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## Advanced Fiber Technologies

### New Technology of the Year

Here's a success story: An innovative replacement part is dropped into a piece of process equipment. It saves half the power, and the equipment runs more reliably and does its job more efficiently. The fact that this happened in one of British Columbia's most important industries just makes the story better.

The technology in question is a high-performance rotor that enhances the operation of pulp screens by allowing the speed of the rotor to be reduced. The production site is Canfor's Northwood kraft pulp mill in Prince George – and the potential electricity savings are worth \$193,000 a year at that mill alone.

The innovative technology was developed by Advanced Fiber Technologies (AFT), a Canadian company, with the support of research at the University of British Columbia. It was tested through a partnership with BC Hydro, Canfor and Natural Resources Canada.

Pulp and paper is the largest industrial sector in B.C., consuming 40 per cent of BC Hydro's industrial electrical load. There is enormous potential for AFT rotors to bring about a fundamental transformation in screening technology and significant industry benefits. If all the pulp mills in the province converted to the new technology and achieved the same electrical savings as at Northwood, enough electricity could be saved to power over 15,300 homes.

*If all pulp mills in B.C. adopted AFT's new technology, enough electricity could be saved to power 15,300 homes.*

In this demonstration project, Advanced Fiber Technologies and UBC have shown that innovation and leadership can boost the competitiveness of this industry by devising a cost-effective, environmentally sustainable solution.

#### HIGHLIGHTS

##### Energy efficiency measures

- High-performance rotor technology for pulp screens

##### Results

- Potential annual electricity savings at Northwood of 3.58 gigawatt hours when all of their rotor screens are replaced, equivalent to \$193,000 in cost savings
- Potential annual electricity savings throughout B.C. of 153 gigawatt hours per year, equivalent to \$8 million in electricity costs, given the same percentage savings measured at Canfor Northwood
- AFT rotors installed in 10 B.C. mills, with two more mills awaiting installation in 2007