

# LOGOSOL FRESH CUT!



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News for the Outdoor Craftsman • No. 1 - 2009



## Celebrate with Logosol!

This year we celebrate ten years of Logosol in the U.S., and Logosol AB celebrates their 20th year doing business worldwide. During 20 years, Logosol has changed from a company that manufactured one sawmill to the hub of a growing international network. Logosol gives customers from all over the world access to the widest range of products in the business, from the small Big Mill to the high-productive Låks Sawmill and with a service level that is out of the ordinary.

Pages 12-15

## Sawing in the circus tent

Simon Edström has the perfect saw house for his Logosol Sawmill: an old circus tent, which also has room for the sawn lumber. Read more at page 10.



**NEW MODEL**  
Logosol PH260

Page 3



## Saving forest in Tanzania

Eight Laks saws turned a wrecked pine plantation into profitable forestry with record-low investment costs. The investment paid off in eight months. The sawmill was started up in 2005, and today it produces 30 000 cubic metres per year.

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## Light a Swedish Log Candle!

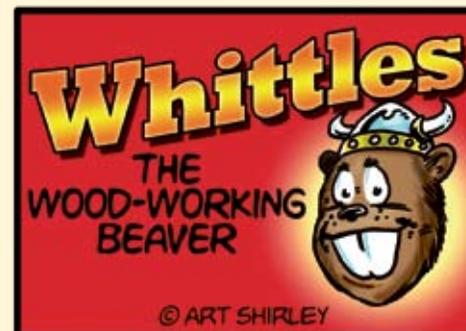
Here's a great idea the creative folks at Logosol headquarters in Sweden use when they have an outdoor event in the evening - Swedish Log Candles. They are simple to make and burn magically!

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**NEW PRODUCT**  
The Sauno kiln

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We are happy to have been in the U.S. market for over ten years and we look forward to many more years of operation here. We are happy to report that our sales are holding their own in this challenging economy. Because of the strong dollar on the world market, we have been able to provide a price reduction on our entire Logosol line. We plan to keep this savings on our equipment available as long as possible. So, it's a great time to purchase Logosol products! Our price savings on the PH260, for instance, is over \$2500!

Logosol has a long history of providing a good product at great value. Our products hold their value for many years, which is why we are able to offer such a powerful warranty. Our Two Year warranty is one of the strongest in the industry. It's always important to know that when you purchase a piece of equipment, you are receiving maximum value for your investment and that the company you are purchasing from will be there to support you. You can know that Logosol is committed to being there for our customers and to back up any equipment we sell.

This year we celebrate ten years in the U.S. and our parent company, Logosol, AB in Sweden celebrates their 20th anniversary. These are key milestones in our corporate histories, and it says to you that Logosol is going to be around for a long time. We have been tested, just like every other company with over ten years in business, and we are proud to say that we rose to the challenge. We are a stronger and healthier company today because of our ability to overcome whatever

# Congratulations to Logosol!

obstacles faced us. I say this to assure you, our valued customer, that we plan to be here to support you and provide equipment that will prove valuable in your endeavors. Remember this: We do not sell equipment that does not work; we do not sell equipment that does not provide good value; and we do not have unhappy customers. You can be assured that when you make an investment in Logosol equipment, you will be getting maximum value for your money!

Recently, I was talking with a customer who had a history of running larger moulders. He had recently downsized to the PH260 and was now enjoying lower electrical costs, quicker setup times, and of course, lower equipment and tooling costs. When I asked him how the finish coming from the PH260 compared to the finish off his previous larger moulders, he quickly said, "it's three times better!" That's a good example of how Logosol equipment can bring lower costs, yet better results to your operation. And, it's the best example I can think of that demonstrates the brand of Logosol.

I want to point out two new products that Logosol is introducing this year – the Sauno Kiln and the Logosol-Laks Frame-Saw Sawmill. These two new Logosol products follow this pattern of bringing excellent value and results to their owners. You can read about these items on our website which is quickly expanding



to provide more information and greater ease of shopping Logosol!

Thank you for taking the time to read this issue of FRESH CUT. I hope you find the information here helpful, and I hope you will help us celebrate our ten year anniversary. I look forward to the next ten years of Logosol!

**Janne Engvall**  
President Logosol Inc.

## FRESH CUT!

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**Special thanks** all Logosol friends who helps us make Fresh Cut better!

**Fresh Cut** is printed in 30 000 copies and comes out twice a year.

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### THE BRAND OF LOGOSOL

## Dependability • Joy • Fellowship • Profitability

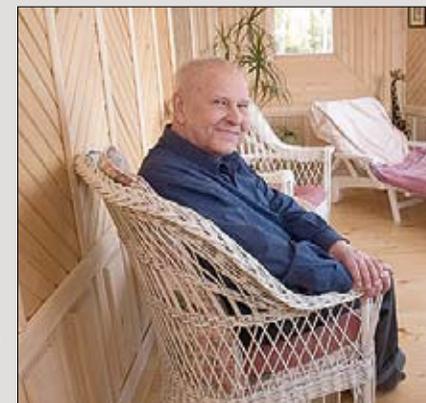
### Dependability

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 Fresh Cut 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.



Now Logosol LM410 is also available with gasoline engine. It is the same powerful log house molder as the electric version, suitable for you who work where there is no access to electricity. It can also be used on other brands of bandsaw mills.

## Mold Large Logs and Beams with Gasoline or Electricity

The new product of this fall was the log house molder Logosol LM410. Now, it is available with both electric and gas motor.

The purpose of this project was to create the best log house molder on the market, with precision to mould the American type of house timber, D-logs.

The timber has double tongues and grooves and a flat inner side for quick assembly and air-tight walls. Up to now, it has only been possible to make D-logs in industrial machines.

The focus on D-logs came because Logosol and its partner Norwood are big on the North American market.

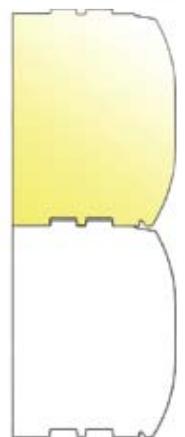
The challenge was solved by new log posts that make it possible to mold the upper and the lower side in line with each other. This also gives a superior precision for the Scandinavian version of log house timber. In America the timber should be large. Due to this, LM410 has a wide, 16" cutter head. In addition, the cutter head can be moved sideways, which allows you to plane widths up to 23 11/16". From this feature an additional possibility emanated: planing beams. You can joint and

plane a beam of up to 23 11/16"x23 11/16". This is much coveted in countries such as Germany, which has a tradition of building half-timbered houses. Large beams also have an important place in the Scandinavian building tradition.

Logosol LM410 is now available both in an electric version and with a reliable gasoline engine from Honda. It is also compatible with other brands of bandsaw mills, since the rail width can be adjusted. \*



The photo speaks for itself when it comes to the capacity of the log house molder LM410 for Logosol's bandsaw mill.



The American type of log house timber, D-logs, requires high precision. Logosol LM410 can do the job.

## Stronger Motor, Larger Knife Protrusion and Spindle Extension

When Logosol turns 20 years, the planer/molders have their 15th anniversary. This is celebrated by making the four-sided planer/molder PH260 stronger and even more versatile.

The first planer/molder was a three-cutter machine that was launched in 1994. At that time it was a sensation. It was the first reasonably priced planer/molder for production of paneling and moldings.

The customers were very pleased, but wanted a fourth cutter head to make it possible to get the job done in one single operation.

Their wish came true in 1997. Since then the four-sided planer/molder has been upgraded once. This time it was a matter of honing an already good machine. Now it is time for the

third improvement. Again, according to the customers' desires. The new features are concentrated to the upper cutter. Each of the four cutters has its own motor. The hardest loaded is the upper cutter. It is wider than the lower cutter and it both cuts the timber into size and, if required, molds it. The continuous output on this motor has now been increased from 3 to 4 kW.

The stronger motor, on its part, gives power to cut deeper patterns, in other words you can use knives that protrude more from the cutter head.

When the knives protrude more, the

feed roller before the cutter and the rubber roller after it get in the way of the knives. For this reason, the rollers have been moved away from each other to give room for longer knife protrusion.

The result is a possible knife protrusion that has been doubled from 10 to 20 millimeters. In all other respects the Logosol PH260 is the same reliable and easy-to-set-up machine as before. If you do not know anything about this new feature, you probably cannot see any difference. But the one who is going to cut deep patterned moldings is given new possibilities.

Another recurring request is the possibility to cut thicker timber with the side cutters. This is already



Logosol PH260 model 3

possible. By fitting spindle extensions on the side cutter spindles, you can mount higher cutter heads.

The spindle extension has earlier been a special product, but now it becomes a standard accessory.

With extensions and higher cutter heads you can, for instance, produce tongued and grooved 5-inch timber. \*

# Eight Laks Sawmills Produce 1 060 000

## The Investment Paid off in Eight Months

The big challenge when it comes to industrial projects in developing countries is to find simple and durable equipment that give high productivity and quality. Klas Bengtsson in Sweden has made this challenge his mission in life. In Tanzania, the result was a plant of eight frame saws from Laks. The sawmills paid off in eight months and they produce 1 060 000 cubic feet of lumber per year.

Klas has a past as a researcher at the Swedish University of Agricultural Sciences in Uppsala. Nowadays, he is CEO for SSC Forestry, which has activities all over the world. The organization works with sustainable forestry, which includes environmental certification of forestry and projects that aim at processing and marketing forests in a responsible way.

“Leaving a forest to take care of itself is not good environmentalism,” says Klas.

### The forest was to be burnt

Five years ago, SSC Forestry participated in a project in Tanzania. The problem was a large pine wood that had been planted with no thought of the future. The plantation was in poor condition and the owners were thinking about burning it down and instead planting eucalyptus.

“A planted wood is wrecked in 20 years if you do not take care of it,” says Klas.

Instead, SSC Forestry made a scheme in three parts. The plantation had to be managed efficiently and on a long-term basis. The outcome was that the entire plantation became the first in Tanzania that was environmentally certified by the Forest Stewardship Council (FSC). They found export customers for building lumber, but the proceeds could not cover the cost

for a traditional large-scale sawmill.

“Developing countries lack the infrastructure and knowledge required for managing such a plant,” says Klas.

Instead, the solution was to invest in eight frame saws from Laks, and one second-hand bandsaw from South Africa to produce the cants.

### No stop in production

The frame sawmill from 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 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.

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 1 060 000 cubic feet. The sawmill is still in operation, now with new owners, and the “worthless”



*Eight Laks saws turned a wrecked pine plantation into profitable forestry with record-low investment costs. The sawmill was started up in 2005, and today it produces 1 060 000 cubic feet per year.*

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 centre of the project.

“We have not found any other solution that has so low

investment and operational costs per produced cubic feet,” says Klas.

The big challenge in Chile is the seasoning of lumber. Different methods have been tried, and the best results have been attained with the Sauno kilns from the Swedish company Plano. These kilns are today also sold by Logosol. 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 regulation. In southern Chile there are many examples of natural forests that have been neglected for centuries.



*Logosol Laks 500, the medium model of three frame saws, which are all of superior capacity. It is this type of sawmill that is used in Tanzania. Experience shows that this sawmill definitely offers higher capacity for the money invested.*

# Cubic Feet per Year



*“Leaving a forest to take care of itself is not good environmentalism,” 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 from Logosol.*



*Kalle Laks is teaching the sawmill staff in Tanzania.*

Successively only the most valuable trees have been cut down and the forests have then been left to take care of themselves.

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?

SSC Forestry also runs a project in El Salvador, where they will cover the whole chain from seedling nursery to finished products. The seedling nursery is already fully running, and plants

are being sown.

The next step is to build a sawmill according to the tested method with equipment from Logosol. Klas Bengtsson has used Logosol equipment since the early 90s. As a researcher at the University of Agricultural Sciences he used the Logosol Sawmill as a tool in education and research. Later, as a consultant, he used it when teaching forest owners the value of their own forests.

When Klas needed to bring the Logosol Sawmill in his baggage on a flight, the problem was solved by dividing the guide rail in two pieces that then were joined together with a joint coupler. Today, all Logosol Sawmills look this way. \*

## New Product in Logosol's Assortment: The Kiln that Makes the Lumber Straight

Drying lumber is a great challenge for small-scale woodworkers. You can let nature do the job, but then it takes five years until the lumber is dried to levels acceptable for cabinet-makers. With the Sauno kiln it takes a couple of weeks. Now, Logosol starts selling it.

The Sauno kiln has existed almost as long as the Logosol Sawmill. It was designed and constructed by Leif Matsson in Dikanäs, Sweden, and manufacturing of it begun in 1990. At the start, complete systems were manufactured. Today, you get a drying unit and instructions for building the kiln box.

“The customer decides the size and can install several drying units for larger volumes,” says Leif.

Today, he works for a larger company, Plano System AB, which delivers tools and equipment for woodworkers, and here the Sauno kiln is one of the products. The method has been refined during the years, and it is no overstatement to say that Sauno is the best-ried small-scale lumber kiln on the market.

The reason why it works so well is the drying method, which is called relax drying. This is the method that large sawmills use for drying their best lumber, in order to reduce the occurrence of cracking and other damages caused by drying.

### Faster drying, less cracks

The problem when drying lumber, is that wood is unwilling to let go of the water it contains. Otherwise the trees would not survive through long periods of drought or ground frost. By first heating up and steaming the lumber at high temperatures (158-167°F) the cell structure of the wood is changed, which makes it possible for water to move outwards from inside the wood. The next step is to dehumidify the lumber at 104-122°F. The result is lumber that is “furniture dry” and that has less cracks and is straighter compared to air-dried lumber. But the greatest difference is the time it takes. The time varies depending on what type of wood you use and the desired moisture content. For instance, you dry softwood from 17 percent moisture content to levels that suits cabinetmakers in a week. Fresh-cut spruce dries to levels suited for planing in 7-10 days.

Since the customer himself builds the kiln box, the investment cost becomes low compared to other solutions. The drying unit is available in two sizes,



*The Sauno lumber kiln is available in two sizes: 2000 and 4000 watt. Below, the small drying unit is installed in a kiln box according to the plans that come with the unit. Several drying units can be installed in larger kilns.*

2000 and 4000 watt, which is enough to dry 1400 and 5000 Board Feet of lumber. For larger volumes you use several drying units.

### Well-ried and recognized as good

“The largest Sauna kiln we know of, is used on a sawmill in Småland in Sweden. There, they have remodeled a 40 ft container and installed four drying units,” says Leif.

Another container kiln, with three Sauno drying units, was used for drying lumber when the East Indianman Gothenburg was built, a project in which Logosol also participated. This is only one of many projects where Logosol has delivered sawmills and Sauno has been responsible for drying the lumber.

“Sauno’s lumber kiln fits like a glove in our range of products. It is a well-ried and reasonably priced kiln, and it is recognized as good,” says Logosol’s CEO in Sweden, Bengt-Olov Byström.

Due to this, Logosol has now started to sell Sauno lumber kilns both in Sweden and abroad, the only kiln for small-scale woodworkers that gives a better result in a shorter time. \*



# Sawing for the future

In Russia, the Logosol Sawmill has been a professional working tool. But at the same pace as the standard of living has improved, it has become more usual to saw lumber as a hobby. The rapidly increasing price of lumber has made this an even more profitable hobby.

Andrej and Vera Akimov live in Volkhov, 120 km (75 miles) north-east of St. Petersburg. He is an asphalt worker and she is a teacher. They have themselves built a house in a summer home area outside the city. They built the house of lumber they bought from local sawmills.

"In former days, there were four 63s in this area. Today they are all gone," Andrej tells us.

63 is the nickname of a frame saw that was manufactured in the 1950s. Today, almost all frame saws are gone in Russia.

## Sawing for hedgehogs

Without any sawmills in the neighbourhood, it was hard for the Akimov family to continue building their house. Vera found the solution when she was participating in a teacher conference in St. Petersburg. She was looking through a newspaper, and found an ad about a small sawmill that was perfect for the family's requirements.

"The price was so reasonable that I ordered one at once," Andrej says.

Last spring, an extended Logosol M5 sawmill was delivered together with a petrol saw unit. Even though Andrej never had sawn lumber – he had only watched when others sawed on the 63s – he quickly got started. The first project was to build a roof over the sawmill. Then a friend came by and bought the rest of the lumber.

## The family needs lumber

The way the lumber is used is a bit odd, seen from a Western perspective. According to Andrej, keeping hedgehogs as pets is in vogue among the

wealthy in St. Petersburg. His friend makes a living from selling hedgehogs, and he uses the lumber for building cages.

Still, there has not been any lumber left for the family. It will take time before they can start building on the house again. Because Andrej's siblings, one brother and two sisters, live in the same area. They all have houses that need to be renovated, and the Logosol Sawmill is a family concern.

During our visit, most of the time was spent on discussing how Andrej should increase the production of the sawmill. An electric saw unit would increase the capacity and at the same time lower the cost of operation. And maybe they would need a planer too.

## A part of the culture

Only five years ago, this type of investments was impossible for a private person in Russia.

The purchasing power is rapidly getting stronger. The Logosol Sawmill is still expensive, but it is no longer unreasonably priced. Considering the lumber prices of today, the sawmill



Andrej and Vera Akimov are building the family a home and a future with the help of their Logosol Sawmill.

investment will soon be recovered, especially if you, besides sawing lumber for your own needs, also are selling some on the side.

"It is just a matter of time before the purchase power is at the same level as in Sweden," says Valery Garbinko at the import company Absolut, which is Logosol's partner.

According to him, the Logosol Sawmill goes well with Russian culture.

Here, people have sawn their own lumber for centuries. Due to this, Andrej, Vera and a growing number of other Russians have wholeheartedly embraced the Logosol Sawmill. \*



"In former days, there were four sawmills in our area. Now they are all gone," says Andrej Akimov, who bought his own sawmill. In the photo you can also see Vladimir Konenkov from Logosol Russia.



The house Andrej had begun to build when the old sawmill disappeared.

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The gutters are also suitable for spreading light indoors.

# Retired Mailman Found an Exciting Business Concept on the Roof

Turn conventions upside down. On the other side you might find a new business concept. This is what Carl Gustaf Olofsson did, and he found two products that feel remarkably old: Rain gutters and roof ridges of wood, sawn in one piece.

Carl Gustaf grew up in a fisherman family, and had an uncle who in course of time became one of Sweden's most renowned furniture designers, Börje Lindau. But Carl Gustaf became neither a fisherman nor a furniture designer.

"Instead I became a mailman in Stockholm," he says.

He took a liking to wood processing when he met Aina Hagberg, and moved to her old tailor house in Buggemåla. She herself had put a lot of work into repairing the house, but there was still work that could be done by a willing-to-work mailman.

"You can't do carpentry just anyhow on this type of house," says Carl Gustaf.

He asked for advice from an architect who has a great interest in building preservation. One of the questions concerned an old outhouse that was to be renovated. Should he use roofing tiles or was it all right to make a tin roof?

"He thought that I could make both the ridge and the rain gutters of wood," says Carl Gustaf.

At that time, Carl Gustaf's father died and left a small inheritance that was just enough money to buy a Logosol sawmill.

After a good deal of experimenting, he found the solution of how to make both the ridges and the gutters. He cut a V-shaped gutter, and found two advantages of this method. Firstly, the heartwood came in the most sensitive part of the gutter: the bottom. Secondly, the sides of the gutter had standing growth rings. Nature offered a shape-keeping and rot-

resistant alternative to ridge and gutters made of tin. The roof ridges have lain in place for several years now. They serve their purpose and go well with the old building. To the uninformed it looks as if they are of the same type as in olden days. The same is true for the wooden rain gutters, they look historically correct.

"The feeling is right, but in olden days they only had rain gutters above the doors, and not along the whole roof length. This is an invention of our days with the purpose of



"The ridges and the rain gutters are made in sections," explains Carl Gustaf Olofsson and demonstrates that the lengths can be adjusted without using a saw.

protecting the lower part of the facade from rain," says Carl Gustaf who has done a lot of research in order to learn how people used to build in former days. The gutters of solid wood have attracted attention among people interested in building

preservation. They are all aware that the rain gutters have nothing to do with building methods of past times, but if the alternative is to build correctly and thereby destroy the facade, it is much better to have rain gutters of wood than of tin. \*



"I intend to keep the business on a small-scale," says Carl Gustaf Olofsson. He sees a bigger market for his product than his small sawmill is capable of meeting.



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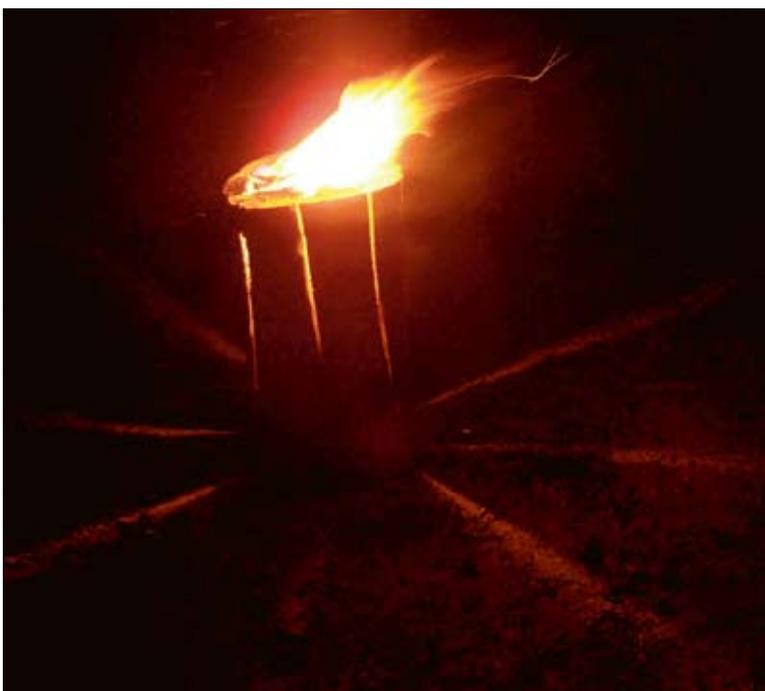
First 4 chainsaw cuts are made vertically in a short standing log to within 4" of the base.



If you have dead pine trees on your property, this is a great use for them - a fun way to dispose of the logs. The flames of a log candle can blow torch up to 2 feet high!

Here's a great idea the creative folks at Logosol headquarters in Sweden use when they have an outdoor event in the evening. I call them Swedish Log Candles. They are so simple to make and burn so magically, you'll want to use these at your own outdoor events. These clever logs will liven up any outdoor night time gathering, providing heat and dancing light with minimum expense and mess. All you need is a chainsaw with a good sharp chain, short logs, and a little accelerant.

## Make Your Own Swedish Log Candle



To make a Swedish Log Candle, 4 chainsaw cuts are made vertically in a short standing log to within 4" of the base. Cut the log as you would a pie. Make the tip of your chainsaw bar dig into the middle of the base of the log when you finish the cut so that lighter fluid will be able to pool there instead of draining out the sides.

These vertical cuts in the log will provide plenty of air to the fire in the center and funnel the air up the middle to make a hot burning fire.

The candles need a little

encouragement to get them going in the form of some kind of accelerant, such as lighter fluid, diesel, or kerosene. If the logs have been allowed to dry awhile after cutting they will start easily. If the logs are green or wet, they will need a good bit of accelerant. If you have dead pine trees on your property, this is a great use for them - a fun way to dispose of the logs. Dead pine logs will burn almost immediately with little drying. Put a little lighter fluid in the cuts and wait a few minutes before

lighting. Once the wood gets to burning, the fire will need no more encouragement and will just grow stronger on its own.

Depending on the log size, these log candles will last upwards of 2 hours, burning cleanly throughout the evening. They are best burned with little wind in the area, as then you will get an even burn all the way through the log.

At their height, they will be dancing flame like a blow torch up to 2 feet high! \*



# The World Is Small With Logosol

*John Copeland and Adrienne Doucette of Delaware and the Logosol Viking. Proud owners of a brand new PH260.*

This morning we had a visitor that turned into a proud Logosol PH260 customer after a demonstration at our office. He was returning from Louisiana and happened to have a cypress board for us to try in the planer. It planed up beautifully!

John Copeland lives in Delaware and while talking with him we found out he is an accomplished carpenter and regularly does maintenance carpentry for a Tall Colonial Era Sailing Ship, the Kalmar Nyckel. The ship is based in his area in Delaware. This sailing ship is a replica of a Swedish wooden sailing vessel that sailed between Sweden and the colonies in the early 1600's. This Tall Ship was one of two Swedish ships that brought the first early settlers to America. And it turns out that the town the great ship was named for is the birthplace of the new

president of Logosol, Inc. Janne Engvall! Janne was quick to point out that it was the Vikings that first found America hundreds of years earlier than the time of the Kalmar Nyckel.

He brought out the Logosol mascot, the wooden Viking for emphasis for his history lesson. Here is an excerpt about this magnificent ship from her website:

*"The original Kalmar Nyckel sailed from Sweden to the New World in 1638 leaving its passengers to establish the first permanent European settlement in the*

*Delaware Valley, the Colony of New Sweden in present-day Wilmington, Delaware. She made a total of four roundtrip crossings of the Atlantic—more than any other ship of the era. Her first voyage to the New World left 24 settlers of Swedish, Finnish, German and Dutch descent in the Delaware Valley."*

John and his friend Adrenne regularly work and sail on the Kalmar Nyckel in Delaware. Perhaps John will soon use some wood for this beautiful ship that was milled on a Logosol PH260! \*

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# Perfect sawing in the circus tent

It is never too late to realize your dreams. Ask Per Simon Edström, 78 years old and busy creating the perfect acoustics with the help of 200 spruces and one Logosol Sawmill.

Per Simon Edström has devoted his life to realizing his theatre dreams. He has done the most: Written plays and books, directed, acted, worked with lighting and as a theatre architect. He is mostly known for being the driving force behind the theatre boat Arena, a government-funded region theatre, which berthed at 60 places in the Stockholm and Lake Mälaren archipelagos. This adventure ended in 1985.

“The politicians thought we were too left-winged, so they closed us down,” Per Simon says.

## Cognac in the sauna

But instead of retiring, he took the opportunity to realize his own ideas, everything from an experimental theatre at home on his farm, to a wood-heated sauna built of a gigantic cognac barrel.

“The first time we used the sauna there was a delightful scent in it. Later on, the scent disappeared and you needed a bottle of cognac each time to recreate the atmosphere. It became too expensive to use the sauna, Per Simon says jokingly.

His great passion is the

theatre on his farm. He compares it to an instrument, which you have to give the correct acoustics, and there also has to be a closeness between the audience and the actors. In order to exploring the possibilities, he built his own theatre called Modellen (the model) with room for an audience of 80 people.

Here he has produced plays in all kinds of theatre forms, and the experiments have proven what Per always has maintained.

“The classical arena theatre is superior,” he says.

The arena is like a circus with the audience around the entire ring. A circus tent lacks the acoustics, and the arenas of today, like the Globe Arena in Stockholm, lack the closeness to the audience. The best would be an arena of wood, like the Drottningholm Theatre.

“The walls will speak if they are built of two inch thick spruce boards,” Per Simon says.

He designed an arena theatre for Ramallah, the Palestinians’ temporary capital on the West Bank. It was never built, but everything needed



for realizing the dream was closer at hand, at home on Värmdö.

“50 years ago, my father planted spruces in an enclosed pastureland. To be honest, I did not like that the pastureland disappeared,” says Per Simon, who after a couple of years changed his opinion.

“Instead of thinning, we sold Christmas trees. People came here by car with newly-bought roof racks and axes. They cut down their Christmas trees themselves and paid 25 Swedish kronor each.” As time went by, the spruces grew tall. Per Simon saw the opportunity to restore

the old pastureland and get himself building material for the perfect arena theatre. He bought an extended and completely equipped Logosol Sawmill, which was placed in a circus tent.

“You can’t find a better sawing house. The sawmill and the lumber are protected from wind and weather.”

The theatre manager had no difficulty in learning how to handle the sawmill. When he was young, he worked as a timber estimator in the forest, and he trained two persons who used the first chainsaws. Nowadays, he also has help when sawing, but he himself takes care

*Per Simon Edström has the perfect saw house for his Logosol Sawmill: an old circus tent, which also has room for the sawn lumber.*

of the most important job: sharpening the chains.

“A sharp chain means everything, especially when you are cutting into a spruce with hard knots in it,” Per Simon states.

## Officially a barn

Actually, it is not a theatre he is building. The 24 metre (79 ft) long building will primarily be a hay barn for the ewes and lambs on the farm. Today the bales of hay are stored in two old circus wagons.

“But when the barn is empty in the summer, there is nothing stopping you from having a theatre here, so you might as well build it right in the first place,” Per Simon says.

The ‘theatre barn’ will also serve as an exhibition room for a travelling waxworks show from the 19th century. It has been exhibited in the Museum of National Antiquities, but today it is stored up. \*



“Everything depends on how you sharpen the chain,” Per Simon Edström says.



Greg Van Winkle of Alma, Arkansas, has used the hybrid concept in the design of his new garage.

## A Logosol “Hybrid” Cordwood/Timber Frame Garage

There is a lot in the news these days about hybrids, especially when talking about new cars. Most car companies are coming out with a hybrid model of one sort or another. However, Greg Van Winkle of Alma, Arkansas, has used the hybrid concept in the design of his new garage. He has utilized his M7 sawmill capabilities to cut the timbers for this unique garage. He may not drive a hybrid, but he parks his vehicles in a garage that can be termed a “hybrid”.

It used to be you only heard the term “hybrid” when you were talking about new seed for your garden or farm.

However, now when we discuss hybrid designs, we are combining different types of elements to make a new version of something. The something in this case is a garage. Greg has used Timber Framing techniques to provide the structural support for a new style metal trusses and metal roof, while closing in parts of the walls with another building technique – Rob Roy’s cordwood/masonry walls. The result, as you can see, is a unique, beautiful, and fully functional structure.

Greg lived in Fort Smith, Arkansas most of his life, until he found a home on seven acres of land in the Alma area. He bought a chainsaw to help clear out his fence row after he moved to

the country. He says, “My only hobby was hot rodding, little did I know that was about to change!”

He started clearing land for people for their cedar trees. “I was needing a garage really bad and wanted something different than a ugly metal building out in front of my house,” he added. “I love the timber frame and log home desgns, and like the strength they offer. All that was left for me to do was decide on what portable sawmill would be best for my needs.”

Greg helped a neighbor on a different type of portable sawmill to get a feel for milling, and after that experience sent off for information on the Logosol sawmill. He said, “soon after that I found myself putting my M7 to work. It’s no joke, my life went crazy for me after that!” He found himself milling all his hard-

gotten cedar logs and making them into different projects. One of the first projects was an 18’ X 18’ Salt Box timber-frame shed. “It helps keep wet weather and summer sun off me and my sawmill,” he said.

The new sawyer found that the M7 came in handy for cutting all kinds of lap joints for his timber-frame shed.

“My garage took me a little longer to finish. The fastest part of building it was cutting the 40 plus 6X6’s I used for the post and beam structure. My sawmill amazed me for its accurate cuts time and time again.” The garage is 28’ X 41’ with walls that are 1 foot thick using Rob Roy’s cordwood and masonry construction method. Van Winkle was able to use many of the cedar limbs that came from the trees he cut up for the timber frame. The cordwood masonry wall

is a method of using short pieces of round wood and a cement type mixture to make a thick wall which provides a substantial wall in between the timber-frame posts.

Greg is not finished with the Timber-frame and cordwood/masonry combination. He told us, “hopefully soon I will be able to match my house

to the garage. More beams and all sizes and lengths of lumber are waiting for that day and once again my life will change for the better.”

We look forward to seeing the results of this next “hybrid” project built with the Logosol M7 sawmill. \*

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*Using one arm, Bengt-Olov Byström heaves up the first industrially manufactured Logosol Sawmill, model 2. The year was 1989. The sawmill weighed 37 kg without saw unit, so the smile was not produced completely without pain.*



*Former Prime Minister in Sweden Torbjörn Fälldin, one of several celebrities who recommended the Logosol Sawmill in the early days. Usually, you have to pay celebrities to make them advertise something. Here they already were on the customer register, and they joined in for free.*

## Logosol Celebrates It Started with one Sawmill

Logosol is celebrating its 20th anniversary. It has been 20 years filled of events, some of them only known to the inner circle of the company. Follow us on a journey through time.



The idea behind the Logosol Sawmill, the first Logosol product, came about in the village where Logosol's founder Bengt-Olov Byström grew up in the north of Sweden. It all began when Bengt-Olov talked to his neighbour Tord Gustavsson, who had heard that in the USA chainsaws were used for cutting boards. To make a long story short, Bengt-Olov built the first Logosol Sawmill of wood and when it proved to work beyond expectation, he built another sawmill made of aluminium angle sections.

It required many angle sections and a myriad of screws and nuts, but it worked even better than the original wooden sawmill. The Logosol Sawmill model 1 was born.

### From sun visor to sawmill

The name Logosol already existed, but as the name of another product, a sun visor of foam plastic, which was fitted to the frames of glasses. On the visor, company names were printed, i.e. logotypes. Logo + sol (the Swedish word for 'sun') became Logosol. The Logosol Sawmill was

for the first time demonstrated to a larger audience in the Swedish town Jönköping on the trade fair SkogsElmia in 1989. It was received with great interest and divided forest-Sweden in two factions.

Some frowned upon the small-scale technique and firmly explained that something that simple could not work. Others immediately fell in love with the small sawmill.

### The first venture

At that time, Bengt-Olov was a consultant at the regional development fund in the county Västernorrland. Before then, he was lecturer and researcher in business economics at Umeå University. The first sawmills were manufactured by the Byström family at home in their rumpus room.

The same year, Logosol was made a company and a couple of rooms were rented in the same building that Logosol owns today. The only product was the Logosol Sawmill. One of the first measures that were taken was to develop the home-built sawmill

into an industrial product. The most important step was the development of the extruded guide rail. The aluminium profile was almost the same as the one used today, although manufacturing methods and coating treatment have been refined. The development of the guide rail was a big venture for the small company, and many experts in the field were hired.

Finding a sufficiently big chainsaw was another problem. Many brands sold the right type of saws, but few of them were type-approved in Sweden. A large Swedish manufacturer was several times requested on this matter, but this manufacturer thought that the market for portable sawmills was too small to cover the cost for a type-approval.

The help came from an important person within the field who became charmed by the Logosol Sawmill at first sight. His name is Hans-Peter Stihl, main owner and, at that time, president and CEO of the world's largest chainsaw-manufacturing company Anders Stihl GmbH.

When the contact was established, Logosol already used Stihl's second largest chainsaw, 064, with reground picco chains. During a period, the regrounding was done in the national prison in Härnösand, Sweden. Sometimes, the quality of the chains changed to the worse when a capable inmate was discharged from the prison.

Hans-Peter Stihl's dedication resulted in the development of today's PMX chain. Stihl's international organization also started to sell the sawmill. Due to this, the Logosol Sawmill could already be exported a couple of years after it had been launched. The first big export market was Germany, and Russia also came early into the picture.

### Hard to sell through shops

On the home ground, Logosol both sold directly to the end customer and through retailers.

It turned out that the Logosol Sawmill is hard to sell through shops. The machine itself is simple, but using it is more complicated. The

customers need support on a level that is not normally provided by retailers. This led to Logosol concentrating on direct sales with competent support and Logosol companies on important export markets.

During the past ten years, the export has significantly increased. This development accelerated in 1999 with the launch of subsidiaries in the USA, Germany and Norway. Since then, Logosol-related companies have been established in, for instance, Russia, Finland, Poland, the United Kingdom, Australia and Canada. Today, Logosol sells direct or through importers in some 40 countries.

### Electric revolution

The guide rail was the first major development project. The next big step was taken in 1993, with the launch of the electric saw unit E5000. The electric saws that already existed were way too weak for this kind of sawing. To match the performance of the large chainsaws from Stihl, would take more powerful equipment with three-phase motors. The motors on the market were too big and heavy. Instead, ABB developed a 5 kW motor. Overdimensioned windings with integrated overheating protection gave a big motor in a small package.

Two years later, the electric saw was accompanied by the bandsaw unit BS350. It is a good example of the commitment among the staff at Logosol. The machine was invented at Logosol's Christmas party in 1994, and the plans were drawn on the tablecloth.

### The first planer/moulder

The first planer/moulder was introduced in 1994. It was a three-sided planer/moulder, which three years later got a fourth cutter head. The same year, Logosol was rewarded with a business growth award, which was given away by the then Minister of Industry in Sweden, Per Westerberg. The year after, the Solo-planer SH230 came, at first intended to be an advanced resaw for dimensioning timber. It was rewarded with the Swedish Land Magazine's award the Golden Axe for being the most innovative new product.

Alongside the planers, a line of industrial machine was developed. First to come were the Rip Saw Assistant and the Log Splitter. Nowadays, the former is close to standard equipment on circular sawmills. The latter, intended for splitting logs before sawing them into

boards, was a product appreciated by those who bought it, but it did not attract a large number of customers.

For several years, Logosol sold components for industrial stack cutters. Just in time for the 10th anniversary, Logosol introduced its own stack cutter, a mobile construction that is moved to where the board stack is. Today, it is an established machine, even on large sawmills.

### Culture for development

This is only a sample of the products that Logosol has brought into being. Several of them have been pioneering, and all them are the result of the Logosol culture.

By having direct contact with Logosol, the customers can hand in ideas and suggestions all the time. Since the employees at Logosol use the equipment themselves, they constantly find new requirements that need to be fulfilled.

It often starts with a loose idea about there being a need for a machine or an accessory for a certain purpose. The constructions originate from real needs.

The marketing is an important part for all companies. In the beginning, the assets were limited and the marketing mainly consisted of demonstrations at trade fairs all over the country, and the customer magazine Fresh Cut.

### A series of world records

Another activity that attracted much attention is the world record for the longest plank of the dimensions 2x4 inches. The first record was beaten in 1993 at the Nolia Trade Fair in Umeå, Sweden. The plank was 25 metres, 57 cm and 4 mm long.

At the trade fair SkogsElmia in 1995 they felled one of the tallest spruces that has ever been cut down in the Swedish province Småland. It stood in the town park of Jönköping and it was 37 metres tall. By united efforts the Logosol staff turned the spruce into a 33 metre and 4 centimetre long plank, approved by Guinness book of records. The record was beaten the very next year by a customer in Austria, Thomas Rentenberg, whose plank was 34 metres and 7 centimetres long. That record was beaten by Logosol in 1999 in connection with the launch of the American subsidiary. The world record of today is 38.9 metres and was broken in 2006 by Anders Nykvist. He, too, used conjoined Logosol Sawmills.

Another record cut was taken at the Elmia Wood Fair in 1997. Logosol cut the first tree in Sweden that was certified according to the environmental system FSC. A 4.8 metre long and 1.3 metre thick log of the species Angelina Pedra was, with the help of the World Wide Fund for Nature, imported from Brazil.

It was cut with the Jungle Saw, the precursor to today's Big Mill. Cutting the log was no problem, but it gave rise to an unexpected side effect. The sawdust spread an unmistakable odour of horse manure all over the exhibition area.

This sawing session was part of a several years' project on jungle forestry, which started when Bengt-Olov and Joakim Byström were commissioned by an EU agency to evaluate a forestry project in the Solomon Island. They became witnesses to the brutality that characterizes conventional forestry in rainforests.

Forest companies bought large areas of forest and only cut down a few trees of valuable wood types. When the logs were dragged out of the forest, vast land areas were destroyed. At the same time, the value of the felled trees was so high that one single tree could support a family for a year.

### On a large or a small scale?

This knowledge resulted in a simple sawmill that was bolted direct to the log and made it possible for the land owners to fell the trees themselves, process them and then replant.

The interest from development agencies was equal to zero, and instead they chose large-scale solutions. Afterwards, it has turned out that these projects almost without exception have failed. Poor countries in rainforest areas lack the competence and infrastructure for running high-productive sawmill lines. Logosol ended up the project in 2000, but due to the rise of micro-loans and similar activities more and more projects are started according to Logosol's model.

### A global network

At an early stage, a strategic decision was taken to limit the business's own manufacturing to include only products of short series. Most of the products are manufactured by subcontractors, which in turn has created closer cooperation and a wider range of products.

As an example, the planer/moulders are manufactured by Moretens



*Sawing in the Solomon Islands.*



*Bengt-Olov Byström has just finished the record cut at Elmia trade fair in 1995, the second of Logosol's three world records.*



*A great media interest when Logosol opened up its USA office in Madison, Mississippi, with breaking a new sawing record.*



*Cutting the first log in Sweden that was FSC-certified.*

Machinery in Östersund, Sweden, which has also developed a line of professional joinery machines. These machines are today sold under the name Logosol.

The latest case of cooperation is between Logosol and Låks, producer of a frame sawmill that for several years has been sold by Logosol on export markets. Now the Låks Sawmill is a Logosol product in a new design. \*

Ten years ago, Martin Hall came to Madison, MS from Harnosand, Sweden with big plans - to cut the world's longest 2 X 4 with one of the world's smallest sawmills. He worked with Madison City officials, got permission to bring a long pine tree into a new industrial park in the city, and set about constructing a series of Logosol M5 sawmills that would do the job. Amazingly, he succeeded, and the resulting 2 X 4 went into the Guinness Book of World Records as the world's longest 2 X 4 on record. The Madison School system adopted the ultra-long 2 X 4, had the school kids sign it, and called it their "board of education!" It was an impressive start in America for Logosol. It showed this was no ordinary sawmill and no ordinary company that was beginning to do business in the US!



*Martin Hall.*

## *Logosol Celebrates* Ten Years of Marketing Innovation in the U.S.

This year we celebrate ten years of Logosol in the U.S., and Logosol, AB, (Logosol, Inc's parent company) celebrates their 20th year doing business worldwide. The history of Logosol in the U.S. is filled with many innovations in marketing wood processing equipment in this highly competitive market.

Logosol, Inc. started in Madison, MS trying to sell sawmills to local fairs and shows in the area. They faced a daunting task, as there was no frame of reference in the U.S. for this type of sawmill. The portable sawmills in the U.S. were mostly band mills. And they were priced much higher! The prevailing train of thought was that a sawmill priced this cheap (under \$2500) and using a chainsaw as a power source could not be much of a sawmill. So, the Logosol crew realized they had to educate their prospects on this type of sawmill and its capabilities. They soon realized they needed to reach much further out in the U.S. than in Mississippi, and began to expand their reach using a new tool at that time, the internet.

The Logosol U.S. website became an important part of Logosol's marketing strategy in the U.S. and has remained at the forefront of telling the Logosol story. On the website, they put

detailed illustrations, how-to information, and success stories of Logosol sawmill owners to help visitors better understand their product. They took a "meat and potatoes" approach to providing information - going into much more detail than any other sawmill website at the time.

Logosol also participated in regional shows targeting the sawmill industry, and were one of the participants of the first ever Sawmill Shootout, where portable sawmills came together on one day for a 2 hour cutting showdown. Logosol was the smallest sawmill in the event, but held its own and actually beat out some of the bandmills in speed and board feet sawn. This got the Logosol brand some national attention and sales began to grow.

The Logosol crew continued to demonstrate the power and capabilities of the Logosol sawmill by participating in regional sawmill and logging shows but began to reach out more, and found shows targeting woodworkers and looked into the possibility of participating in them. They worked out an agreement with the promoters of these shows to set up outside (since their chainsaw wouldn't be allowed to operate inside) and began to entertain the attendees with sawing demonstrations as they came

and went to the shows. This began to catch the attention of woodworkers and soon many of Logosol's customers were from a woodworking background. With this new audience of woodworkers, Logosol realized that the needs of woodworkers were different from other users of wood, and from this came the idea for the WoodWorkers Mill - a shorter, more compact sawmill, capable of providing wood of all types for woodworkers. The Woodworkers Mill is now an established sawmill in the Logosol line worldwide.

Meanwhile, requests were coming in from around the country for more information on this new and unique sawmill, and Logosol responded by putting together a video on how the sawmill works.

They spent a few days on a farm in Alabama, and with a professional filming crew put together the first Logosol promotional video for the U.S. They have updated this video several times and continue to provide it (now in the form of a DVD) free of charge to anyone who requests it. This video became an important part of the information package and many prospects have received this and watched it over and over in anticipation of one day owning a Logosol sawmill. Thousands and



*Rob Bjorklund demonstrates the M7 sawmill with electric powerhead to a large crowd in the Woodworking Shows "Action" Area.*



*Rob performs a "specialty" cut on the WoodWorkers Mill at a show in the U.S.*

thousands of this video have been sent out over the years.

Once the sawmill was firmly in the market, Logosol began to introduce the PH260, Logosol's unique 4-Head Planer/Moulder.

This machine was another new product for the U.S. and again Logosol faced an education hurdle in its introduction. It was thought to be too small, as most of the competition had motors twice as large, and heads twice

the diameter, and weighed three to five times as much. And, the price of these big moulders was 2 and 3 times more than the PH260.

However, Logosol began to demonstrate and go on site to interested customers and provide hands-on use of the machine to get the first customers began to make





## Blocking up the Logs to the Correct Height

Dave Ellis is an M7 owner from Chichester, West Sussex, who is making reverse use of his equipment and thought others might like to know it is possible.

He collects timber from tree surgeons in his Mercedes 4wd truck and he also works as a grounds man. Dave then converts his recycled timber into benches, childrens playground furniture, park benches

etc. Some of the big 'lumps' that he picks up are not able to go onto his M7, so he came up with the idea of reversing the chainsaw and blocking up the logs to the correct height so that he can turn them into cants and

machine them on the correct side of the M7.

After a few trial and errors it seems to work really well. Dave hope this might give a few ideas to all the Logosol Owners. \*

M7-owner Dave Ellis blocking up his log to the correct height with a chainsaw before he uses his Logosol M7.



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