Wood Working: Planing and Moulding in the Last Frontier
(August, 30 2007)

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A research report from Alaska about statewide increases in the manufacture of secondary wood products.

Planing and moulding is an important step in the value-added manufacture of wood products, and recent advances in Alaska have been noteworthy. Just a few years ago, most planing occurred on simple shop planers, producing lumber for retail sale or for wood working uses such as cabinet stock. Currently there are at least 26 planers and 13 moulders in-production at Alaskan dry kiln sites (Nicholls et al. 2006), and the expansion of the moulding industry has gone hand-in-hand with that of the dry kiln industry. This number does not include additional machines used by wood working firms that do not own dry kilns such as cabinet and furniture producers.

More comprehensive surveys of commercial wood products facilities in Alaska place the total number of moulders at 18 and the total number of planers at 51 (Parrent 2004). These moulders have produced a variety of products, mostly for local and statewide markets. Examples include profiled house logs (produced at Delta Junction, AK), interior trim and millwork (Anchorage, AK), paneling and flooring (Wasilla, AK), tongue and groove lumber (Hoonah, AK), and planed lumber for retail sale (North Pole, AK). Government construction projects such as National Park Service buildings are increasingly relying on locally milled lumber to create a rustic ambiance for tourists.

Many firms in Alaska are finding moulders beneficial to maintain desired production levels, meet market needs for custom wood working products, and explore product options for underutilized species. This is particularly important in light of decreasing log processing in Alaska. For example, the volume of logs processed by southeast Alaska sawmills decreased from an estimated 88 million board feet in 2000 to about 31 million board feet in 2004 (Brackley et al. 2006). Alaska producers have adapted by identifying high-value products for their limited wood supplies.
At the same time, adding new machines can help companies to diversify their operations, grow in size, and/or survive economically difficult times. Specific examples of successful moulder installations have been noted in products as diverse as millwork, kitchen cabinets and solid wood doors (Gazo and Vlosky 2000).

Recent trends

Information on moulder use was gathered in phone conversations with wood products business owners in all three Alaska regions (interior, south-central, southeast). Moulding equipment, species processed, markets, and innovations were discussed in these conversations.

Summary points from discussions with moulder owners:

Resources: Most moulders in Alaska have been installed within the past seven years, although some firms had moulders prior to this.

Resources: Alaskan moulders process softwoods primarily consisting of white spruce, Sitka spruce and western hemlock. The hardwoods they process include domestic species from outside of Alaska and Alaska birch.

Production: Alaskan moulders are used to produce an array of product types, including log home siding, tongue and groove lumber for paneling, and interior millwork.

Production: Several facilities produce more than 80,000 board feet per year.

Production: Over the past year, facilities have produced a wide range of unique profiled products. Individual firms report producing from five to more than 300 different shapes.

Production: Most facilities have just one moulder, but also have at least one planer.

Production: Innovative approaches to moulding and related operations have included use of new types of cutterheads, methods for quick changeover of cutterheads, and improved methods for sorting and storing many different products in inventory.

Economic impact: Each moulder accounts directly for about 1.5 full-time jobs, not including additional support jobs such as lumber drying and stacking. The U.S. Bureau of Economic Analysis estimates that Alaska has an economic multiplier of 1.4 to 1.9, depending on the industry (Hadland et al. 2006). Therefore, each planer or moulder installed in Alaska would accrue additional benefits beyond direct employment.
Economic impact: Most facilities invested at least $100,000 to purchase their moulder and accessories, which includes knife stock, sharpening equipment, dust removal systems and freight.

Markets: A key challenge for Alaskan wood processing facilities is creating higher value products from lower-value or underutilized woods, such as Alaska birch and/or western hemlock.

Markets: Most moulded products are sold within local markets, or locations within Alaska's road system.

Markets: Alaskan-produced mouldings are featured at numerous sites in Alaska, including public schools, restaurants, lodges, offices, military bases, custom homes, medical centers and National Park buildings.

References


Nicholls DL, Brackley AM, Rojas T. 2006. Alaska lumber drying industry-impacts from a federal grant program. PNW-GTR.