



Serving the Forest Products Industry in Products Development, Process Improvement and Training

Manufacture of High Strength LVL from Lodgepole Pine Using State-of-the-art Continuous Press System

T. Tekle

Published in the Proceedings of The 4th ICWSF 99, Missenden Abbey, High Wycombe, England.

ABSTRACT

The first Continuous Press System (CPS) to manufacture LVL started operating in Rocky Mountain House Alberta, Canada in October 1997. The major components of the line include a veneer scarfer/stress grading line, veneer feeder with a skew correction system, dual level lay-up line, microwave pre-heater, and a continuous press system. The main species of wood used to manufacture LVL is Lodgepole pine.

Material flow and the function of each process center are discussed. Among other techniques, a combination of veneer stress grading and densification is used to increase the amount of Lodgepole pine veneer that can be used to manufacture high strength LVL for structural applications. The performance of this line is examined after 18 months of operation. The advantages of the technology and opportunities that it provides in product development are also discussed.

In light of the available technology, the paper concludes by questioning the current approach taken towards new forest products development and adaptation of new technologies by the industry. It is proposed that a mutual three party alliance involving researchers, equipment manufacturers and the forest products industry is important in order to realize the opportunities offered by the technology and advance the utilization of the resource further.