

The mill operates separate band saw and circle saw filing rooms.

mized edger, then installed a USNR curvesawing gang for sawing grade. Startup date of the gang is etched permanently in the principals' memory, not because there were problems, but because it coincided with history. The date was September 11, 2001.

A primary goal of the project was to increase production. "When we put the gang in our piece count went up dramatically," recalls Stephen. Throughput jumped from 8MBF per hour to 13.5MBF; overall yields have increased about 5%.

Yet father and son say "school is still out" as to whether that was the right decision for this particular operation. "I am completely sold on the benefits of curvesawing, but was that benefit applicable to this operation?" Stephen asks. "That is still a question mark."

Also in 2001, the mill increased kiln capacity with the addition of a USNR/Irvington-Moore kiln, bringing the total to four kilns with total charge capacity of 290MBF. The first three are original Irvington-Moore kilns updated with USNR/Kiln Boss computer controls. A 30,000 sq. ft. lumber storage facility was also added.

# **PRODUCTION**

Logs arrive cut to length and are unloaded by one of two Caterpillar frontend loaders, which also feed the deck of a 38 in. Beloit ring debarker. A MDI metal detector scans logs prior to mill entry.

The new carriage delivers logs to a McDonough 6 ft. bandmill. The sawyer opens the face and sends the jackets downstream to a 6 ft. McDonough vertical resaw. Boards go to an optimized USNR three-saw edger.

Two-sided cants pass through a MDI metal detector prior to entering a 12 in. USNR double arbor curve-saw with a

total of 70 saws and five different pockets available. "What we are trying to do is force the lower grade pieces into certain pockets," Jones explains. It is capable of handling up to seven pieces per minute, though actual mill flow is about one and a half boards per minute.

Edger and gang feed an optimized USNR/HEMCO trimmer and 50-bay sorter system, which empties to a USNR/Lunden automatic stacker. This system was installed in 1996 and was designed to handle both green and dry lumber on one line. With increased production after the gang installation, the combination sorter was not able to keep up with throughput. Management opted to shutter the dry side of the system and went back to the original method at the soon-to-bereplaced manual dry sorting chain.

Lumber packages are dipped in a Fifo dip tank during the summer months to prevent stain. Hyster forklifts transfer packs to the kilns. Lumber exits the kilns and is trimmed and sorted prior to dressing at the planer mill, which includes two Yates-American A2012 planers and two hand-pulled sort lines. A HEMCO stacker is located at the end of one line.

The mill operates separate band and circle saw filing rooms. Reggie Vick and Al Hobbs head up the band saw room and Ricky Lowe looks after circle saws. Equipment includes two Armstrong top/face grinders, a Hanchett top/face grinder, Armstrong side grinder, Iselli automatic leveler and Armstrong bench. Circle saw equipment includes a Vollmer side grinder and top/face grinder, and Wright Machines side and top/face grinders.

# **GIVING BACK**

J.W. Jones Jr. officially joined his father's lumber business in 1957, after

completing a degree in Lumber Manufacturing and Merchandising at North Carolina State University, though he had helped at the mill since he was a boy. He assumed the mantle of leadership when his father was killed in an automobile accident three years later.

Following his father's example, Jones has spent his career "giving back" to his community and his industry. He has been active in the National Federation of Independent Businesses (NFIB) and Southeastern Lumber Manufacturers Assn. (SLMA), where he is a past Chairman of the Board, and has served on numerous industrial development and civic organizations. Currently, he is President Pro-tem on the North Carolina Forestry Advisory Council, which advises the NC Div. of Forest Resources.

"I've had a lot of mentors along the way that have helped me realize that you have to give back to your community," Jones says. He notes that the timber industry, particularly, is dependent upon the efforts of those who came before. "We've seen an evolution of changes in the business," he observes. "There are not as many people today who have feelings for the land, so you've got to help give them the knowledge and be honest and straightforward with them, and encourage them to replant. If we don't, the next generation isn't going to have anything."

In addition to promoting reforestation to the landowners, Jones supports future forest management by providing annual scholarships for forestry students at NC State. The company is a charter member of the new Southern Pine Awareness Network (SPAN).

The businessman is also a strong supporter of his local community college, College of Albemarle, where he serves on the Board of Directors of the COA Foundation. The company provides internship opportunities for students and supports the foundation financially. "I believe in the average student and not just the straight A student," he adds. "So we give to the Albemarle Foundation and they can use it in the areas they

Over the years, Jones has been politically active and has served as a county commissioner in Pasquotank County. He has provided his financial and personal support to numerous election campaigns at all levels of government and has been a regular contributor to the political action committees at SLMA and NFIB.

# LUMBERMEN



Jennifer McCary

J.W. Jones Lumber pursues path of continuous improvement.

ELIZABETH CITY, NC hat if? That's the question that gets batted around a lot at J.W. Jones Lumber Co. Inc. In many cases, the answers are relatively easy to simulate thanks to today's optimization technology and the skilled team J. Wilson Jones Jr. has amassed over the years.

One of the players on that team is his son, Stephen Jones, who is a self-described

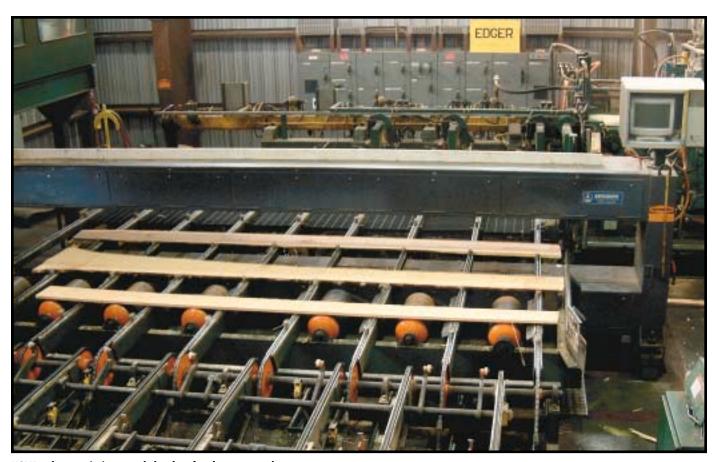


At top, it's curve-sawing gang time. Above, J.W. Jones Lumber operates four kilns.

jack-of-all-trades and the unofficial projects manager for the family's pine mill here and hardwood mill in nearby Roper, NC. Concerning today's technology, Stephen comments, "The advantage of the software now versus what we had back in the '80s is that you can do 'what-ifs.' You can ask 'what if I changed the codes and

took this product out of the solution?' Now we are able to run simultaneous solutions side by side to see if it would help. Before you could only do hypotheticals or what I call WAGs (wild a\_\_ guesses)."

His father nods in agreement, citing some adjustments they made just recently on the USNR optimized Salem carriage in-



USNR edger optimizer reads lumber for three-saw edger.

stalled last summer. "That's the thing with this optimization," the elder Jones says. "You can spend a million dollars, or whatever, on some optimized system, but when you turn that switch, it's not going to work exactly right. You have to massage it, get to know it. I would dare say for every optimizer that we've put in, it was probably a good two years before we felt like we knew what we were doing. And not long after that the software changes!"

The Joneses are no strangers to cutting-edge technology. The company's fact sheet, given to visiting legislators and dignitaries who have toured the mill over the years, lists a number of firsts over nearly seven decades of continuous operation at this location. These include being the first in the South to install a log metal detector; the first east of the Mississippi and third in the nation to install a computer controlled carriage and scanning system (some 25 years ago); and the first to install a combination green and dry sorter line in the Southeastern U.S. (in the mid 1990s).

# ROUGH/DRY

Currently, Jones Lumber is installing a 41-bin TS Manufacturing rough/dry trimmer and sorter line, which will have in-house designed controls and software.



The Joneses have never been afraid of experimenting with downstream material handling.

Jones purchased it at auction from Evans Lumber Co., Lewiston, NC, and transported it in three sections roughly 80 miles to the mill.

"We're doing this one a little different," Stephen says. "We wanted to be able to sort on demand by order, by sales and be able to put a blend of grades in a package. This system will do that in hardwoods and we wanted to be able to do that in pine." They are already using customer driven sorting parameters at the sister hardwood

mill, Mackeys Ferry Sawmill, Inc.

Benefits of the new line will be the ability to trim and sort dry lumber before it goes to the planer mill, which will improve processing efficiency. The system will replace an existing hand pulled dry sort chain. Though it has been almost three years since Hurricane Isabelle hit the coastal area, the sawmill is still getting checks and splits from timber that was stressed, though not necessarily enough to show outward damage. Optimizers in the

mill don't pick up these splits, they note, so boards come out of the kilns with maybe a foot or two that should have been trimmed, but wasn't. It will also allow more versatility in meeting the growing demand for customer driven proprietary grades. He anticipates startup of the new line in June. This project is a precursor for plans to replace the planer mill.

## **PERSONNEL**

"We are able to do all this because of the depth of knowledge and experience that we have in our employees," Stephen says. Average tenure of the company's 125 employees is close to 20 years. There are eight employees with 30 or more years on staff; eight with 20 or more; and 15 with 10 or more years. Truck driver Samuel (Jack Rabbit) Spence holds the record as longest tenured employee, second only to the owner. Head sawyer Bill Roundtree has more than 32 years with the company.

What is the secret to such high retention rates? The owner credits a management philosophy based on the Golden Rule. Fifteen minutes into a conversation with Jones, one discovers that he is engaging, caring and quick to praise others. "Dad has instilled an awful lot of loyalty in his people, just in his integrity and how he operates," observes eldest son Wilson III, who manages Mackeys Ferry Sawmill. "A lot of it has to do with how you treat folks and how you do business."

Jones rewards worker safety through several avenues including monthly cash raffles and \$20 gift certificates for all employees who remains accident free for six weeks. The owners, not the company, fund the cash raffles. Separate raffle drawings are held for each division of the business—logging/forestry, pine mill and hardwood mill. Prize values vary according to the number of people in each group. The pine mill prize starts at \$100 for the first accident-free month and grows for each zero accident month, up to a maximum \$500. Jones notes that cash prizes are more effective than check rewards of equal value.

Safety surveys are conducted regularly and even "near miss" incidents are detailed for in-house records. Safety committee members use a digital camera to record the walk-through surveys and these are displayed on a large plasma TV screen during the monthly safety meeting. Any recorded incidents are also discussed at that time.

Since adopting these and other loss control programs recommended by workers' comp carrier, BB&T Insurance Services with Strategic Comp Services, Metairie, La., the company has recorded 20 months with zero lost time accidents



J. Wilson Jones Jr., left, and Stephen Jones



Left to right, head filer Reggie Vick, sawmill manager Tim Briggs, saw filer Al Hobbs



Sawyer Bill Roundtree has put in 32 years.

and few recordable accidents.

Key supervisors and managers include Sawmill Manager Tim Briggs; lead mill-wright Dwight (Catfish) Nelms; kiln supervisor Calvin Upton; planer mill supervisors Leroy Powell and Matt (Buck) Wood; and band and circle filing room supervisors Reggie Vick and Ricky Lowe, respectively. Support personnel include David Harris, vice president Administration; Bob Pippin, vice president Procurement and Sales; Bob Gaston, IT manager; electrician Terry Morgan; logging supervisor James Lamb and chip mill manager Wood Bailey.

## **OPERATIONS**

J. W. Jones Lumber Co. operates a pine sawmill and a chip mill, purchased

in 1999 from St. Laurent Forest Products Corp., both located here. Annual production at the sawmill averages 28MMBF a year and the chip mill produces 144,000 tons annually.

The company and/or family own and manage roughly 6-7,000 acres of timberland in eastern North Carolina. A four-man forestry staff handles procurement and provides land management and reforestation services for their land as well as other private landowners, a practice Jones started in the 1960s.

Foresters purchase about 40-50% of the stumpage needed at the mill through sealed bids and direct contacts, pulling from a 180° half circle, due to the close proximity of the coast, and extending out 80 to 90 miles. Jones Lumber operates one company logging crew and subcontracts with three or four loggers in the region. Gatewood purchases round out the log supply.

Lumber products include dimension, framing and patterned lumber including paneling, siding, wainscoting, flooring, stair treads and S2S. The company services mainly domestic markets in the Eastern U.S. through brokers, wholesalers and distribution centers. Originally, all hardwood chips were sold to export markets but that has dissipated since Jones acquired the chip mill. Today, chips are trucked to area paper mills and most is shipped on barges to distant paper mills.

## MILL UPGRADES

Management has been busy in recent years with several upgrades on the mill floor. Last July 4, they replaced an existing linear positioner Salem carriage with a new linear positioner Salem carriage with USNR/Perceptron software and replaced one of the last remaining steam shotgun drives in the state with a 300 HP Tyrone hydraulic drive.

Wilson, the dad, who still mans the sawyer's booth several times a week, prefers the explosive power of the shotgun, though he admits there is probably more drift with it than with the hydraulic gun. Is it faster? "Probably not, but it's still pretty fast and from the sawyer's point of view, it's a heck of a lot of horse-power," he says.

Production has increased, but he attributes that to the faster optimization. The main benefit of the hydraulic drive is that it no longer competes with the kilns for steam from the boiler.

Between 2000 and 2001, the mill replaced a manual edger with a USNR opti-