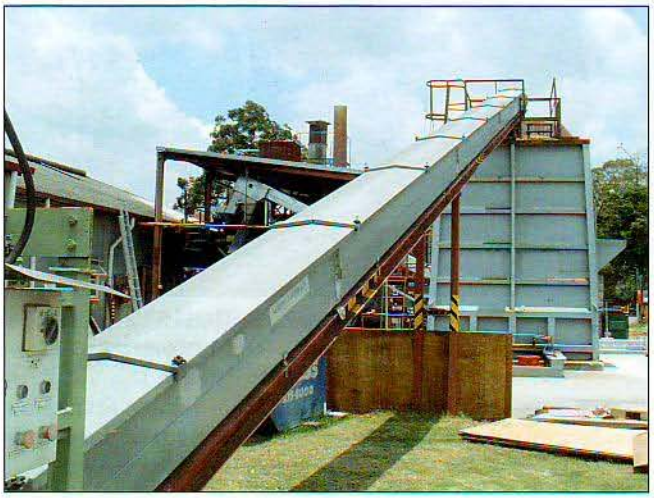
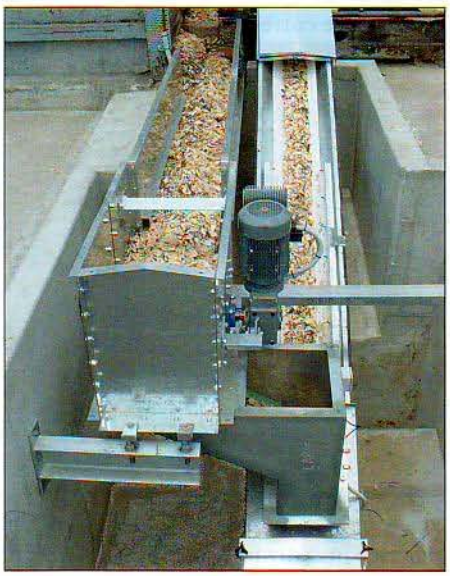
Aerobelt conveyor cuts wood plant costs

Austral Plywoods has spent only $280 in nine years in replacement parts for an Aerobelt conveyor. This performance has delighted Austral, leading to more orders and plaudits from the company's chief executive.



Aerobelt's inclined conveyor which started operating at Austral Plywoods' plant in January 1998.



Two new Aerobelt conveyors installed in January 2007 to replace a drag chain conveyor.

Aerobelt Australia was approached by Austral Plywoods in July 1997 about a short woodchip conveyor to fill a bin at its Tennyson, Queensland, plant.

The existing method of filling the bin at that time was blowing the woodchips approximately 20 metres into the top of the silo. The problem with this method of conveying the woodchips was the inherent noise associated with the process. Austral Plywoods' factory is in the middle of a residential area and the local council was threatening to close the plant as local residents were complaining about the noise.

Austral Plywoods' engineer at the time requested an opportunity to view an existing Aerobelt conveyor of a similar type elsewhere to assess operational noise levels.

"We had recently supplied and installed a 400mm conveyor at Ricegrowers in Griffith, and so the engineer travelled down to see that conveyor running," said Mr Steve Kutassy, general manager, Aerobelt Australia. "The noise level there was around 40 dB when running, which suggested a solution to Austral Plywoods noise problem. Austral placed an order in August 1997."

"The Aerobelt conveyor we installed in 1998 is, without doubt, the least troublesome item of plant in our mill," explained Mr Scott Matthews, joint chief executive, Austral Plywoods Pty Ltd.

Aerobelt delivered the equipment in January 1998 and the conveyor was installed and commissioned in two days during a planned shutdown.

Austral Plywoods' woodchip is waste product from the process of making wood veneer for plywood and is chipped and re-used elsewhere in the plant to generate heat for the drying process.

The conveyor operates daily for nine hours, five days a week, for 48 weeks a year. In that time it carries 12,000 cubic metres per annum, or around 4,000 tonnes per annum. Since commissioning the conveyor has carried around 36,000 tonnes of woodchip.

"Recently, I asked Austral Plywoods what had been replaced on the conveyor in the last nine years," said Mr Kutassy, "and the answer was that the only items to be damaged or suffer failure were two pressure switches worth $280 in total.

"All the other original parts supplied nine years ago are still operating and have not failed."

This equates to spare parts costs of $0.0078 cents per tonne. In terms of operating costs more broadly, the conveyor's drive is 1.5 KW and the fan 0.75 KW, which are well below the power required for the compressor to blow woodchip the twenty metres to the storage bin.

"This saving in running costs is a hidden saving that companies do not always consider but which can be quite substantial," added Mr Kutassy.

Aerobelt recently installed two more woodchip conveyors at Austral Plywoods in January 2007, with the new items replacing an existing drag chain conveyor.

"The Aerobelt conveyor we installed in 1998 is, without doubt, the least troublesome item of plant in our mill," explained Mr Scott Matthews, joint chief executive, Austral Plywoods Pty Ltd. "It is absolutely vital to our operation and it hasn't stopped our production yet in the nine years it has been in service.

"We installed two conveyors recently and chose Aerobelt because of the excellent service history of our existing conveyor. The new conveyors are performing as planned and have eliminated the safety risks associated with the old drag conveyor, as well as massively reducing noise pollution.

"I am very confident in recommending Aerobelt conveyors based on their excellent service, design and equipment." ■