increase efficiency and boost productivity.



In paper production, the drying stage consumes the most energy. Kadant Johnson's fluid-handling equipment and controls play a significant role in lowering the energy use—and therefore the energy costs—associated with drying. Our Dryer Management System™ control software, rotary joints, and syphons all improve drying productivity and increase drying efficiency.

Other Kadant products that increase efficiency include pulp-washing systems that require less water and chemicals, low-friction doctoring systems, heat transfer equipment, and filters, formers, and showers that recycle process water. In a linerboard mill in Finland and a newsprint mill in the US, our advanced stationary syphon systems reduced steam consumption by 18 percent and 25 percent respectively. By replacing conventional fiberglass blades with Kadant's Syntek™ blades and other low-friction doctor blades, clients can clean dryer rolls more effectively—using half as much energy.

Kadant products are playing an increasingly important role in industries other than papermaking. Hydraulic pumping processes benefit from our Unigy™ pumping system—one of the most efficient hydraulic drive systems on the market today. The patented Unigy technology, developed by Kadant AES, eliminates excess outputs produced by traditional hydraulic power systems. Unigy pumping systems allow conventional pump/motor combinations to precisely and continuously match pump outputs to varying hydraulic application demands. This minimizes the wasted energy, lost heat, and other complications created by excess outputs.

Compatible with virtually any positive displacement hydraulic system, the Unigy pumping system can extend pump life and reduce power consumption by up to 60 percent. Recently, a US-based forging operation improved press control, reduced noise, and realized a 69 percent reduction in power consumption—all thanks to our Unigy pumping system.

The growing need for energy efficiency is creating demand for Kadant's energy-saving products and driving our research and development efforts. As more manufacturers around the globe invest in efficient new systems and upgrades, Kadant continues to be the name they trust.



[caption with photo:]

Requiring high levels of electricity and steam, the drying process is the most energy-intensive stage of paper production. Our innovative Dryer Management System (DMS) software improves efficiency by automatically and continuously monitoring and adjusting all steam system set points.

The DMS software responds to operating changes on a machine, maintaining the correct relationships between various set points and allowing the machine to operate faster, more efficiently, and with fewer sheet breaks. With this Kadant product, customers achieve both lower energy costs and better product quality.

[caption under photo of blades:]

Assuming a typical machine speed of 4,000 fpm, a paper producer can spend up to \$5,600 annually in additional energy consumed for each dryer cylinder it doctors. By using Kadant blades to actively doctor 15 dryer cylinders, the producer could save up to \$84,000 in non-value added costs each year.