

NEWS & CUSTOMER REVIEWS

# WoodworkingProject.com

**Bailey's**  
EDITION

**LOGOSOL** # 01 | 2012

**LOGOSOL PH360:**  
"Like adding  
another person"

PAGE 14

**The PH260 Spins  
Straw Into Gold**

PAGE 14

**The Science of  
Kiln Drying**

PAGE 6

**Big Cut with  
the Big Mill  
System**

PAGE 11



## THE STORY OF LOGOSOL

PAGE 8-9



**"I'm pleased with  
the Logosol service"**

PAGE 6



**"We made \$1,000  
the first day"**

PAGE 4



**A Mayor Builds  
Unique Log Homes**

PAGE 12



# The joy of processing **your own wood**

**G**etting access to the most valuable parts of trees – the planks and boards – was the driving force when I first developed the Logosol sawmill. Making use of a storm-felled tree that would otherwise be firewood or even be left lying on the forest floor is a powerful way of showing concern for our environment. The product became a great success and opened up new opportunities for wood processing in many different areas. By offering customers around the globe safe purchases and the best customer service, our products are now, 23 years later, sold from Sweden to over 65 countries. The machines are working in a wide range of surroundings, from the rainforests of the Solomon Islands, to Alaska's vast wintery wilderness. Many use their Logosol machine in their business, but just as many are quite ordinary people, just like me, who build their dreams of wood and experience true joy when doing it!

**BECOMING A LOGOSOL** customer is a safe and long-term investment. During ten years, we have sold our products in the USA and taken the first

step towards making our products and trademark known across North America.

**FOR MANY YEARS**, LOGOSOL has cooperated with Bailey's on the American market, and we have great confidence in this company. I am, therefore, extremely pleased that we are now taking the next step with a large-scale joint investment in order to reach an even greater number of people who need our products in the US. Our colleagues at Bailey's are also wood enthusiasts and know our machines inside out after having used them in their own building projects. On page 10 you can read about Bailey's president Nik Bailey's woodworking projects with Logosol machinery.

**THE JOY OF INVENTING** becomes evident when you see the variety of our range of machines. Besides several different sawing systems we have, among other things, developed a revolutionary planer/moulder line for both professionals and hobby-carpenters. LOGOSOL's products are always of Swedish quality and are recognized by the elegant solutions, which have become our signature. To us,

it is important that you, if you want to invest in a Logosol machine, know that it will be rewarding due to smart design and a personal commitment to you as a customer.

**WE ARE CONVINCED** that we, together with Bailey's, will be able to make this proven equipment available to more people in the US who want to experience the joy of processing their own wood. We wish them every success, and will do our utmost as supplier and partner.



*Bengt-Olov Byström*

**Bengt-Olov Byström**,  
Founder of Logosol

## To Our Valued Customers,

**B**ailey's is proud to announce that we are your new Logosol distributor in the United States.

**Bailey's has been** serving the Wood Products, Forestry and Tree Care Industries for nearly 4 decades and Logosol wants you to know that our two teams have joined forces to provide the best in U.S. distribution, sales and service of Logosol wood processing products.

**We're proud** to be able to offer you the 2012 Logosol Product Catalog (see right). It contains the finest woodworking products available in the world. The catalog is an excellent reference and shopping guide for the complete selection of professional wood processing tools that Logosol has to offer. In addition to the catalog, we encourage you to visit the [Logosol.us](http://Logosol.us) website and [BaileysOnline.com/logosol](http://BaileysOnline.com/logosol) for even more detailed information, product videos and the most up-to-date pricing. You can also call toll-free and speak to one of our Logosol specialists at **1-877-LOGOSOL (1-877-564-6765)**. We're here to help you in any way we can.

We look forward to serving you soon!

Sincerely,

*Nik Bailey*

Nik Bailey, President



See Nik's Logosol Story  
on page 10!

**Bailey's**

## Get the Latest LOGOSOL Catalog & DVD for **FREE!**



**USE CODE  
LGL123  
WHEN  
ORDERING**



**Search for #LSK at BaileysOnline.com  
or Call 1-800-322-4539**

## WoodworkingProject.com

### EDITORIAL STAFF

#### **Publisher:**

Logosol AB

#### **Editorial Page Editor:**

Marie Rönnberg

#### **Translations:**

Anna Byström Olsgrén

Special thanks to all Logosol friends who help us make Woodworking Project better!

## LOGOSOL

Fiskaregatan 2,  
SE-871 33 Härnösand

#### **Call TOLL FREE:**

1-877-LOGOSOL

#### **Telephone:**

1-601 856 1889

#### **Fax anytime:**

1-601 856 9535

Internet: [www.logosol.com](http://www.logosol.com)

Email: [info@logosol.com](mailto:info@logosol.com)

# THE BRAND OF LOGOSOL



### DEPENDABILITY

Logosol offers long-term reliability, no matter where in the world you live. Doing business with Logosol is safe. You get extensive warranties, the right price, unlimited support, and products that keep their high value.



### JOY

You become proud and happy when creating by working with wood. Standing in the sun sawing or planing; feeling the scent of sawdust; processing a log into something lasting – building that sauna, terrace or house you have dreamt of – what an amazing feeling!



### FELLOWSHIP

As a member of Team Logosol, you are part of a fellowship. We belong to a large group of people that share dreams of working with wood. You have access to experience, tips and ideas through our customer magazine Woodworking Project and our website, but also through personal contact with members round the world.



### PROFITABILITY

You can for a small investment start to process your own timber. No matter whether you are processing timber for personal use or for running a business, this is a profitable occupation. You have the opportunity to make use of all kinds of wood, and create exactly what you have dreamt of.





## UNIQUE Optional Fifth Head for PH360

Logosol continues to be on the move, designing innovative solutions for planing/moulding challenges. When the PH360, Logosol's largest four-sided planer/moulder, was first released, everyone noticed there was an extra button on the control panel of the PH360. Some people utilized it to control the external chip extractor. However, now the button's real function is revealed, it's to control an optional fifth cutter head.

Logosol strives to design modular machines, to allow for future development. The most developed along modular lines, for example, are the chainsaw powered sawmills. It's fully possible to begin with the small handheld timber jig and develop it into a fully-equipped portable sawmill.

The PH360 is designed according to the same modular philosophy. It was equipped from the start for a fifth cutter head. The only thing that gives away the potential of this future option is an extra start button on the control panel. The development work has taken a little time, since it involves a brand new type of cutter head, with a function not found on any other planer.

### A TRUE MULTI-CUTTER

"The cutter is in principle an MF30 vertical milling machine," reveals product manager Mattias Byström.

The milling unit is an independent unit that attaches to the planer, and the electrical systems are coupled together. Both machines function as a single unit, with the same feeding speed. All cutter heads are controlled from the PH360 control panel.

The MF30 model is a multi-machine in the widest sense of the word. The motor unit can be swivelled 270 degrees and the milling arbor can handle both a side cutter spindle of the same type as already fitted on the PH360 or a spindle into which router bits can be fitted. The machine can process timber from below, from the side and from above. With a fifth cutter head in a four-sided planer/moulder it becomes possible to produce very complicated details in a single operation.

"The PH360 with a fifth cutter head is a very efficient machine for producing windows, for example," points out Mattias Byström.

The fifth cutter head is undergoing integration testing. No launch date has been set, but interested parties can get in touch with Logosol for further information about this unique option for the PH360.

### EQUIPPED FOR MORE

The PH360 is also equipped for even more additional functions. Two are now available. The planer/moulders now supplied have a hole in the feeding table, for attaching a press roller to help guide the lumber before it enters the planer. The press roller is available for delivery.

A longer jointer fence is also available to order. This improves the function of the planer.

# "Not milling is like leaving a **SACK OF MONEY** out to rot"

Recently we heard from one M7 owner who had collected a bunch of logs in anticipation of doing a lot of milling, only not to have time to mill up the logs until 2 years later. Rainer Kern called to tell us what he found when he cut into some hardwoods that had lain in place for several years. We discussed the value of spalted wood, and we sent him some reference material on this kind of wood to help him realize what he had found in these old logs. Here is his story:

Thinking of what I have discovered makes me remember how I first got started with using the M7 mill in the first place.

Three years ago, I purchased some land and immediately had about ten acres of it cleared. What was bulldozed was a mixture of pines and hardwoods. The standard practice here is to push all the debris into a pile, throw diesel on the pile and burn it. It cost me more money, but I had the dozer operator stack both the pines and hardwoods that were over a certain size to keep them from getting burned.

### SAVE THE COST

When asked what I was going to do with the wood, I shrugged my shoulders, unsure myself. I tried to sell the logs to a logging firm, but times were very good for them at the time, so they did not want to invest in the effort to load the logs onto a logging truck.

I invested in your mill about two years ago, because I didn't like the alternative of having the logs used for firewood. Two years that have gone by, and I have had the time to only mill the pine. It is now that I am finally milling the hardwoods. Before I had started milling the hardwoods, I felt disappointed with myself for having left these logs turn to rot. In a way, it didn't feel any different than leaving a sack of money out to rot. After all, the whole idea of milling the lumber was to save the cost of having to buy it from a lumber yard.

The next thought was to run these logs through a chipper to make mulch. But because some of these logs are too big to run through a chipper, I used the mill to cut them down into manageable pieces. As I cut my first piece, the wood wouldn't even let me take out my frustration by throwing it away. The wood was so rotten that the wood broke in ten pieces, like shattered

glass, before I even had a chance to give it a rebellious throw of disgust.

### DISCOVERED SPALTED WOOD

The antipathy I felt of having let the maggots and rain eat through what would have been thousands of dollars saved from having to buy it from a mill was sickening. As I cut further down into the wood, I got some satisfaction of cutting the maggots and beetles in half that had made this wood their home over the last couple of years.

It wasn't until my third cut, that I discovered what you call spalted wood. In fact, I thought it was just a fluke in the wood until I noticed the same uniqueness in the other logs. Imagine the relief I felt of knowing this wood being spared from the chipper just to become mulch. It is extremely rewarding to see the time spent two years ago being paid off, more than I could have even imagined.

The word should get out so more people can learn about this marvel. Thanks for all the info and for the Logosol hat. I think your equipment and support is great".

### Rainer later writes:

"The curse of having such beautiful wood is deciding how to use it. Typically when doing a wood project, you make a best guess of the amount of wood you need. If you guess wrong, it is just the inconvenience of having to buy more. True, the color tone may vary between stock piles, but nothing so far off that a different shade of stain can't fix.

With this spalted wood, if you run out, that's it. There's no lumber mill that carries wood like this. Best bet is to cut a tree down, bury it and restart the project in another year. So it has been very difficult to decide for which projects to use spalted wood. For example, I milled my own 1/2" solid floor for a 1500 sf room last summer. I have enough spackled wood to cover that, and the floor would have looked awesome. But in the end I



• Rainer Kern and his M7 sawmill.

chose to save the spalted wood to make cabinet doors. It was just too hard to let all the wood go in just one project. And that's the curse. When you've got a good thing, it's hard to let it go."

So, don't discard those old hardwood logs just because they look rotten. They can produce some of the best wood you've ever seen! That's one of the joys of milling – discovering what grains and patterns you will find within a log.

### USEFUL FACTS: Logosol Sawmill

**Weight:** 126 lbs without saw unit.  
**Length:** 18 ft is standard length.  
**Width:** 43"

**Distance between log beds:** 79"

**Log diameter:** Up to 24", with the possibility of sawing logs of larger diameters.

**Log length:** 16 ft is standard, but you can extend the sawmill to any length.

**Accessories:** Gas engine chainsaws, electric saws, bars, chains, log house moulder, etc.







# “The first day we ran the PH260, **WE MADE \$1,000**”

By Dave Boyt

**The Ozark mountains of Arkansas are rich with logging history and lore. With shortleaf pine and a mix of hardwoods including oak, hickory, ash, cherry and walnut, it has provided lumber – and jobs since the early 1800s. To this day, many old timers can recall pulling logs out of the woods with horses, or working on sawmills powered by steam threshing machines, tractors, and even Model A Fords.**

Family run mills gave way to large modern, high production mills. These mills typically cut one product, such as dimension lumber for houses and railroad ties, producing more than 50,000 board feet of lumber per day.

With the economic downturn, these large mills are closing down. Sawyers like Dave Barnes of Flippin, Arkansas are filling the void left by the closures with small band saw mills, and finding niches for specialty lumber that are simply not feasible for a large production mill.

Operating under the colorful name “Arkansawyer”, or “Arky”, Dave and his crew of eight cut timbers for post and beam houses, tongue and groove flooring, siding, and just about anything else his customers request.

“I started out cutting timbers for my own place, and I discovered that I loved sawing,” he recalls. “We started out with just a ordinary band sawmill, under a pine tree in the summer of 2006. In the afternoon, we’d move the mill around to the other side of the tree for shade.” Dave built a shed for the mill that winter. He estimates that he has cut close to three million board feet of lumber since then.

Not long after setting up the mill, Dave realized that he could increase his income by processing the lumber into flooring and lap siding. He purchased a Logosol PH260 planer/moulder and a 15” planer. He opted for the single phase machine, and says that it has plenty of power to do the type of work he needs. “The first day we ran the Logosol, we made \$1,000. We were tongue and grooving 1x 4 and 1 x 6 cedar for the ceiling of a resort. We never even took the machine off the shipping pallet, and it is still sitting on the pallet today.

It is one of those things that we could take out of the box and make money with

it that day,” he says.

The flexibility of the PH260 is a large part of the reason he has been able to expand his business at a time larger mills are closing down. “This area used to have five pretty good sized mills, but there are now only two left standing. They just cut ties and grade lumber. I cut pine for timber framing posts and beams and subflooring, and hardwood for flooring, trim and doors. I saw cedar, pine, oak, hickory, and walnut. We build two or three houses a year.”

A deep pile of fresh planer shavings just outside the shed is testament to the amount of use the PH260 gets. Dave pre-planes the boards before putting them through the Logosol. “We usually [pre] plane the worst face of the board, then put it down when it goes through the Logosol. That gives a smooth, straight surface.”

He has found that this helps the Logosol operate more efficiently in two ways. It eliminates high places in the board that can ride up and bind in the machine. It also reduces wear on the bottom knives. “We just take 1/16” off the bottom on the Logosol, partly because those bottom knives are the hardest ones to change,” he explained. For some jobs, Dave does not even use the bottom cutters. “I use this machine [PH260] for a lot of rough ship-lap boards to put in cabins. The customer wants the rough side out to make the cabins look rustic on the inside. You just put the shim plate in, but you don’t turn on the bottom cutter, take your cut off the top, and ship lap the board.”

Dave doesn’t worry about straight line ripping before putting boards through the Logosol. “After the board has gone through, it’s straight. If there’s a bump or knot on the edge, if you just put that to the outside, the outside cutter will take it right off.” He says



• The Arkansawyer sorts through some oak tongue and groove flooring that he processed on the PH260 planer/moulder.

example, blue stain is normally considered a defect. But many of his customers like it so much, they pay a premium for it. “I even let some logs sit through the summer to get blue stain and worm holes for the customers who want them. I call it ‘buckshot denim pine,’” Dave explains. “I always tell people they’re getting something special. You can’t just go to the lumber yard and get a piece of wood like this. Every board is different here.”

“It’s hard economic times,” concludes Dave. “There’s a lot of mills everywhere going out of business. The saving grace for me is the fact that I am versatile. I’m in an area where I have more than just one type of wood supply, and I have more than one market for the lumber.” He has even found that having a location on a highway where people can see his mill operation – once an irritation – is now a benefit. He put up a sign painted on an old circle saw blade, and built a small office building next to the planer shed to let people know where he is and what he does.

“I have good craft market. During the tourist season, I have ten thousand cars a day drive by. They pull their motor homes up here, and we pack ‘em full of walnut or cedar.”

that the side cutters can take off as much as 3/4” of material. Sharp knives are an important part of equipment maintenance.

“I can do 8,000 feet of oak or pine before I have to stop and sharpen or replace the blades,” says Dave.

He sends his straight blades to a local knife grinder. He has found that he can sharpen the side profile cutters with a belt sander and a fine belt. “I take a little off the back side of the blade, and I can get another run or two out of it.”

He keeps the feed rate down to help make the knives last longer. “The side profile grinders are about \$160 per set, and they’ll do 10,000 feet of siding, so you’re looking at less than two cents of knife cost per board foot of bevel siding.”

His two years of experience with the Logosol have given Dave plenty of time to evaluate its performance. “It does a good job,” he says. “I can’t afford a \$50,000 machine to do what a \$15,000 machine does real well.” Quick setup and knife changing are important to his business. “If I don’t have to change the bottom blade, setup time is about ten minutes,” he explained.

“Right now, I’m set up to cut 8” wide S4S lumber, and I’ve got to do five of them. Then I’ve got to do 6”, then 4”. All I have to do is crank in the side cutter for a narrower board, then lock the cutter in place.”

Selling directly to the end user instead of a production yard makes it possible for Dave to sell lumber that would normally be downgraded – or rejected – at a higher price. For

**INCREASED INCOME BY  
PROCESSING LUMBER INTO  
FLOORING & LAP SIDING.**

## USEFUL FACTS: Logosol PH260

**Length, width:** 43” x 35”  
**Height:** 38”  
**Weight:** 772 lbs  
**4-SIDED PLANING**  
**Width:** 5/8 to 10 1/4”  
**Height:** 7/16 to 3 15/16”  
**2-SIDED PLANING**  
**Width:** 11 7/8”  
**Height:** 7/16 to 9”  
**FEEDER**  
**Continuous output:**  
0.2 hp  
**Feeding rate:**  
Standard: 7-39 ft/min.  
Optional: 13-79 ft/min.







• Don Haney shows off his signature Wide Plank flooring produced on the NEW Logosol PH360.

# FAMILY FLOOR IN HICKORY LUMBER

**A beautiful floor of hickory was the result when Charlie Griffin and his family decided to complete the floor they started for over 28 years ago.**

Charlie Griffin of Logosol, Inc. and his wife Kathleen raised 6 kids on an unfinished floor. "We built the house ourselves and ran out of funds before we could get the flooring down in our large living area. We had just the plywood for a floor for 28 years," Charlie says. "We never had to worry about a spill ruining the floor, or when kids wanted to screw the Christmas tree to the floor to keep it from falling. It actually made a pretty nice floor."

But, finally he got some time recently to mill some hickory that his brother-in-law had given him a few years ago to use for his floor. "We tarped it, but after a year or two the tarps blew off and water got to the lumber." So, the lumber got weather stained. "It looked pretty rough!"

## BEAUTIFUL FLOORING

This fall, he and his wife and some of his children started working through the lumber. "We pulled the best pieces and ripped them into 3.5" and 5.5" pieces", he said. "I was worried about how the lumber would look, but we began to mill this lumber on the moulder, and some really beautiful flooring started to emerge!"

The hickory was, of course, very tough to work with. But, with patience and good tooling the hickory got milled. He used center-matched T&G side knives which allowed the lumber to be put down on either side. "This center-matched technique allowed us to choose which side we wanted to be visible when we put the flooring down," Charlie said. "We could examine each board and select the best looking side and get the most out of this lumber. If a board had a bad spot on one side, we would use the other."

## A FAMILY AFFAIR

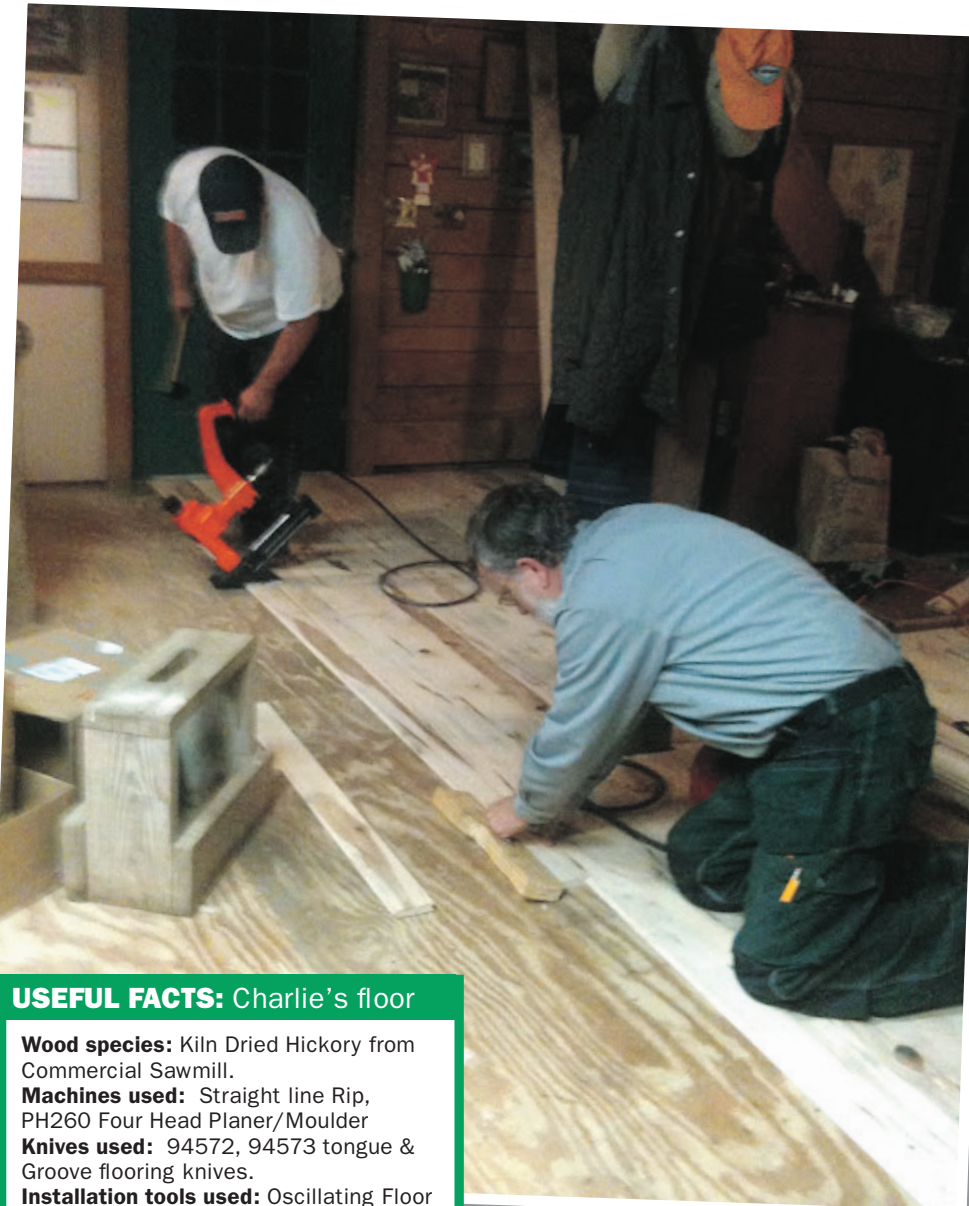
When the time came to put the flooring down, it was a family affair. His sons and son-in-law and daughter and wife all joined in the effort. "Hickory has a variety of colors in it, from darker heartwood to the whiter sapwood, and the weather staining had black and grey streaks running through it. You also, have to understand that this lumber was rejects from a handle mill, which only uses the highest quality hickory. If a board has curly grain in it, it is rejected. So, this wood had a lot of curly in it, and that made for some beautiful flooring," he explained.

## FAVORITE PIECES

The floor has several "special" boards in it. Everyone in the family has picked out their favorite piece of flooring. Charlie's is the piece that Sarah put where you first enter the room, where it will never get covered up. He tells a story about it. "It seems that a hunter went hunting squirrels one day and shot at one and missed it. The bullet that missed the lucky squirrel was lodged in a piece of flooring and went through the planer. We didn't notice it until it was through. It shined up nicely and now is a unique piece in our floor," he explained. It has become a game for any new visitors to find the bullet in the floor.



• The floor was the perfect place for Charlie's granddaughter, Kathleen to write a note to Santa on Christmas Eve.



## USEFUL FACTS: Charlie's floor

**Wood species:** Kiln Dried Hickory from Commercial Sawmill.  
**Machines used:** Straight line Rip, PH260 Four Head Planer/Moulder  
**Knives used:** 94572, 94573 tongue & Groove flooring knives.  
**Installation tools used:** Oscillating Floor Sander, Disc Floor Sander, air assisted flooring nailer.  
**Finish:** 1 coat Dura Seal Sealer, 3 coats Dura Seal Professional Floor Polyurethane.

• Charlie and his son-in-law Ben installs the floor.

## PH360 Extends Family's Legacy

**The carpenter's son is the carpenter's father. For three generations, we have been purveyors of our craft and expertise in quality woodworking and construction. It's part of our family's legacy. Combining old world log building craft with proven over-scribe techniques, creative expertise and modern quality equipment has produced a creative synergy enhancing our log building.**

Nestled in the mountains of Southern Oregon's Rogue Valley, we build in our yard and then re-assemble on location. It's like cutting a fine jewel and then placing it in its setting. Being equipped with a considerable collection of the tools of the trade is a real advantage – like our Logosol PH 360 and our special saws and hand tools. When the right equipment is blended with the heart, soul, and love of the craft – you have the greatest of assets. As a father-and-son team log building company, we focus on mastering old world craftsmanship, quality and "green" log building techniques, utilizing environmentally friendly and low VOC materials and natural domestic real wood materials. By purchasing our own molder/planer we have been able to produce high quality molding, trim and decking to finish our fine log homes at considerably lower costs than purchasing these products. We also make our own hardwood flooring, risers, casings and molding to finish the inside. We pride ourselves in going the extra mile to achieve the visual "wow" effect. From the first glimpse of the massive truss logs and the complex mortise and tenon joinery, the visual impact is immediate. Fine details like the hardwood flooring and matching trim set our log homes off beautifully. We take pride in the level of skill required for our log and beam joinery. When quality tools and craftsmanship marry, it produces something you can be proud of.

We begin each log home with the lasting beauty and structural genius of the old Swedish saddle-notch style log building technique as a foundation. We blend with that foundation, an attractive and eclectic mixture of Timber Frame and Post & Beam building methods, for a creative ageless look that is attractive, functional and efficient. With the 6" by 14" wide capacity of our PH360, we can finish many of our beams and produce the ultra-wide plank flooring and casings that complement our Log or Post & Beam style homes. View our log homes at: [www.naturalelementsloghomes.com](http://www.naturalelementsloghomes.com)

Read more about Don Haney's operation online at our new website: [woodworkingproject.com](http://woodworkingproject.com)



# TIMBERJIG in Ecuador

**Jim Birkmeier of Timbergreen Farm from Spring Green, Wisconsin recently contacted Logosol about a project he was working on with the Kallari Cooperative in Ecuador.**

He was planning a training trip down to the cooperative, and wanted to include a Timberjig and a 36" Picco bar and ripping chain in the mix of equipment he would be using to train the cooperative members. As you may know, Jim has a successful flooring business in Spring Green, using the Logosol PH260 as the principle moulder for his finished products. He also is a successful saw-miller and a forester, so he knows his stuff when it comes to milling. But, for this trip, he had to leave his big sawmill behind, so he turned to Logosol to help with the technology for this area where there were no saw-mills in place.

## MILLING FOR YEARS

The Kallari Cooperative in Ecuador had been milling lumber for years, but it was all done by freehand milling with a chainsaw. Jim was going into territory where they "knew their stuff" when it came to chainsaws.

Here are some of the comments he recorded on his first day there:

- "There has never been a sawmill here – Your stuff is all wrong for here....."
- "We all just saw logs with a chain saw – our men are very professional....."
- "It will overheat the engine, you need to break off all the rakers...."
- "I could do that much faster the way I always do it..."
- "That is just firewood, we throw that all away...."

## STARTED HIS TRAINING

Then Jim started his training. After the first big slabs began to be sliced off of logs that had lain in the forest for years, Jim began to get their attention. When he put the 36" picco bar and ripping chain Logosol had sent with him on the big Stihl, and the saw began to move faster through the log, they really got interested. And when they began to slice boards out of scrap pieces of wood

with the Timberjig, there were hooked. Here is what the cooperative Director had to say afterwards:

"A couple years ago I thought it was impossible for us to create these large slabs of wood from old logs, I couldn't comprehend how to create value from something just laying in the forest. I never imagined it would be this easy – we needed so little to get started. We did not have the vision to use our scrap wood and make it into something valuable like furniture. I could see the finished product in books or internet, but didn't understand how to make it from our trees. Now I feel like my eyes have been opened with this lesson, as if we have woken up from our slumber and can now initiate a new woodworking facility."

## ALTERNATIVE INCOME SOURCE

"Our families have a small income and wood is something that will contribute to their overall family earnings, it still makes a difference for our village/community members. It helps us rest at night as leaders, because our job is to find a way to create alternative income sources to the deforestation and contamination.

I also want to thank the companies that donated the equipment and Timbergreen Farm for donating the chainsaw. These tools will serve as a cornerstone for the future woodworking business of Kallari."

(Elias Alvarado, Production Director: Kallari Cooperative in Tena, Ecuador)

## PROUD PARTNER

Jim Birkmeier had this to say about the experience:

"It is rewarding to see the many changes this cooperative is making. We have been sharing ideas for 6 years. Elias will stay in our home for 5 days in November, and he will be able to see and try many new things. What he will value and take home to his people is hard for me to predict, but we will have some fun working together."

Logosol is proud to be a part of this ongoing effort by Timbergreen Farms. Thanks, Jim for a job well done and for including us in this project!



• Making planks from discarded cutoffs with the Timberjig in Ecuador.



• A great combination: The Timberjig and a 36" picco bar and ripping chain making a test cut in Ecuador.

## The Science of Kiln Drying Wood for Woodworking

**Air-drying works well if you are going to use the timber to build a house. But you can't rely on the spring winds to dry it enough for use in furniture.**

**"It's the biology that means furniture lumber has to be dried artificially," says Svante Larsson, who together with Leif Mattsson came up with the Sauno wood kiln.**

Svante is one of the owners of the Plano System company, where Leif works. In a past life he was a high-school chemistry and biology teacher.

When Leif showed him the newly built Sauno wood kiln, he used his knowledge of biology and woodworking to examine it closely.

## ONLY ALIVE AT THE SURFACE

"The principle is far from new and was used by furniture makers as long ago as the 19th century," says Leif.

The difference is that today science can explain how the process works and why the results are so much better.

"The answer lies in the physiology of the tree," explains Svante.

Trees are only alive on the surface, between the bark and a few millimeters into the tree. The rest is dead wood with an automatic function that transports water to the treetop and keeps it in the cells (vessels and tracheids) in a drought. The mechanism continues to work even when the tree has been felled and sawn into pieces.

"A cubic meter (424 board feet) of raw, newly sawn timber can contain 66 gallons of water," says Svante.

Air-drying can't remove all that water.



The dead wood reacts just as it would in an extreme dry spell and shuts the water inside it. It doesn't matter whether you saw it into thin sheets.

The solution is to change the cells so that they can't shut the water inside. This is why the Sauno method begins the process by adding water and heat. The water vapor that is formed then permanently opens the ring pores of the cell. The actual drying process then begins under low heat and since the pores are open, it takes much less time and achieves better results than air-drying.

"The drying time is counted in the same number of weeks that air-drying in heated premises would take years. Drying pine to a 7-9 percent moisture level for use in furni-

*ture takes between 3 and 4 weeks. It would take 3-4 years to get the wood down to the same moisture ratio with air-drying," says Leif.*

## PROVEN METHOD

Since the pores are open during the drying process, there is less tension, which leads to fewer cracks. Often there aren't even end cracks in a Sauno dryer.

As previously mentioned, the method is far from new. It was used in the 19th century

but was forgotten when industrialization required faster flows. At the large sawmills, drying with moisture and heat has come back into favor, in order to reduce the drying damage.

"Unfortunately, the industry uses the method to bring the drying times down too, which doesn't give the very best quality.

The best quality wood for your furniture is achieved by doing the drying yourself following the Sauno method," summarize Svante Larsson and Leif Mattsson.







• Logosol sells direct to the whole of Europe. Contact with most customers goes via the Internet and by phone. One long time customer is the French couple Rémy and Nicole Cellier. Among other things, they have purchased a band sawmill from Logosol in Sweden.

# “We get better service from Logosol than from local dealers”

## The Demands of the European Market Formed Ikea and Logosol

**Logosol was born in a demanding market and the unique demands they encountered have shaped this innovative company. Logosol is now partnering with an equally successful company in the US to extend their brand in the USA.**

In Europe mail ordering has not been as common as in the USA. Sales of sawmills and other machinery for small-scale wood processing originally were exclusively sold by local dealers.

Logosol broke with this tradition when it was set up in 1989 as a pure mail-order business. It succeeded with this new marketing strategy by offering high-quality products and giving better service both before and after purchase.

Europe has a different geo-political structure than the USA. Even though today most of Europe is considered a single market, the individual countries have different cultures and languages. This puts high demands on companies that want to sell outside their own country.

“The demands of Europe have formed Swedish companies like Ikea,” says Malte Frisk, CEO of Logosol. The demands of this unique market begin when designing the actual product. Every part has to be of the right quality and the parts have to fit together when the customer receives his or her delivery. Due to this, Logosol has from the start placed great emphasis on the quality of the machines.

### SERVICE IN MANY LANGUAGES

But products that keep their promises are not enough. Sawing, planing and other forms of wood processing put demands on the user’s knowledge. That is why Logosol always delivers clear and elaborate manuals in the customer’s own language.

English is the most common language, but if the customer is Spanish speaking, there are manuals available in this language too, or in French, German, Polish, and so on.

Nils-Bertil Holm has been for many years, and continues to be, a customer to Logosol in Sweden. Today, he owns an M5 sawmill equipped with many accessories and the saw unit E8000. Besides the sawmill, he also has the planer/moulder SH230.



• “I’m very pleased with both the products and the service I get from Logosol”, says Nils-Bertil Holm.

“I’m very pleased with both the products and the service I get from Logosol. They are always willing to help when I have problems and are quick to deliver the right products when I need them,” he says.

### BETTER THAN A STORE

Logosol also offers free support by phone and Internet. The aim is that each customer will receive help quickly and get maximum benefit and pleasure from the products. Over the years, Logosol’s product specialists have built up extensive expertise when it comes to how the products work in actual use. In most cases there is already a solution to problems when customers call in for help and support.

Logosol sells direct to the whole of Europe. Contact with most customers goes via the Internet and by phone. One long time customer is the French couple Rémy and Nicole Cellier. Among other things, they have purchased a band sawmill from Logosol in Sweden.

“We get better service from Logosol than from local dealers,” says Nicole Cellier.

She says that before buying the sawmill, they contacted several dealers. Many of them did not even send them an offer. Logosol quickly came back with plenty of information and a quotation.

“After the purchase we have been in contact with Logosol several times to order spare parts and accessories. It works just as well every time and we get all the help we need,” says Nicole Cellier.

### LOGOSOL IN THE USA

Since the success of Logosol in Europe was built on good support, quick service and high availability, Logosol, when looking for a partner in the USA, searched for someone with the same attitude and proven sales experience. The choice fell on Bailey’s, a highly successful, woodland and outdoor products catalog sales company headquartered in California.

“We chose each other. Logosol and Bailey’s both place great emphasis on giving the customer the very best service all the way from the first contact,” says Malte Frisk.

In the USA, Bailey’s is responsible for the service. Logosol supplies more than 20 years of experience and high quality products designed for long-distance sales and support. “This combination of experience, support, and dedication to customer satisfaction, will ensure customers of Logosol products through Bailey’s will have a similar experience to our customers in Sweden and Europe,” Malte adds.



“A sawmill without a planer is like a computer without a printer,” says Ronny Karlsson. Christina, his wife agrees.

## Compact Wood planer adds value to your lumber

**After investing in a sawmill the couple Ronny and Christina Karlsson bought a Soloplaner. “A sawmill without a planer, it’s like a computer without a printer,” says Ronny Karlsson.**

At home Ronny Karlsson has a portable sawmill and a Logosol SH230, also called the Soloplaner. The Soloplaner has many possibilities, it squares, resaws, planes and molds in one single operation. In a small workshop the machine saves time, and recently it replaced the resaw.

### INVITED CUSTOMERS

“I put the resaw away in a corner. The Soloplaner is much better, making dimension sawing much easier,” says Ronny.

When Logosol invited customers to their open house in Sweden, Ronny and his wife Christina visited. They wanted to get tips on how to develop their woodworking, but also look for other machines.

“What we have works fine, but you never know,” says Ronny as he looks around.

### READY TO USE

The couple has already helped their three sons with timber for different woodworking projects.

Here is a further explanation of the metaphor of the computer and printer that Ronny likes to use when talking about his machinery. For Ronny and others, rough sawn lumber is like a picture on the computer screen. It is nice to look at, but difficult to use.

However, when the image is printed and the wood is planed, the product is ready to use!

### USEFUL FACTS: LOGOSOL 's warranties and customer service

- **The right products to meet the customer’s needs.**
- **Personal service, at Logosol we care and keep our promises.**
- **Generous money-back guarantee and warranty.**
- **Continuous development of unique new products and services.**
- **Continuous training of staff.**
- **Strong solidarity between Logosol owners all over the world.**
- **A dedicated and skilled support organisation with 20 years experience of working with wood.**





## IT ALL STARTED WITH A SAWMILL...



- Logosol is launched.
- The Logosol Sawmill is shown for the first time in public. It attracted great interest.

1989



- The first planer/moulder is introduced, a three-sided planer/moulder.

1994



- PH260 is introduced.

1997



- The first FSC certified log in Sweden is sawn. The lumber became, among other things, a conference table in the Logosol office. The log was of the species Angelina Pedra, imported from Brazil.

1997

# Logosol – A World Leader Processing and Woodworking

Logosol is a Swedish based international company developing and selling unique machines and services within wood processing and woodworking. With innovative and affordable solutions, we have visibly changed forestry and woodworking for more than 20 years. Our products are known for simplicity of design, reliability, and efficiency. The modular nature of our products and accessories means that our customers can easily upgrade at the same rate as the growth of their business. The most diverse range of products and service in 65 countries make us global leaders in our industry. Please take the time to get to know our company!

For centuries, Sweden has been world-famous for its inventors, design innovations, and high quality of products. The zip, the ball bearing, the gas stove and the monkey wrench are all samples of Swedish inventions that have become indispensable in our everyday lives. Swedish companies such as Ericsson, Volvo, SAAB, Nobel and IKEA are associated with ingenuity, perfection and high standard.

### LOGOSOL QUALITY IS SWEDISH QUALITY!

“Made In Sweden” means high quality, innovation and sustainable solutions. Logosol is a Swedish company that really can live up to the expectations! For the last twenty years, innovation, originality, simplicity and quality have been the distinguishing features of our product line. With these features as a basis, Logosol has developed a wide range of equipment for wood processing and woodworking. Due to our products, Logosol has become well known in this field all over the world.

### TAKE CONTROL OF THE PROCESS!

From felling to finished wood products; with Logosol’s line of products you will be in charge throughout the entire process. In our range you will find everything from chainsaws to industrial machines. Our most renowned product, however, is the Logosol Sawmill. This invention is the world’s most popular portable sawmill!

### A CARING COMPANY

Logosol is both a company and a family. Together we work to ensure that each purchase is characterized by dependability

and profitability. Our motivation is that you will experience job satisfaction and pride by using our machine. A responsible and small-scale use of our natural resources is an act that feels truly good. With Logosol you can refine and create almost anything from a tree.

Logosol’s founder Bengt-Olov Byström grew up on a farm, where making good use of one’s resources was vital. He invented the one-man sawmill, which could cut trees into lumber, on the farm or out in the woods. Today, the whole Byström family is engaged in Logosol in different ways.

At Logosol, we often hear our customers’ success stories. It is very special to think of all businesses that have been built up with our machines as a base, and it fills us with pride hearing about families and friends working together, creating with wood.

We have ourselves experienced the usefulness and joy of our products. We know that they work, and we know that you are making an important investment for the future.

*You are warmly welcome!*

### USEFUL FACTS: Logosol

- Owned by the Byström family.
- 38 persons working at the Logosol headquarter in Härnösand, Sweden.
- Sales in more than 65 countries.
- Over 25,000 sold sawmills in 20 years.



• The whole Byström family is engaged in Logosol in different ways.

## ... AND GREW INTO A GLOBAL STORE!



- New Logosol Sawmill model, M8 is introduced.

2011



- Bailey’s takes over Logosol’s sales in the USA.

2011



- New head quarters in Sweden.

2012



- Logosol doubles R & D with new cutting-edge technology.

2012





• The development speeds up. Launching of subsidiaries in The USA, Germany and Norway.

1999



• Just in time for the 10-year anniversary, Logosol introduces its own stack cutter.

1999



• Logosol's joinery machines are introduced.

2005



• Anders Nykvist cuts the world's longest plank, 127,6 feet. The record was made by using conjoined Logosol sawmills, and is still valid.

2006

# in Wood ng Equipment!



## THE STORY OF THE UNPLUGGED LOGOSOL SAWMILL

**Last year it was the tenth anniversary of the Logosol Sawmill model 7. Logosol celebrated this by taking the next step in development, the M8. But what happened on the way here?**

The 066 became the present Stihl MS660. It is still the world's most sold professional chainsaw. Extremely reliable, and almost impossible to wear out. It does its job during many years, on the sawmill and when felling trees in the forest. In addition, it is a workhorse on the woodyard.

**1989.** The Logosol Sawmill was introduced for the first time in 1989, on the exhibition Elmia Wood. It struck like a bomb. At that time a mini-sawmill was actually a large piece with a wood bench and ignition bulb motor. Or with a very large electric motor that depended on high-amp fuses.

**1993.** The old village sawmills disappeared one by one, and the need for stationary sawmills grew. Modern circular and band sawmills were unreasonably expensive. The demand for an improved Logosol Sawmill increased. It already started in 1991 with extensions for the guide rail of the Logosol Sawmill. In 1993 came the first electric saw unit, E5000.

The first Logosol Sawmill was an "unplugged" sawmill. No cord, and with a big gas powered chainsaw running it. The saw unit was by far the biggest chainsaw on the Swedish market, Stihl 066. The world's most sold chainsaw received Swedish type approval because Logosol started to sell the Logosol Sawmill.

**1995.** The most common objection to the Logosol Sawmill was about the wide sawing kerf. In practice, the difference was minimal compared to a circular sawblade, especially when considering the fine and smooth sawn surface. If you plane off the defects that the surface gets when being sawn by a circular sawblade, the difference in material loss disappears. But Logosol chose to listen to the customers' demands for a narrower kerf. In 1995 the first bandsaw unit, BS320, was introduced. Initially, it was a sensitive machine, but after years of improvement it has become a reliable workhorse.

As all Logosol Sawmills, the first one was also lightweight and very portable. It was designed to make it possible for one person to lift it onto the roof of his or her car, drive it to the woods and cut timber there on the spot. The sawdust was left in the woods, and you could drive back home with sawmill and timber.

**2001.** The Logosol Sawmill model 7 is introduced, 18 feet long, wider, sturdier, and with more accurate height setting. On older Logosol Sawmills the height is adjusted with the help of lock pins. On the M7 the log beds are raised to the sound of clicks by using a crank. One click is either 1/8 or 1/4 inch, depending on the setting. With the M7 came more accessories to make it possible for everyone to build a sawmill that is perfect for his or her needs.

**1990.** Model 1 was made of standard aluminium profiles, screwed together like a big Meccano construction. Fascinating for those who like building kits, complicated to others. Due to this the M2 was introduced already in 1990. It was then that the guide rail, which is still in use, was designed. By using aluminium profiles made specially for the purpose, the sawmill became simpler to assemble and its length was increased to 16'.

**2011.** Now model 8 is introduced. The Logosol Sawmill M8 is the combined unplugged and stationary sawmill. Perfect out in the woods and at home on the backyard.

During the 1990s new models were introduced every second year and the number of accessories increased. When the M5 came, all development potential was exhausted. The work with developing a new generation of sawmills begun. The M5 is the ultimate sawmill of the original type, and is still being manufactured.

### USEFUL FACTS: The Byström family

**Bengt-Olov Byström** founded the company, and is still active as chairman of the board. He and his common-law spouse Christina are now machining the last mouldings for their house, which is largely built of lumber sawn on the Logosol sawmill.

**Joakim Byström** is active in the board, and his wife **Sara Boström** writes articles and other texts for LOGOSOL. They have a summerhouse lot, on which they intend to build a new house in the future.

**Mattias Byström** is Vice President and Product Manager, and his wife **Anna Byström Olsgrén** works as translator and language reviewer at LOGOSOL. Together they have recently restored and renovated a summerhouse next to the High Coast Bridge on the Swedish East Coast.

**Katarina Byström** works with organizational development and is responsible for



• MATTIAS & BENGT-OLOV.

international marketing. Her common-law spouse **Robert Berglund** is web developer and runs all LOGOSOL websites. Together they also run a B&B, which they have built with lumber sawn on the Logosol sawmill.

New building projects are always in the pipeline in the Byström family!



Bailey's president is an experienced woodworker:

# "I've been pushing lumber through Logosol machines for a dozen years"

Some people might not see a lot in common between the 17-foot trailer Nik Bailey lived in during his youngest years and the 100,000 square foot warehouse he operates now as president of Bailey's, a major supplier of Logosol products.

But the little trailer and the huge warehouse are both at the center of a family that's been devoted to the timber and wood products industry since the 1950s, when Nik's grandparents arrived in Northern California to work in the sawmills.

When he was born, Nik's parents, Bill and Judith Bailey, were living in a small trailer in Mendocino County where Bill worked as a timber faller. They'd occasionally move to where the work was—the Sierras or up to Oregon—but mostly stayed near the heart of the "Redwood Empire," Laytonville, California.

An accident forced Bill out of the woods in 1975, but he couldn't leave behind the industry he knew so well. He started Bailey's to get timber fallers the gear they needed to do their jobs.

The business Nik runs now bears little resemblance to the small startup that sold chainsaws and rugged work clothes to guys who would disappear for weeks at a time into the woods to ply their trade, although Bailey's still works hard to supply loggers with all the gear they need. Also, the fact that the company continues to meet the needs of professional chain saw users helps maintain Bailey's strong reputation in the field, which is important to its other customers who demand the highest quality and most reliable products.

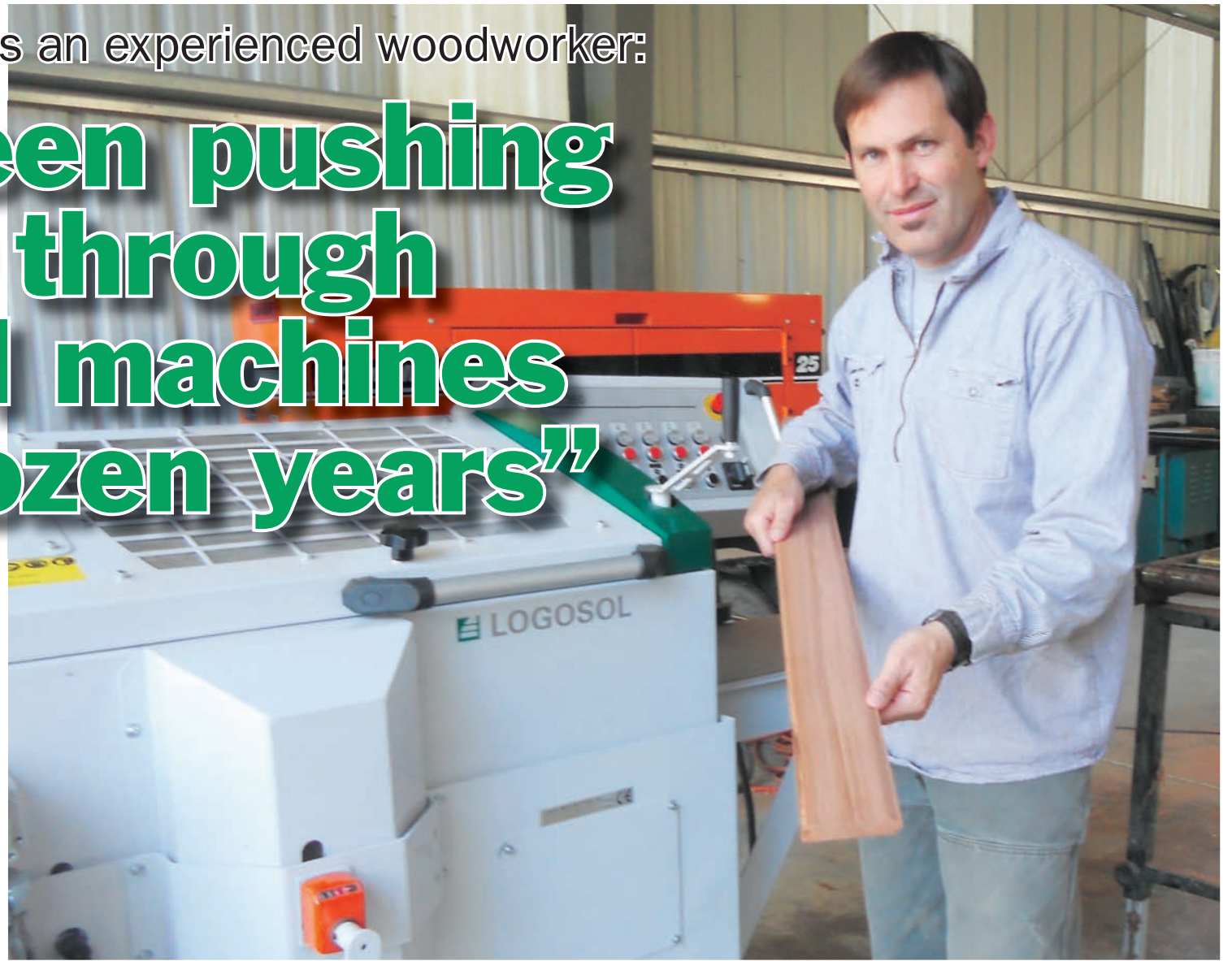
Now gear like the Logosol planer/moulder product line, portable sawmills and related items make up a substantial portion of sales, and like his dad, Nik knows the products he sells. His family owns forested property near Laytonville where he can test and use these products himself, including the Logosol moulder/planer.

"Like many property owners, we do a lot of thinning operations to manage the forest." This produces a lot of small diameter saw logs with very little commercial value, but they are perfect for the Logosol product line. Small logs can be processed easily into knotty paneling, which is found in most of the offices at Bailey's today. Even logs that were discarded over 100 years ago have value if you own a Logosol. "Once you have a Logosol machine, you find valuable saw timber showing up everywhere, much of it from non traditional sources." Nik's recent sauna project is a great example of putting such logs to use.

"It was kind of a unique situation. We had access to some salvaged redwood logs from a nearby property. The logs were probably cut around the turn of the century and were less than perfect, so they were left behind. There were lots of short logs with big knots and broken pieces, and some heart rot. But in between all these defects were clear, fine grained redwood boards. We milled them and then processed them further with the Logosol PH260 moulder," Nik continues.

Old growth, fine grain redwood lumber like that is hard to come by today. But Nik's problem was that the lumber produced was in the form of short, narrow boards. There weren't a lot pieces over 4" wide.

"What do you do with a bunch of 1" x



4" old growth salvaged redwood?" he asked himself. It's the perfect material for a sauna, and the PH260 is the perfect machine to efficiently handle these small, short pieces Nik had on his hands.

"When you get down to smaller pieces of lumber, there's not a whole lot of value to them as a rough piece of lumber. But if you turn them into a piece of paneling, flooring or moulding, then they're in a usable form. You add a lot of value to a fairly worthless piece of wood when you run them through a four-sided moulder," Nik continues.

The same principle applies to material at any mill. Small sawmills are left with a considerable amount of edgings from their process. This lumber might just get tossed into the burn pile. With equipment like the Logosol moulder/planers those smaller pieces can be run and "get the extra value an operator's looking for," Nik explains.

But, don't get the idea that Nik has just run a few hundred feet of material through his Logosol to build his family's new sauna.

"I originally saw some of the first Logosol moulders produced back in Sweden in 2000 and promptly got one over to Bailey's back then. I've been pushing lumber through Logosol machines for a dozen years."

"I've probably stood at those machines and fed material through for 200-300 hours," Nik says. He has knocked out several big jobs, including thousands of feet of beautiful custom floor boards and ceiling panels.

Growing up in a town like Laytonville—which in its lumbering heyday boasted some 22 small sawmills—Nik knows the industry well. He's seen the boom and bust periods, and the consolidation of the industry. He remembers the days when they were shipping logs to Japan and notes that now many logs are going to China.

Today, even when Northern California redwood lumber products are dominated by one or two large companies, he's seen some bigger mills make good use of Logosol moulder/planers.

"The neat thing about the Logosol is that the knives are interchangeable quickly compared to big moulders," Nik says. With those bigger machines "you might spend four to five hours setting the machine up for a run. Then you run several miles of material through. With the Logosol machines you can change the pattern out in 15 minutes so you can go from one pattern to another really quickly. You don't have to run miles to make up for your time to become efficient."

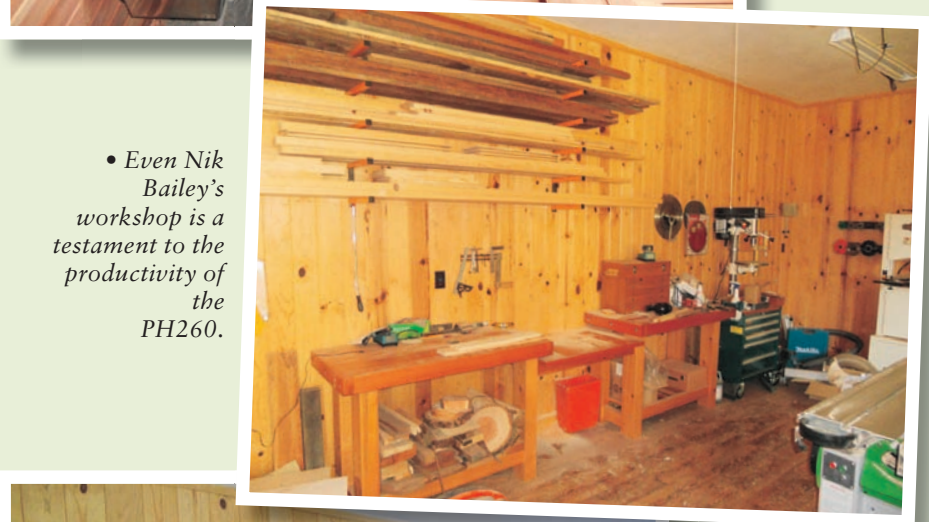
Due to Logosol's agility, Nik has seen a few bigger sawmills buy them "because they can shift patterns around to set up fairly quickly. If they get a small order, they don't have to spend half a day setting up for it."

"It's a quick, nimble machine, and it produces material of the highest quality" Nik concludes.

**YOU ADD A LOT OF VALUE  
WHEN YOU RUN WOOD  
THROUGH A MOULDER.**



• The Bailey's Sauna was constructed from salvaged Old Growth redwood.



• Even Nik Bailey's workshop is a testament to the productivity of the PH260.



• The Bailey home features Ponderosa Pine that Nik milled and planed himself.



• Nik's office ceiling at the Bailey's headquarters features beautiful Sugar Pine panels and beams planed using the Logosol PH260.





Laks frame saw in Tanzania brings

# PROFITABILITY TO A PINE PLANTATION

**Eight Laks saws turned a wrecked pine plantation into profitable forestry with record-low investment costs. The alternative would have been to burn down the whole forest plantation.**

Today, huge amounts of money are invested in wood plantations all over the world. The aim is primarily to plant trees and recreate the lungs of the Earth in order to bind carbon dioxide. But only too often the future of the projects is forgotten. How should the woods be taken care of, how are the efforts to be financed, and in what way will all these trees be used in the future? In Tanzania the solution was eight Laks Sawmills.

## NO STOP IN PRODUCTION

The frame sawmill Logosol-Laks is a simple and stable construction with high capacity and high accuracy, and it leaves a very clean cut. The frame saws were placed side by side with a roller-track system.

The advantage with this was that the logs could easily be moved between the different saw units, and that a fault in one machine did not stop the entire production.

**THE ENTIRE INVESTMENT WAS PAID OFF IN 8 MONTHS WITH A YEARLY PRODUCTION OF 12 720 000 BOARD FT**

“The plan was that one frame saw would always be shut down for servicing, and this way maintenance could be carried out without disturbing the production,” says Klas Bengtsson, who runs two projects in South America that aim at using forests in a responsible way with the help of small-scale solutions.

The plant was started five years ago and it was immediately a success. The entire investment paid off in eight months, with a yearly production of 12 720 000 board feet. The sawmill is still in operation, now with new owners, and the “worthless” pine wood generates export incomes to Tanzania. A plantation that was unsellable a couple of years ago, could in 2007, after very modest investments, be sold for 13 million US dollars. Now SSC Forestry is running a similar project in southern Chile, on a smaller scale for a start. Also this time, the Laks frame sawmill is in the center of the project.

## AMAZING RESULT WITH THE SAUNO KILN

“We have not found any other solution that has so low investment and operational costs per produced board foot,” says Klas.

The big challenge in Chile is the seasoning of lumber. Different methods have been tried, and the best results have been attained



• The frame sawmill Logosol-Laks is a simple and stable construction with high capacity and high accuracy, and it leaves a very clean cut. The frame saws were placed side by side with a roller-track system.

with the Logosol-Sauno kilns. These kilns are today sold by Logosol in the US through Bailey's. The lumber is of beautiful, valuable, and hard-to-dry wood types. The drying results are amazing, and now tests are being carried out where biofuels are being used in order to lower the electricity costs. Low costs make it profitable to process even small-diameter logs. This creates a value in woods that earlier were worthless, and it gives the wood owners resources that they can invest in forest restoration. In southern Chile there are many examples of natural forests that have been neglected for centuries. Successively only the most valuable trees have been cut down and the forests have then been left to take care of themselves.

## USEFUL FACTS: Laks 330

**Weight:** 1654 lbs  
**Length:** 22 ft  
**Height:** 5 ft 5"  
**Width:** 4 ft  
**Max. number of blades:** 12  
**Sawing height:** Max. 7"  
**Frame width:** 13"  
**Continuous output:**  
 Gas, 23 hp,  
 Electric, 7.5/  
 11 kW  
**Feeding rate:**  
 2-4 ft/min



• Mattias Byström sawing oak with Big Mill System.

## Cutting oak with Big Mill System

**How do you cut an oak log that is three feet in diameter and weighs nearly 2 tons? We used the Big Mill System – see pictures above from the big cut!**

The owner of the oak log asked Logosol for help. The mighty oak was just over three feet in diameter and eight feet long.

“Fresh oak weighs about 57 lbs/ft<sup>3</sup>, so the log weighed about two tons. Then it is a big advantage if you can cut without having to lift up the log onto a sawmill. The job was perfect for Big Mill Pro and Big Mill System”, notes Logosol's product manager Mattias Byström, who took up the challenge.

Four people were required to lift away the first batch.

“The boards we cut out weighed about 110 lbs each”, says Mattias Byström, showing off the amazing results.



• Bengt-Olov Byström, founder of Logosol.

## Bengt-Olov's TIPS ON CHAIN SHARPENING:

✓ **Sharpen before it gets dull!**  
 Sawing with a dull chain puts a lot of stress on the cutting equipment. It is important to sharpen the chain before it gets dull.

✓ **Sharpen it comfortably!**  
 It is always easier if you have a comfortable working place. Fasten the guide bar with a clamp when sharpening, and use a filing vice if you have an electric saw and are sharpening manually.

✓ **Don't forget to change sprocket!**  
 The best is if you alternate between four chains using the same sprocket. When the chains are worn out, you change the entire set including the sprocket.

✓ **File the bar with a UKF edge file**  
 If the chain has been damaged the guide bar can get unevenly worn. File the bar rails level using a UKF edge file.





• Logosol's product manager is a frequent user of the Logosol Timberjig.

## Your wood-working journey starts at \$99.99

For just \$99.99 you can get started with sawing with the LOGOSOL Timberjig.

The feeling when taking the first cut is hard to beat. Many of our customers who started with the Timberjig, did so only because they had a couple of trees in their garden, but they soon experienced the great joy of sawing boards and noticed how well the Timberjig worked. After having chosen to invest in more professional equipment, like the LOGOSOL M8, their hobby has turned into wood processing businesses.

When you have begun to appreciate processing your own wood, investing in a planer/moulder, which accelerates the profitability and joy, is not a big step. When you can produce flooring, furniture, and paneling, there is no limit to what you can create in wood – and you can even make a living out of your passion.

With LOGOSOL's machines, you always have the possibility of expanding your interest in wood. Maybe you start out with a tree in your garden and a Timberjig – or perhaps you immediately buy more professional equipment. Wherever you are on your woodworking journey, we have a cost-effective and smart solution that suits you!



• When you have begun to appreciate processing your own wood, investing in a planer/moulder, which accelerates the profitability and joy, is not a big step.

# A French Mayor Builds Unique Log Homes USING TWO LOG HOUSE MOULDERS

France is a country built from stone, brick and, in recent years, concrete. Raymond Herberateau intends to change all that. He may well be a mayor, but he's going to achieve this change using his own sawmill.

Raymond Herberateau is mayor of the small village of Les Ventes de Bourse just outside the town of Alençon in Normandy. His wife comes from Belarus, and he has drawn inspiration on how to build climate-smart and energy-efficient housing from the same country.

"The log houses in Belarus are fantastic," he says enthusiastically.

That may be true, but how does such a style fit in with the French building tradition? The houses along the country lanes, including the mayor's, are all built from natural stone walls. On the other hand, the Belarusian style of construction does suit both the surrounding countryside and our shared environment much better.

### BETTER FOR THE CLIMATE

"One of the French government's aims is to increase the number of wooden houses," explains Raymond Herberateau.

There are two reasons for this. Firstly, trees bind carbon dioxide and by building out of wood you could say we're imprisoning the greenhouse gases in the walls. Secondly, wood is an excellent material for building low-energy housing. The inspiration from Belarus caused a few problems. Ready-to-use timber cannot be bought in France. The solution was to buy a sawmill and start making timber from trees felled in local forests.

"In this neck of the woods, there's a lot of Douglas spruce, which is ideal for timbering. And there's also a fair amount of oak," he says, pointing to a healthy pile of 30-ft-long logs.

The plan is to build 2-3 fairly large timbered houses for year-round occupation on the property, for rent and for sale. The houses will be made from 5-inch lumber and the inside of the walls covered with cellulose insulation. They will be passive houses that only need additional heating on the coldest days of the year.

The project started in early 2009 with an assessment of the market's small-scale sawmills. A lot of thick and long wood needed to be sawn. The best option was a band sawmill and he found the Logosol Norwood band sawmill on the internet. This sawmill met all his requirements and Logosol also offered a log molder, which Raymond Herberateau thought was very good value for money.

### DOUBLE MOLDER

In the spring of 2009 he traveled to Logosol's headquarter in Sweden so he could take a proper look at the sawmill and log molder. He liked what he saw and it was a done deal. There is now an impressive setup installed in a newly built machine room in Les Ventes de Bourse. Bolted securely to the concrete slab floor is the sawmill with a 36-ft-long rail, plus a double log molder.

"One side is set up for straight planing and the other for molding. It saves a lot of time," explains Raymond Herberateau.

He believes the log molder to be an unusually well-priced piece of machinery. He also bought two special handheld machines for making the corners. They cost more than the molders. The sawmill is not alone; the machine room also boasts a Logosol PH260 4-sided planer. Originally this was used to make dowels, round battens, for the timbering. Its next task will be strips and panels for the houses.

### THE HIGHEST PRECISION

When we visited him, Raymond Herberateau was in the middle of aligning his setup, helped by Gérard Doucet, who is assisting with the project and will be building a timbered house for himself as well. The timber looks like a cross between the Swedish version with tongue and groove and the American D logs.



• Using two Log house Molders LM410, is a real time saver. One is for planing and the other one is for molding. "This saves much time", says Raymond.



• Gérard Doucet is checking the result of the milling. "The accuracy is perfect", says Gérard and Raymond Herberateau.

"I made a sketch of the profile shape during a trip to Belarus and sent the drawing to Logosol, and they made up the right sort of knives," he tells us.

This is a profile with a push fit that requires high precision when molding. Which is why the 36-ft-long sawmill is equipped with a precision molder guide on each crossbar along the entire length of the rail. Once everything is set, log after log can be sawn and molded on a conveyor belt.

"I've always been interested in wood. For me this is both a real pleasure and a business project. The result will be genuinely attractive houses," says Raymond Herberateau.

### USEFUL FACTS: Logosol LM410

**Length:** 28 3/8" **Height:** 39 7/16"  
**Width:** 55 1/4"  
**Weight:** approx. 441 lbs  
**Max. width:** 23 11/16"  
**Height from rails:** 23 11/16"  
**CUTTER HEAD**  
**Diameter:** 2 7/8" **Width:** 16 3/16"  
**Speed of rotation:**  
 approx. 6000 rpm  
**Max. take-off when planing:** 5/16"  
**Max. knife pattern protrusion:** 1"





# Unique Home creates time for life and family

Is it possible to create a better life for oneself in a way that also cuts costs and creates more time for family? Magnus Hjorth and Malin Wallinlind were successful at doing just this. The way there involved their own sawmill, salvage items, and dedicated effort.

For Malin and Magnus the house is a part of their philosophy on life. Their basic premise is for living to be environmentally friendly; but even more important is the concept of having control over one's own life. It was a matter of getting out of the rat race and creating more time for their children.

## TOP OF THE HILL

She and Magnus selected a lot that was at the top of a slope. The last part is pure slalom material. The advantage of this is a detached location with an incredible view over the valley and lake. The lot was covered in trees, and one of the first investments they made was a sawmill, an electric Logosol M7.

Ecofriendly building now incorporates straw and clay. This was another method the couple selected, but not only for environmental reasons.

"It is the best method for those building their own homes, as it's relatively simple to learn and forgiving of mistakes," explains Magnus.

The frame of the house is made of thick wooden posts. In principle, double layers are built with straight edges and between these, compressed bales of straw are stapled in. The straw is covered with a mixture of clay and cow manure. At first Magnus and Malin were reluctant to get into using manure, and they initially tried working without it.

"We quickly realised the cow manure was completely necessary. It makes everything adhere better and easier to work with," says Magnus.

## COLD WINTER

He notes that the process of getting used to it is something like becoming a parent and changing diapers. Now that the house is done, you can't smell any trace of the manure. On the outside, the clay is covered with a wooden panel that provides protection from the wind. The inside is whitewashed.

The entire building took two years to make, the family moved in a year and a half ago. Their second winter was the coldest in living memory, and the house lived up to the challenge outstandingly. The thick straw walls provide ample insulation, and normally the heat generated by human inhabitants, electrical appliances and solar collectors is enough to keep the house warm.

The heart of the heating system is an accumulator tank charged by the solar panels. During the summer months this proves sufficient to heat both water and house. During the winter, a secondary fire is kept burning in a wood-burning stove connected to the tank.

The operating costs are extremely low. Water and waste are handled through a common purification system. Electrical consumption is around 3,000 kW a year. And the construction itself was record low. When Magnus last totalled up his receipts, the final cost was around \$57,000. This for 1130 square feet of living space, plus secondary space and a workshop.

"The bank did not believe in the project. Instead, we had to find alternative means of financing, through a saving and borrowing program from JAK cooperative bank," says Magnus.

**THE FINAL COST FOR THE CONSTRUCTION ITSELF WAS RECORD LOW.**

## RE-USED MATERIAL

The interest-free JAK loan means that the house will be paid off in a few years. In combination with the inexpensive operations, this means that the family has avoided significant costs and can now budget in an entirely different way. They can work less and make themselves and their children a



• The family's home is situated at the top of the hill. The residence totals 1130 well-planned square feet and the red building is used for workshop- and storage space.



• Olof makes sure that mom and dad have cut and nailed the boards properly.

## USEFUL FACTS: House project

Magnus used his Logosol sawmill to cut wide pieces of wood. From these pieces he could then cut out the curved details, which give the house its unique character – all at a very low cost.



• Malin Wallinlind and Magnus Hjorth won more time for themselves and their children Olof and Erik, thanks to low living costs.

priority, without having to cut back.

"During construction I worked in home services and heard several people say they thought we had neither electricity nor running water. We have everything you'd find in an ordinary house," says Malin, pointing out the only new appliance in the house – a dishwasher.

Most of the building material and installations are recycled or we built them ourselves, or we bought them used, salvaged them, and so on. The result is a personalised home as far away from a standard cookie-cutter house as you can get.

• Erik's room was built and furnished with a high degree of imagination.







• Jim Birkemeier (Left) shows Josh Manaugh how to turn dead oak trees into high value flooring. “The market value for our floor boards is about \$3 sqft. By simply nailing the board to the customer’s floor, we earn another \$3/sqft. Sanding and varnishing earns another \$3/sqft. Installing our flooring in our customer’s homes earns us retail prices, making the whole forest to finished flooring system profitable.”

## The PH260 Spins Straw into Gold

**I LOVE to make what others consider waste wood into high-value beautiful long lasting wood products that earn me a good income.**

Worthless logs – the wood that should be harvested first in good forest management are small diameter, curved logs, unwanted species, and dead timber – normally used for firewood or pulpwood. We have developed our business to do annual harvests that improves the forest and pays a good logger and timber grower an excellent wage. We earn 100 to 1,000 times the traditional market value paid to forest owners for these low value trees.

### UNLIMITED PRODUCTS

We make and install custom blended hardwood flooring, cabinets, countertops, & furniture – selling our products direct to local homeowners. We use what the forest gives us and make things other people need. Our Custom Blended Flooring is an expression of our natural forest.

A woodworking shop in our 100 year old dairy barn transforms low value lumber into high value products. Basic tools – a table saw, a shaper, chop saw, one sided planer, and our Logosol Molder are used to make unlimited products.

Flooring is our main output. We use the PH260 to make our tongue and groove flooring symmetrical – usable with either side up. This saves a lot of wood, but you have to think when you install it to show the prettiest side of the board.

### LUBRICATE THE SURFACES

I sawmill lumber 1 1/16th inch thick which comes out of the solar heated kiln at about 1”. We skip plane the boards to 15/16th inch with a one sided planer to remove the band sawblade ridges, and any thick portions of the board on one face. This makes the pass through the Logosol smoother, producing a better surface on our floor boards and millwork. We wax the bed of the Logosol frequently with paste wax, to clean and lubricate the surfaces that touch the wood – keeping the boards flowing efficiently through the machine.

Higher value products like cabinets, wood countertops, and furniture earn us 5 times the value per board foot of lumber. We use the PH260 to S4S wood strips for glue ups.

Buy Local and Sell Global with Internet sales. Search out the Best of the Best Ideas.

Every purchase you make is a vote for the future of your local economy – every vote counts!

By Jim Birkemeier, Spring Green, Wisconsin

• Logosol’s CEO Malte Frisk and Product Manager Mattias Byström are happy and proud to ship a PH360 to Chad and Roger Jones’s family business in Batchelor, Louisiana.



# “LIKE ADDING ANOTHER PERSON”

**Chad Jones is too busy to talk. He’s helping load up a customer’s truck with some cedar he and his dad, Roger, just finished milling. “It’s been really busy lately,” Chad says after they’re done loading and the customer is on his way. “It slowed down a little last winter,” he adds “but that may just be due to the weather. It rained a lot.”**

Jones & Jones Cypress is a family operation. It’s just Chad, Roger and their equipment, including a Logosol PH360 they added a couple months ago and which has proven to be a major productivity improvement for their operation.

Located in Batchelor, Louisiana, they’re in the heart of cypress country and that tells you one of the most important facts about their mill: they work with cypress. Virtually all of the logs they run come from within about a 100 mile radius of their mill.

The father-son partnership started back in 1997 when they were working in cabinetry. They started milling their own lumber to complement their cabinet business.

“Pretty soon the mill became full time,” Chad explains. And, in a way it brought the family heritage full circle. Roger’s father, Chad’s grandfather, was a logger and operated his own small mills back in the day. Roger worked all his life in carpentry, moving to cabinets and then finally making the jump to milling with his son. Roger has spent his entire life in the area and still lives in the home where he was born and grew up.

### MAKES BIG DIFFERENCE

As a two-man operation, anything that increases throughput is a welcomed addition and that’s the way Chad sees their new Logosol PH360.

“Before we had a three-edged moulder. We had to plane the backside first and then do the front,” Chad explains. This meant that most of their finished products required two passes through their old moulder/planer. “With the Logosol, we can get it all done at once.”

The Logosol PH360 isn’t the only equipment the father-son team has ordered from Bailey’s over the years. They’ve been customers for quite a long time and some of their major purchases were an Alaskan Chainsaw Mill along with a 12-1/4” beam planer.

When a small operation like this can cut its workload in half, it makes a big difference to the bottom line.

Jones & Jones Cypress deals with local builders and property owners. Much



• Much of the work is for new home construction, although outdoor additions, like pool houses and even outside kitchens have become increasingly popular.



of the work is for new home construction, although outdoor additions, like pool houses and even outside kitchens have become increasingly popular.

They’re equipped to mill virtually any dimension of cypress lumber, along with flooring, mantles, baseboard, trim, beams, posts, crown molding, tongue and groove, and V-cut tongue and groove.

“One day we might be sawing posts for a house order and then the next two to three days we might be milling 2,500 board feet of tongue and groove,” Chad says. And, on the day we caught up to Chad, they just finished

up an order of 1,700 square feet of V-cut tongue and groove. That specific product – V-cut tongue and groove – is one of their biggest sellers and with their new Logosol PH360 they can cut their production time in half.

### CONNECTED WITH LOGOSOL

In the Jones’ local area, where the economy is mostly farming along with a little light industry, their V-cut tongue and groove is a frequent choice for both interior siding and ceilings. They’ve built up a lot of repeat customers in the last 13 years and demand for this product is running high.

“It’s just me and my dad. Any kind of time saving element we can come up with makes things more cost and time efficient,” Chad explains. “In just the time that it would take to plane the backside before, now we’re finished.”

While most of their material comes from nearby logging operations, occasionally some special logs will show up at Jones & Jones Cypress: sinker cypress. With two rivers nearby, one being the Mississippi, they’re in the perfect location to have an occasional sinker cypress make its way to their mill.

“Time to time a fisherman or boater will find a log that’s popped up and started to float down the river. They’ll bring them to us and we’ll mill them,” Chad says.

When Chad and Roger mill these logs, it’s the first time the wood has been exposed to

oxygen for several hundred years. When air hits the newly sawn lumber, the wood changes color and gives it a totally unique look. This is truly unusual lumber that can add a beautiful look to projects.

On occasion they also get the rare pecky cypress, which can’t be discovered until the log is cut. Pockets, or holes are created throughout the wood in a circular pattern that follows the rings of the tree. When milled, the holes appear random and it’s a great choice for customers who want a rustic look.

Chad remembers browsing through Bailey’s catalogs and the company’s website, and checking out the Logosol PH260 – but it always seemed a little light for their purposes. He was on The Forestry Forum one day, which Bailey’s help sponsor, and found the PH360. He connected with Logosol on the forum and got the information he needed to decide that the Logosol PH360 would be perfect for Jones & Jones Cypress.

They placed their order with Bailey’s and now have their equipment installed.

The pair enjoys being a small operation with no employees. When business slows down, they don’t have to “find things for people to do,” Chad laughs. And, adding a piece of equipment like this is “like adding another person,” he says, but without any of the downsides.

### USEFUL FACTS: Logosol PH360

**Length, width:** 117” x 44”  
**Height:** 56”  
**Weight:** 1322 lbs  
**4-SIDED MOULDING**  
**Width:** 16”  
**Height:** 3/8” to 5”  
**2-SIDED MOULDING**  
**Width:** 14”  
**Height:** 3/8” to 9”  
**FEED, PLANETARY VARIATOR**  
**Output:** 1 Hp  
**Feed rate:** 11-52 ft / min or optional 20-98 ft/min.







## M7 in the Caribbean

Logosol was invited to St. Vincent to provide training for the St. Vincent & The Grenadines' Ministry of Agriculture, Forestry and Fisheries. The Ministry had just purchased a Logosol M7 Sawmill. Logosol's trainer helped the enthusiastic beginners to get started correctly with the sawmill.



## Ulf from Sweden produces playrooms for IKEA:

When you leave your children in the playroom at Ikea, take a closer look at the fixtures and fittings. Some of them have been produced using a Logosol PH260 four-sided planer/moulder, among other equipment. "We have fitted out 150-200 playrooms throughout the world," says owner Ulf Feldt from Sweden.



## Extreme Weather Milling

Of course you can cut lumber even though it is winter and cold. This is proven by the picture above, where the temperature is -26° F. The owner is fulfilling his dream of building a cabin in the middle of the wastes of Alaska. The logs for the cabin are cut by a Logosol M5 sawmill, which has been taken to the building site by airplane and snowmobile.



## Artwork in wood

Klaus Kralovec is an artist who has chosen to work in wood. By gluing together different types of woods into blocks and then plane and process the material, he creates beautiful designs and unique products. In his workshop stands a four-sided planer/molder, PH260.



## Log house-building course in Gran Canaria

Through Logosol in Germany, Carlos Velasques, forest manager in Gran Canaria, found an excellent course leader for a weeklong training in sawing and moulding log-house lumber on the Logosol Sawmill. Erik Pohl, master carpenter and Logosol customer from Germany taught the staff and forest owners in Gran Canaria how the sawmill works and how to build log houses.



## Ice as clear as glass

The first ice sculpture Tomas Tremml made was a swan, and his first customer was the traditional delicatessen store Käfer in Munich. Nowadays, his company, called Ice-Team, has about 1400 customers. Blocks of completely transparent ice are his working material. The ice blocks can weigh up to four tons. First, Hans works these blocks with a stack cutter from Logosol, then, he uses his Logosol Sawmill M7. Above is an example of Hans's work: an ice pedestal with the frozen logo of the opening game of Bayern-München.

## Closer to nature with your own raft


"We are so busy that we don't have time for the most important thing in life, life in itself," says Martin Richter who has built two rafts using his two sawmills – to inspire others to enjoy nature. The two rafts are for hire and anchored North of Berlin. Martin has built them himself using a Logosol Sawmill M7 and a Big Mill Basic. The rafts are made of oak, cut down, according to old tradition, in the winter just before full moon.





# Whittles

THE WOOD-WORKING BEAVER



© ART SHIRLEY

NOW THAT THE EQUIPMENT'S PACKED, YOU GUYS FOLLOW ME OUT TO THE NEW SITE. C'MON, GUYS, WE'RE **BURNING DAYLIGHT!**



THAT NEW SUPERVISOR IS QUITE THE **EAGER BEAVER!**

YES, HE IS, GRAMPS.



HE'S A **VERY COMPETITIVE GUY...ALWAYS HAS TO BE FIRST ON THE SCENE.**



BUT THAT MEANS WE'LL BE **WAY AHEAD OF THE OTHER TEAMS.**



OF COURSE, IT CAN ALSO MEAN WE'VE GOT A BIT OF A **HURRY UP AND WAIT SITUATION.**

SHOULD BE ANY TIME NOW.



## Current LOGOSOL Specials



Item No. LSL 4900 000 1000

from *Bailey's*!

### Big Mill Timberjig

Reg. **\$199<sup>99</sup>** **Save 30%**

Now Only **\$139<sup>99</sup>**

### M8 Sawmill Kit

USE CODE **LGL123** WHEN ORDERING

Reg. **\$2,999**

Now Only **\$2,199**

Save **\$800!**

Item No. LLSL 4508 000 1005

## Here's How to Order

Place your order by phone, mail or online.

You are warmly welcome to contact us!

Telephone: Toll free 1-877-LOGOSOL

Web store: [www.baileysonline.com/logosol](http://www.baileysonline.com/logosol)

E-mail: [logosol@baileysonline.com](mailto:logosol@baileysonline.com)

Bailey's  
1222 Commerce Ave., Unit D  
Woodland, CA 95776

Our mailing address:  
P.O. Box 550  
Laytonville, CA 95454

**Bailey's 100% Satisfaction Guarantee:** If you are not completely satisfied with a product when it arrives you may return it within 30 days for a refund or exchange. Please call or email (see above) for an RA# for your return.

**30-Day Refund or Exchange:** When you get your order you have 30 days to return the product for an exchange or refund. We encourage that products are insured and traceable when they are returned for your protection. For exchanges Bailey's will waive surface shipping charges on like items. If your shipment arrives damaged, call right away and we'll have the shipper come and inspect the package. In most cases we'll be able to reship immediately.

