Mechanical or hydraulic debarking is the first step in converting a sawlog into lumber. In conventional sawmills, large logs are placed on a moving log carriage and passed repeatedly through a band or circular saw, each pass producing boards that normally require further processing.

Boards

Wood particleboard is a panel product manufactured by bonding particles of wood together with an adhesive in a press. Since the product is manufactured from small pieces of wood, properties of the finished board, such as density, hardness and elasticity, can be engineered into the panel.The most common type of particleboard manufactured in Canada is the three-layered, graduated mat-formed variety. By preparing the core and surface material separately — segregating the coarser materials into the centre and the finer particles to the surface — the manufacturer can create a board that can be sanded to an even, smooth surface, with the desired mechanical properties in each layer.

Oriented-strand board is an engineered, structural panel made from large, thin strands cut from roundwood. Like particleboard, the panel is manufactured from pieces of wood which can be designed in size, thickness and profile, allowing the properties of the board to be engineered into the panel. These strands are mixed with waterproof phenolic resin and interleaved together in thick mats, which are then bonded together under heat and pressure. The result is a solid, uniform building panel with high strength and water resistance, properties that make strand board suitable for most construction applications. Some examples of uses are wall and roof sheathing, subflooring and underlay, cladding and soffits. The panels are also widely used for farm structures, industrial packaging, crating and warehouse pallets.