

Going After Wide

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Sawmill operations support Anthony Forest Products' glulam facilities.

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ATLANTA, Tex.

In recent years, Anthony Forest Products Co. (AFP), headquartered in El Dorado, Ark., has been powering up its lumber production facilities in Atlanta, Tex. and Urbana, Ark. to support its growing lumber market and the company's two glulam facilities. Production is heavy to wide dimension products, of which 25-30% of the sawmill's 2x6 and 2x8 grade dimension goes into the production of AFP's engineered beams and logs marketed as "Power" beams, headers, logs, columns and planks.



"This mill actually cuts larger logs than it did three years ago," states David Chadwick, General Manager of Lumber Operations. "Our foresters have changed their buying practices, and both of our mills are set up for larger logs. We cut 50-60% wides in 10 and 12 in. widths."

In the last six years AFP has invested several million dollars in a multi-phase program designed to improve recovery, increase production and maximize quality at the Atlanta operation and, ultimately, enhance the quality and consistency of the lumber supplied to its customers and its glulam facilities. Initially, AFP installed a Newnes McGehee double arbor curve-sawing gang, a Hi-Tech-optimized Newnes horizontal resaw and an in-house designed log bucking system.

Next, they added a log merchandising deck equipped with USNR/Perceptron LASAR optimization, completed three years ago. According to Chadwick, the system has met all of their objectives and helped achieve substantial gains in recovery. "Having the ability to buck the correct lengths without overdoing the sweep goes hand in hand with curve-sawing," he explains.

The merchandiser is an economical flat deck design featuring one cutup saw instead of a bank of saws, which are not necessary for every log. "Perceptron said the best scanning would be on a flat deck," he states. "So we designed it to where it would scan on a flat deck and, instead of step feeders, we use an Exco loader."



Logs up to 72 ft. are loaded onto the infeed deck by a Volvo 120 front-end loader and a remote controlled Exco loader singulates them at the scan deck. Four ceiling mounted LASAR 3-D scanners look at length, diameter and crook to determine the best cuts. J-hooks dump logs onto the infeed conveyor of the cutup line, and automatic stops pop up based on the system's bucking decision. Material continues through a Cambio debarker and Rens metal detector. Additional decks after the saw allow for the introduction of cut-to-length logs. C&D Welding of Junction City, Ark. built the merchandising deck and housing.

At the same time, work began on a planer mill upgrade that included retrofitting the existing Yates A25 planer with a variable speed drive and replacing the feed table. A new building on the outfeed side provided space for installation of a new Hi-Tech 35 bay sorter, Hi-Tech stacker and Samuel strapping station. A USNR/HEMCO trimmer remains in place.

These projects have increased production nearly 25% and boosted recovery significantly. Annual production on a single shift basis is 80MMBF. Ninety-seven percent of production is 2 in. lumber in 8 to 20 ft. lengths and 4 to 12 in. widths and the remaining 3% is 1 in. lumber.

Workforce at the sawmill and planer mill numbers 91. Key supervisors include Parish Lawing, Plant Manager; Archie McNeely, sawmill supervisor; Lonnie Pruitt, planer mill supervisor; Fred Thomas, dry end superintendent in Atlanta and over boilers and kilns in Urbana; and Charlotte Humphries, environmental health and safety coordinator.

RETROFITS

This year Chadwick and Plant Manager Lawing have turned their attention to the drying process to further enhance product quality and drying efficiency at an existing 84 ft. USNR kiln and 54 ft. Convert-a-Kiln. Current remodeling has focused on the steam kilns' fin pipe work and heat distribution systems. They increased the number of wraps from 36 to 60 wraps per foot. Piping contractor is Joe Skipper of SIS Metal Works, Citronelle, Ala.



With one retrofit complete, kiln superintendent Thomas reports a decrease of five and a half to six hours drying time per charge, which has delivered an additional 250MBF throughput per week. Target moisture content varies according to product but is generally in the 12-13% range for 2x6 and 2x8 in.; 16-17% for 2x10 and 2x12 in.

Drying capacity in the USNR 84 ft. kiln is 150MBF and when combined with the 54 ft. Convert-a-Kiln at 95MBF gives the plant a total of 245MBF capacity.

Kilns are computer controlled with Delta T controllers. Steam heat is supplied by two wood-fired boilers - a Hurst 600 HP gasifier and a Superior 400 HP with a Thermoplast wood burner. Boilers consume about 75% of the mill's sawdust and bark waste. The rest goes to outside fuelwood markets. Chips are sold to Domtar in Ashdown, Ark.

OPERATIONS

AFP owns approximately 82,000 acres of timberland in Texas, Louisiana and Arkansas, which are managed under voluntary SFI and BMP guidelines. Foresters Buddy Rosser and Perry Rushing work out of the Atlanta office and are responsible for supplying the Atlanta mill. The Atlanta mill receives approximately 60% of its log supply from gatewood logs, 35% purchased timber deeds, and the other 5% is harvested from company-owned land. They rely on three logging contractors to harvest wood supplied



from company-owned lands and purchased timber deeds. Log yard wet and dry storage areas carry an inventory of approximately 5MMBF.

Logs enter the sawmill from the merchandising line, where a Corley carriage and 8 ft. Walker-Whelan headrig equipped with Key Knife chipping heads are used for primary breakdown. The headrig opens the log and hands it off to the Hi-Tech-optimized Newnes horizontal resaw to cut the other side. "We do that for speed," the general manager says. "The headrig was taking both sides off until we put that resaw in, so it's the equivalent of running two carriages."

Cants advance to the Newnes McGehee curve-saw and then to a Newnes sort station. At the gang, pieces pass through Key Knife chipping heads prior to entering the double arbor sawbox, which is fitted with sixteen 19 in. blades on each arbor. Cut Technologies supplies the .90 plate, and No. 3 splined blades. Saw kerf is .140 in.

Boards go to a two-saw Hi-Tech edger or straight to the USNR trimmer equipped with a Hi-Tech optimizer. Lumber moves to a 49 bay USNR/HEMCO sorter and stacker. All production is kiln dried, and 97% is surfaced. All 1 in. boards are sold rough.

Contract trucks and railcars are used to deliver product to lumber brokers, wholesalers and direct markets located in Texas and throughout the U.S.

FILING ROOM

The filing room received an upgrade during the curve-saw installation. Equipment includes a Vollmer face grinder, Jacobsen dual side grinder for circle saws and for band saws, a No. 6 Armstrong for the headrig, No. 4 Armstrong for the resaw, and Armstrong stretcher rolls. A Simonds knife grinder sharpens chipper knives for three 58 in. Precision chippers.



Chipping heads at the headrig and gang use Key Knife knives. Headrig saws are 14 gauge, sliver back with a 13/4 in. tooth space. Saw kerf is .165 in. Resaw bands are 15 gauge straight back with 2 in. tooth spacing. Kerf is .145. Both are Cut Technologies blades. Saw changes at the bandmills and circle saws come twice per shift.

Head saw filer Gary Maloch is experimenting with Cut Technologies' Quiet Cougar XX saws in the planer mill trimmer. The goal is to get a smoother cut. Maloch says the blades have nearly twice as many teeth, and they have proven to be quieter in operation.

Maloch's staff includes filers Gene Stevens, Doyle Lawrence and Joseph Terry. Stevens takes care of hammering, tipping, sharpening the carbide circle saws and band saws. Lawrence and Terry are responsible for the guides and some re-tipping.

SAFETY

Plant Manager Lawing is proud of the Atlanta sawmill's safety program which has received considerable recognition. The Atlanta mill has been a SHARP Award recipient since 1998. This award is earned through the Texas Workers' Compensation

Commission OSHCON Program in conjunction with OSHA. Every two years the mill is inspected for compliance with all applicable OSHA regulations. The results of the inspection along with the incident record determine whether the SHARP certificate is renewed. It has also received the SFPA Division II Sawmill Safety Award in 2000, 2001, 2002 and 2004, the AF&PA Safety Excellence Award, the National Safety Council's annual Excellence Achievement Award since 2001, the National Safety Council Industry Leader Award and the Atlanta-Queen City Area Special Recognition Award for Outstanding Safety Performance.

Supervisors have bimonthly safety meetings with their departments, and Safety Coordinator Humphries conducts monthly safety meetings with each department. AFP uses positive reinforcement to recognize employees who remain accident free. Departments have monthly cash drawings for workers who have 100% attendance and are accident free during the month. Gift incentives are given to all accident free workers on a quarterly basis and yearly basis. All employees receive cash awards every six months based on mill-wide safety performance. The Atlanta sawmill also hosts a number of company cookouts throughout the year to recognize safety and production achievement.