International Paper strengthens its Eastern European base at Kwidzyn

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Modernization projects benefit mill and local community

International Paper's Kwidzyn mill is about 4-1/2 hours north of Łódź (in Polish, pronounced Woozj), off an alternate route to Gdansk. The exact time varies, depending on the number of tractors and bicycles en route, the number of accidents, and how much you're inclined to push the limits of the two-lane highways.

Jerzy Majewski became managing director of the mill in November 1997. He started work at Kwidzyn in 1979 on the day contruction of the mill began. He progressed from the power plant to the finishing department, where he became manager. Up until last fall, he had served as deputy managing director for the mill.

The history of the mill has been affected by the political history of Poland. The country came under marshall law in 1981, which interfered with final construction phase of the mill's pulping facility, but did not prevent it from starting up that same year.



Paper production was added to the mill next, with PM1 starting in 1985, PM2 starting in 1986, PM3 starting in 1988 and PM4 starting in 1989.

During that period, Poland operated under the communist system. In 1989, Solidarity succeeded in bringing about a social and economic revolution in Poland. On the first day of 1990, the country began operating under a free market system. It was a difficult transition. In general, all Polish industries had been run poorly, Majewski said. A lot of Polish mills couldn't adapt and went bankrupt.

Kwidzyn's management decided to privatize the mill in late 1990. They realized that without a source of capital and technological help, the mill would have a difficult time competing. The mill also needed to find customers for its products, which before had simply gone to the state.

What the mill hoped for came true in 1992. International Paper took over the operations in one of the largest privatization transactions in Poland. IP brought money for investment, highly skilled people with knowledge of most technologies, and a broad sales network.

IP has implemented a high performance management system at the mill, Majewski said. To do that, some of the staff from Kwidzyn underwent training in the United States and Western Europe. They, in turn, trained other staff at Kwidzyn. In addition, the mill got help from it's U.S. and French IP colleagues in preparing operations manuals.

Since Kwidzyn became an IP mill, it's undergone a major modernization of its pulp and paper lines which has essentially doubled production. And, the mill has found customers for those products.

Kwidzyn is the largest employer in the area. The mill employs about 2300 people, with another 600 people employed at companies that directly serve

the mill. Its prosperity has benefited the town in many ways, and changed it. It's prompted the start-up of a lot of small service companies and brought in contractors and subcontractors. From the beginning, IP also wanted to benefit the community and has provided financial support to the local schools and hospitals.

IP has also invested about US$ 30 million to reduce emissions and effluent from the mill, with plans for additional improvements.In some cases, the Polish environmental standards are stricter than elsewhere in European, Majewski said, but the mill is in compliance with all the requirements.

The mill has four coal-fired boilers, one bark boiler and one recovery boiler, all equipped with "electo-filters." Such a filtering system was added to the bark boiler in 1995, eliminating the problem of mill-generated ash constantly falling on the town.

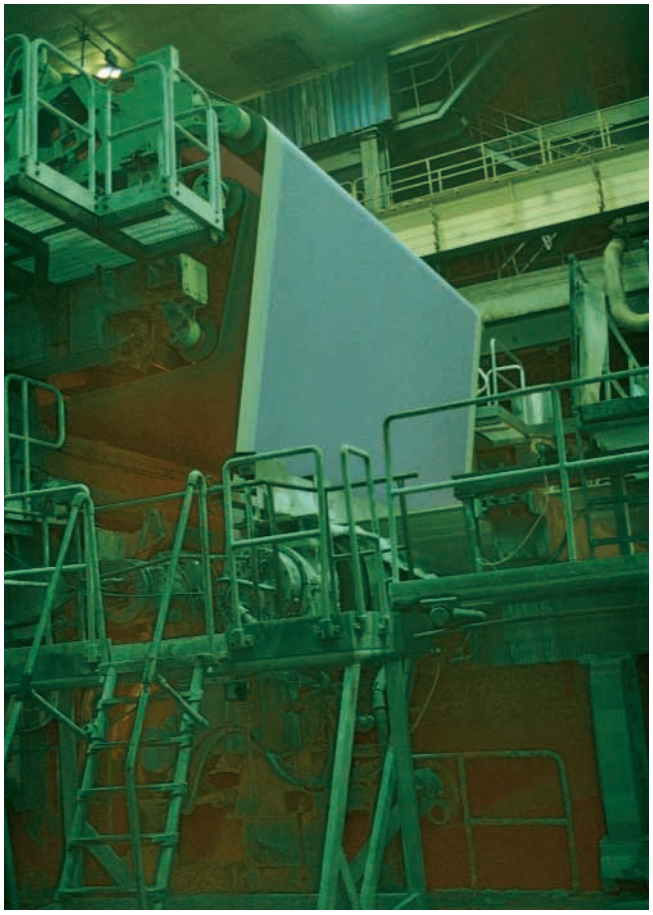
The mill's waste water treatment plant also handles sewage from the city of Kwidzyn's 40,000 residents, and the mill supplies heat to 80% of the area's homes and buildings. The city has benefited in many other ways from having the mill there, also, and from IP's involvement. A walk through the parking lot, for example, finds many new and newer cars compared to several years ago, noted Marek Gajko, coater superintendent.



Jerzy Majewski

The mill has also bought equipment for the local hospital and schools. In the fall of 1997, it opened a special training center to teach English and German to local students, and to provide computer training. It has also contributed US$ 3.5 million toward local water quality improvements.

Kwidzyn was the first mill in Poland producing chlorine-free bleached softwood (pine) and hardwood (birch) pulp. It was also the first mill in Poland to be using alkaline sizing. (It changed from acid to alkaline in







1994, with PCC as filler.)

Most of the 2 million m^3 of wood used at the mill annually comes from Poland. The rest is imported from Russia. The mill had also been recycling about 100,000 metric tons of paper each year, with capacity. Majewski said the mill would end up recycling 150,000 metric tons/year once PM4 reached design capacity.

Kwidzyn recycles newspapers for deinked pulp, which is used for newsprint production. It also uses mixed waste papers to produce coated carton boards. The paper is obtained through state-owned and private suppliers in Poland, without benefit of subsidies.

The mill was originally equipped with Beloit paper machines. Over time, PM 1and PM2 have been rebuilt by Voith, PM3 by Valmet, and PM4 by both.

PM1 and PM2 are almost identical. Both are equipped with speed-sizers and mainly produce 80 g/m^2 offset copy paper which is Xerox-certified. A 30-pocket, fully automated Will-Pemco sheeter, one of the largest in the world, can cut 150 tons/day of paper.

PM4 is a multiply coated board machine built by Beloit Walmsleys England. Following a US$ 48 million modernization, which included a new back side headbox and top former, the machine has an annual capacity of more than 130,000 metric tons. A new coater was installed by Voith Sulzer in 1996. PM4 is also equipped with a Yankee dryer.

The mill started cartonboard production in January 1996. Its range of products includes folding boxboard, white lined chipboard and aseptic board for liquid packaging. **TJ**

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IP adds Svetogorsk to its Eastern European stable

INTERNATIONAL PAPER ANNOUNCED IN JANUARY THAT IT HAD completed its purchase from Tetra Laval of a majority interest in the OAO Svetogorsk pulp and paper complex. Svenska Cellulosa Aktiebolaget (SCA) had previously announced it would be acquiring Tetra-Laval's tissue operations at the site.

"The Svetogorsk mill compliments International Paper's leading European position in business papers," said Robert Amen, president of International Paper-Europe. "It leverages the Kwidzyn mill in Poland and enhances our ability to profitably serve growing market demands in Russia and Eastern Europe."



The mill currently produces uncoated free sheet, liquid packaging board and softwood market pulp. IP plans to make modest, incremental investments at the mill to improve efficiencies and expand the range of products produced at Svetogorsk, according to Amen. A paper machine improvement project was completed in October 1998. A new sheeting facility, soon to be completed, will substantially increase the mill's cut-size capacity.

The pulp and paper complex, located just inside Russia's western border, near Imatra, Finland, was acquired by the Swedish Tetra Laval Group in 1995. The company had undertaken a US$ 127 million investment program to improve pulp production and reduce emissions at the mill.

As part of that program, the mill's bleaching line was modernized in 1996. Sunds Defibrator supplied the primary machinery and auxiliary equipment, installation, personnel training and start-up supervision for an elemental chlorine-free (ECF) bleaching system which uses a medium-consistency chlorine dioxide stage.

For softwood ECF bleaching, Svetogorsk uses a D1-EO-E1-D2-E2-D3 sequence, giving a brightness of 89 ISO. The line has a capacity of 300 a.d. metric tons/day, which can be increased to 500 a.d. metric tons/day. For hardwood ECF bleaching, the sequence is O_2-D1-E/O-D2,

yielding a brightness of 88 ISO. The mill has the capacity to produce 450 metric tons/day of hardwood bleached pulp.

Sunds also supplied a handling and dosing system for the rpoduction of liquified sulfur dioxide. That will eliminate air pollution caused when the mill burned sulfur to create sulfur dioxide.

The mill's PM4 has an annual capacity of 160,000 metric tons of uncoated (wood free) fine paper. Liquid packaging board and other board grades are produced on PM1, which has a capacity of 80,000 metric tons/year. PM5, with a capacity of 30,000 metric tons/year, produces tissue paper.

SCA notes that "Svetogorsk Tissue operates Russia's most modern tissue machine." PM5, built in 1989, has an annual capacity of 30,000 metric tons of tissue, though actual production has been closer to 20,000 metric tons/year. Modest investments could boost annual capacity to 40,000 metric tons, according to SCA.







Single-ply crepe paper for toilet paper is made from recycled fiber and rejects from the pulp mill. The tissue is converted to rolls of toilet paper at Kamennogorsk, about 25 km southeast of Svetogorsk. The plant's six production lines have an annual capacity of 50,000 metric tons.

SCA will have a contractual agreement with IP for electricity, water, waste treatment and other services.

Part of Tetra Laval's improvement program included converting mills' power plants to use natural gas in place of fuel oil.

Water treated for use at the mill complex also serves as drinking water for the city. Likewise, steam and hot water produced through the mills' power plants are fed to the city's heating sytem. All effluent from the mills is processed in a biological water treatment plant before being returned to the Vuoksi River. Residual fibers and sludge from the treatment plant are used as raw materials for hardboard production at another local facility.

– Donald G. Meadows