

NOTABLE WOOD CHIP INSTALLATIONS

TO THE DIGESTER

The first Sandwich Belt high-angle conveyor installation for wood chips replaced a 500 HP blowline that was being used to elevate screened wood chips to the digester. The problem was the blowline badly damaged the chips en route, reducing them to pins and fines, lowering the pulp yield and the digester's uptime when pins bridged at the transfers.

The customer was drawn to the claim that the Sandwich Belt high-angle conveyors were very gentle on conveyed material. Indeed, the documented test demonstrated that conveying the most sensitive grains and wood chips along the Sandwich Belt conveyor resulted in no damage of any kind.



A Sandwich Belt high-angle conveyor of only 60HP was installed in place of the 500 HP blowline. The savings that resulted exceeded the customers' expectations. The \$93,000 USD (1989) annual savings in power were minor compared to the increased pulp yield and plant uptime. This resulted in increased revenues that were estimated \$240,000 USD and \$480,000 annually.

The Sandwich Belt conveyor paid for itself in six months to a year. Beyond the payback period, the customer "cashed in their chips" to the tune of \$340,000 to \$570,000 USD annually in 1989. Today, this would be a savings of \$764,000 to \$1.2 million USD.

HAULAGE FROM TRAIN OR TRUCK LOADOUT

Due to the success of the first commercial wood chip installation, the same customer installed a unit where wood chips were received from trucks or trains and delivered to an open stockpile or to the first stage screening house. The accepts were fed by conveyor for the Sandwich Belt conveyor for elevating to the metering bins of the second stage screening where the chips go on to the thermo-mechanical pulp mill. This "S" shaped vertical Sandwich Belt lifts 66 t/h vertically (90 degrees) to feed the pulp mill. This unit permitted a direct high angle route from beneath the chipping drum up to the transfer tower. This proved more economical than a conventional conveyor solution which could have require two conveyors in switchback arrangement. The latter also added a transfer point, effectively reducing the system availability while

increasing clean up and maintenance cost.

SCREENING

An additional unit for a new customer was an important part of a chip thickness system located in Canada. This 1219 mm (L-Shape) high angle conveyor lifts 229 t/h of chips at 53 degrees.

