

## **Quality improvement and cost saving in particleboard production with focus on wood recycling technology**

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To compete in the current market all panel producers are forced to reduce production costs and improve product quality as much as possible. In our aim to reduce costs, we analyzed different panels and production processes to compare quality, energy, raw material and glue consumption. The result of the analysis is that we have to focus on flake preparation to produce thin flakes. The core and face flakes must be classified, the dust and heavy/thick flakes removed, and the blending optimized to get even distribution.

North American interest in the recovery of wastes from urban areas as raw material for production of particleboard continues to increase. Since the 1980s, various areas of the world, including Europe and the Far East have used recycled wood instead of fresh wood. In these areas the use of recycled wood has almost completely replaced the use of fresh wood. At the same time, technology has improved for decontaminating the wood pollutants, thus allowing for the production of panels with excellent surfaces, good mechanical properties and good machinability with considerable savings in raw material costs.

In other areas of the world, where there is still plenty of fresh wood, including North America, interest in recycled wood has arisen due to the abundance of attractively priced recycled wood. PAL, with its experience of over 200 recycling plants around the world will discuss the latest developments/innovations and the present state of the art of this technology.