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PETER HASSELRYD HEAD OF MARKETING, KOMATSU FOREST

Facing the future together

2020 will long be remembered as a year of great and overwhelming change. My new role as VP Marketing & Sales didn't start out quite as I'd imagined. The ongoing pandemic has been challenging for everyone and has entailed completely new conditions for conducting our business – which you can read more about in this issue of Just Forest.

We've worked hard to keep everything running smoothly and to offer you, our valued customers, the best possible support and availability. And this has meant rethinking how we do things. Despite lockdowns and other obstacles, creative solutions and our wonderful employees have helped to keep our customer service running as well as possible without compromising health and safety.

During the fall, we managed to organize a limited road show in a number of countries, giving us the opportunity to demonstrate our new agile and forest-friendly thinning forwarders. In general, though, the year has been marked by social restrictions, which have meant that we've only been able to organize local and limited activities, so we're very much looking

forward to the day when we can get back out there to meet with our customers once again. Hang in there and we'll get through this together.

Despite the circumstances, I'm incredibly pleased and proud that during this time we've been able to present several new products, many of them with a focus on thinning. Which is also the theme of this issue, with plenty to read about the new 825TX, 835TX, and 845 forwarders, some new MaxiFleet functions, and much, much more. We also have several interesting features about customers working the forests of the world that I hope can offer some inspiration.

With all the turmoil of 2020 behind us, we're looking to 2021 as a year of opportunities. Our new production plant will be completed and made ready to start producing our red machines this year, which is something we're all looking forward to with great anticipation.

Take care of yourselves and your loved ones. We're going to get through these challenging times together.

Happy reading!

Please note that some of the photos in this issue were taken before social distancing rules were introduced.

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JUST FOREST INTERNATIONAL MAGAZINE

Publisher: Annelie Persson, annelie.persson@komatsuforest.com Editor: Terese Johansson, terese.johansson@komatsuforest.com Address: Just Forest, Komatsu Forest AB, Box 7124, SE-907 04 Umeå, Sweden

Contact: Telephone +46 90 70 93 00 Internet: www.komatsuforest.com

Production: TR, Skellefteå Printing: Ågrenshuset, Bjästa, Sweden Paper: Multi art matt 115 g Circulation: 40,000

Languages: Swedish, Finnish, English, German, French, Portuguese, Spanish, and Russian. The content may be quoted if the source is cited.

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NEW PRODUCTS FO

Small forwarders with a new look – and a brand-new machine

THE FALL OF 2020 saw a long-awaited upgrade for our smaller forwarder models. Just like their larger stablemates, they now boast a Stage V engine, a new, striking machine design, and – thanks to the new mini steering wheel – a roomier cab. A brand-new forwarder model has been introduced, the 825TX with a 9-tonne capacity, which alongside the upgraded 835TX has a strong focus on thinning and a special tracking frame.

Get acquainted with our upgraded small forwarders!



825TXUltra-compact productivity

One long-awaited addition is the introduction of a 9-tonne (9.9-ton) forwarder for the smaller machine market seg-

ment. It fills the gap left by our previous bestseller, the Komatsu 830. Rim size: 22.5".



835TX Updated favorite

Previously our smallest offering, this 11-tonne (12.1-ton) machine is returning with an upgraded spec boasting new

A quick look at the **biggest** announcements with a little help from Jan Svensson, one of our sales reps for southern Sweden.



LOAD SPACE

The FlexGate for the Komatsu 845 has a new reinforced, straight design, which ensures that the load sits more evenly up against the gate. The paint also has a more matte finish to minimize distracting reflections.

The load space on the Komatsu 825TX and 835TX has been optimized for thinning – both the gate and the bunks are angled 5 degrees inward to be as agile as possible in tight spaces. This reduces the risk of hitting standing trees when the machine sways from side to side in uneven terrain.

Q

"One important change that customers will profit from is the load capacity. It's been optimized based on the machine's width and other dimensions. The gate is straight now too, which makes for faster loading. Plus, visibility through the gate is also really good."



 \Box

"This is another popular improvement that many customers have requested."

IMPROVED ADBLUE®/DEF SYSTEM

- Better placement of AdBlue®/DEF tank for shorter hoses from tank to dosing unit
- New concept for filling AdBlue®/DEF encompassing a fuel cap with an integrated filter and funnel for easier and faster filling
- Hoses and connectors gathered in a single unit for better reliability
- Smaller hose diameter for easier system drainage and reduced risk of frost damage to the pump



R 2021





845 Effective and versatile

features that make it an even more specialized thinning machine.
Rim size: 24.5".

An upgraded mid-class 12-tonne (13.2-ton) stalwart that performs well not only in thinning, but also in lighter final logging. Now available with an optional larger crane as well, for those who need to handle long, heavy timber.

Rim size: 26.5".

NEW STAGE V ENGINE

The 2021 Komatsu 825TX, 835TX, and 845 models also boast the new Stage V engine installation, which was introduced on the larger machines in the 2020 range.

- New engine installation with particulate filter (Stage V/EPA T4F)
- Hydraulic tappets save time and service costs (Stage V/T4F/Stage II)
- New aftertreatment system (exhaust system) with DPF filter (Stage V/T4F)
- All 4-cylinder forwarder models have a new, improved water pump

Q

"One major announcement for the 2021 models is that they have a brand-new engine, which our customers have been waiting for! It features many positive upgrades, such as no need to adjust the valves. And the emission control system is greatly improved."





KOMATSU 845

The Komatsu 845 is a versatile machine suited to both thinning and lighter final logging. The load space is both generous and flexible with many custom options for different logging conditions. The hydraulic stakes help to ensure faster and more fuel-efficient crane operation as they are easily adjusted to match the height of the load. This latest upgrade delivers a deservedly modernized machine that is now fully aligned with the larger forwarders but in a more compact size. Alongside the new engine, cab, chassis design, gate, and more mentioned above, the new Komatsu 845 also offers these advantages:

- Optional larger than standard crane ideal for working in areas with larger, heavier trees.
- LED front headlights (Option)
- Extra service lights (Option)
- Outer boom lights for grapple work, available for combi crane 105F (Option)
- Improved front blade
- Active feed pressure control for lower fuel consumption
- Extra fire extinguishers (Option)
- Central lubrication integrated with MaxiXT (Option)



"I think the Komatsu 845 deserves a little extra attention. It's a bit sturdier than the machines intended solely for thinning and it's ideal if you also do some final logging. And the larger wheels also mean that it handles well in difficult terrain.

Customers have commented that they find the Komatsu 845 as agile as the smaller machines when off-road, but that it causes less damage and more easily passes obstacles thanks to the larger wheels."



NEW TRACKING FRAME IMPROVES NAVIGABILITY IN DENSE STANDS

The TX machines see the introduction of a new tracking frame that more than halves the difference between the front and rear wheel tracks down to less than 200 mm (8"). A machine with little tracking deviation is easier on the forest floor as it leaves narrower tracks at its minimum turning radius and narrower tracks between trees. There is also less risk of damaging standing trees when navigating dense stands.

The length of the load space remains the same, which means maintained productivity. The tracking frame is available for the 825TX and the 835TX.

"It's great to see how well received the new forwarders are. During the road show this past fall, our customers had the opportunity to test-drive a brand-new Komatsu 835TX equipped with a tracking frame and their response was that they found it extremely agile and stable. And this was despite the fact that many of them admitted to deliberately choosing particularly challenging routes."



"I'd really like to emphasize the visibility as a major advantage. The visibility through the gate of a Komatsu forwarder is extremely good, and you don't have to crane your neck to see where the wheels are."

NEW OPERATING SYSTEM

New MaxiXT features

- Troubleshooting tools able to log signals make it easier to find faults and simplify service
- Updated control panels
- Electrical system with improved connectors and upgraded power boxes for better reliability
- Electric mini steering wheel to replace the Orbitrol one allows for higher speeds, takes less space, and reduces noise levels in the cab

"The new operating system offers a world of opportunities, essentially future-proofing the machines. One thing I honestly think deserves highlighting is the troubleshooting function that enables the machine to send a recording of the machine's control signals, so that our technicians can resolve any problems more quickly and easily."



EXCELLENT VISIBILITY

When thinning, it's especially important that the operator has a clear view of both the surrounding forest and the machine's position relative to each individual tree. The visibility in our thinning forwarders, just like all Komatsu forwarders, is excellent in all directions – whether down toward the wheels or through the gate. This means that as an operator you can have peace of mind knowing that you won't damage any standing trees.

Good visibility is also important if you are to work efficiently. When you're sure about where your machine is relative to the trees, you can maintain a high production rate without impacting the remaining stands.



NEW CAB AND NEW MACHINE DESIGN

The 4-cylinder forwarders are now fitted with the same cab as the larger machines. And now that the Orbitrol steering wheel is gone, the cab feels airier and has more storage space. A new seat leveling function ensures that you're always sitting comfortably upright (Option)

The machine also has a new design, with a modern, narrow-shaped hood. And the hood is now opened and closed electrically.

Q

"The change most visible to customers is probably that the white pillars, which have always been covered in dirty fingerprints, have been replaced with red metal pillars!

As for the cab, I'd also like to mention the Comfort Ride cab suspension. It's an incredibly popular option on our forwarders."





OFF-ROAD PERFORMANCE

The forwarders offer high traction and are designed to navigate and work in all types of terrain. We offer a wide range of different wheel widths and the option to use tracks, enabling you to adapt the machine to different types of ground conditions.

When working on softer ground, the forwarder can be fitted with wider tires, thereby lowering the ground pressure and making it easier to get around.



"Our forwarders offer good ground clearance, especially with the portal bogie."

Relaxed operation with the new **825TX**

The Komatsu 825TX is a brand-new forwarder with unique characteristics that make it ideal for thinning dense forests.

"An agile and responsive machine whose size belies its power," says Anna Eneslätt, an operator at the forestry company Skogstjänst Frostkåge AB.

THE 825TX, which has a 9-tonne load capacity, is part of the new Thinning Xperts (TX) concept together with the Komatsu 835TX. The new machines boast several new features that allow them to navigate dense stands with great agility while maintaining high production. Two of these new features are a new tracking frame and an optimized load space.

A pleasure to drive

"It's a pleasure to drive, with the comfort of a larger forwarder. But because it's not that big, you can make tighter turns than I'm used to. I also like the fact that the crane is relatively powerful. Then there's the good visibility, both over the wheels and through the gate," says Anna Eneslätt, who spent two days test-driving the machine.

Anna has been operating forwarders since 2005, and for the last two years harvesters as well. Her team is mostly focused on final logging, but also does some thinning work for the forest management company Norra Skog in the Mellanbygden region of northern Sweden.



"Testing a new forwarder was fun and exciting. I soon felt at home in it, as well as safe and relaxed while operating it," she says.

Reduces the risk of forest damage

The TX concept introduces a completely new tracking frame that halves the tracking difference to less than 200 mm (8").

"A machine with as little tracking difference as possible has less impact on the forest floor and is more maneuverable, which reduces the risk of damage to standing trees," says Daniel Grabbe, Product Manager at Komatsu Forest.

Each component of the new frame is of the optimal length to ensure the best possible tracking – without changing the overall frame length or affecting the length of the load space. The steering coupling has also been moved further back so that the rear wheels better follow the front wheels, to further reduce tracking.

"I can rely on the trailer following as it should, with no need to reverse or make unnecessary turns that can damage standing trees. The bunks are angled slightly inward and this reduces the risk of them scraping against trees. The fact that the trailer follows the cab so closely also means that you don't need wider strip roads for the forwarder when thinning," says Anna.

Good access with the crane

Good maneuverability is not the only must for a thinning machine, it also has to offer good productivity. This is why the Komatsu 825TX comes with a generous load space, a powerful crane, and high traction.

"It's subject to the same demands as the larger machines, but comes in a more compact size," says Daniel.

"The length of the crane makes it easy to get at the timber and the load space feels big," says Anna.

Her overall impression of the new forwarder is positive.

"All in all, it's a great machine! It feels like a stable and dependable machine that enables you to get around a little faster in confined spaces."



Right on Track road show highlights:

More than 500 opinions forwarders – here are th

The central theme of the Right on Track road show was our thinning forwarders. We visited ten locations in Finland to present the new 2021 Komatsu machines, meeting no fewer than 400 customers. There was a great deal of interest in our new products, and everyone agreed that smaller machines were also a necessity.

Timo Ahonen, who visited the Right on Track road show in Jyväskylä, owns a forestry machine company specialized in forwarding.

"YES, IT'S PROBABLY THE FOOTPRINT

you leave behind that decides who gets offered a thinning job first. You need to listen and be accommodating. If a forest owner doesn't accept the use of tracks when thinning, then you use a smaller machine and chains. They're not as picky with final logging, then they accept larger machines and bulkier equipment," Timo explains, summarizing forest owner views on the role of the forwarder.

The forestry company H & T Ahonen Oy's current fleet includes a Komatsu 855 forwarder used for both thinning and final logging. In recent years, the forwarder model has varied depending on the assignment. The company sold its Komatsu 830 recently, and since then has been using two Komatsu 845 forwarders to handle its thinning assignments. The company is now awaiting delivery of a new Komatsu 835.

"In general, you always assume good accessibility and that the size of the machine doesn't really matter, but every forest has tight spaces, obstacles, and softer ground that demand an agile machine

or lower ground pressure. I don't expect anything more from the harvester, and it wouldn't exactly increase forwarding productivity. It's enough that the different tree species are kept separate, at least along the straight strip roads. It's another matter on bends and at intersections, they're narrower and more difficult for the harvester to navigate," says Timo, reflecting on the teamwork between harvester and forwarder when thinning.

"The technical reliability and durability of smaller machines have improved considerably, although they've also gotten heavier, but you simply have to accept that. Thinning will continue to need specialist machines even in the future," says Timo.

Forwarder operation is demanding

With his lengthy experience, Timo has a good idea of which factors influence efficiency in forwarding work. He describes his own work method as follows:

"Once I've received the information from the harvester about the tree species and quantities felled at the site, I prepare a route, have a good look around on the way there, and make a mental note of the tree species harvested along the strip road. I almost always load several assortments. These days, I don't think anyone can just start at one end without a plan and simply

load everything they come across," Timo points out.

Along with several other companies, H & T Ahonen Oy is part of a cooperative that conducts harvesting and thinning assignments for the forest company Metsä Group. Arrangements like this are common in Finland. Timo adds that he's interested in trying out MaxiFleet and MaxiVision in his contracting team. He thinks that the information about current machine and team capacity in different locations and the timber assortment support for forwarders could come in handy.





Komatsu's new forwarder range discussed in Pirkkala

ALTHOUGH AJ-KONEPALVELU OY

has no pressing need for a new machine, Antti Isomuotia and Joonas Osara spent a long time at the Right on Track day held at the service center in Pirkkala. There was much to discuss and consider, so much in fact that a decision was made to meet at the company's current worksite 40 kilometers (25 miles) north of Tampere later that week. There, deep in the forests of Hämeenkangas, the problems of thinning on soft ground - a daily challenge for machine contractors - were to be discussed.

Discussions at Hämeenkangas

AJ-Konepalvelu's current worksite was a thinning assignment in a pine forest with some soft ditches. The harvester was thinning another forest owner's pine forest while the forwarder was busy at work a few hundred meters away in a forest owned by Antti's relatives.

On the moorland, the tracks left by the machines were completely straight, but on the uneven marshland, the strip roads snaked through some areas. The wider

tracks now permitted on peatlands were in for some criticism.

"Naturally, it pays to make access roads of the right size during the initial thinning, so that they can be used later as well. Our forwarder operator, Lasse Hinttu, usually says that if there aren't any tight spots in the tracks, then they're too wide. In our work, long pulpwood entails a greater risk of damage to the forest floor. The bunches are often more than five meters (16') in length. It's good for a harvester operator to operate a forwarder now and again, to learn what causes forest floor damage," says Antti.

"Our goal is for no noticeable forest floor damage from the harvester. At AJ-Konepalvelu, we always line our routes with brushwood, to protect the root crowns and reduce the depth of the tracks. Yes, it costs money, but it also enables you to keep working, even in more difficult conditions. Although sometimes it's better to stop logging and wait for the weather to improve, to work on another job in the meantime," says Joonas Osara, commenting on one of the company's steadfast principles.



RIGHT ON TRACK ROAD SHOW

Good planning is as important as the machine

As for productivity and forest-friendly harvesting, both contractors believe that careful and thorough planning at assortment level is more important than the characteristics of the machine. In their opinion, the most important aspects are the routes taken, the directions of the strip roads, and the log piles lining them. Here's how they break this down:

"Not only long pulpwood can pose a risk of floor damage but also a large share of short timber, at least if they are far into the harvested area. The risk of leaving deep tracks then increases due to the increasing number of forwarding trips. In addition, the profitability of the forwarding is significantly reduced."

Capacity the determining factor

Antti and Joonas are young contractors and part of a generation that knows how to use modern technology, and they're well acquainted with the technical solutions, dimensions, and weights of the new Komatsu machines. They've already experienced the challenging working life of a forest machine contractor, and they know that sufficient load capacity is the governing factor when choosing a new forwarder. After a moment's thought, the pair answer: "For these

conditions, the 825TX is too small, and the 835TX is borderline. If we had to make up our minds now, we'd probably go for the Komatsu 845."



We met more than 100 customers on the Right on Track road show in the Baltics

The owner of SIA RAIRU welcomes lighter machines for harvesting

FOLLOWING THE RIGHT ON TRACK

ROAD SHOW in Finland, the main attraction – the Komatsu 835TX with the new tracking frame – made its way to the Baltics. The company RAIRU, the largest Komatsu customer in Latvia, tested the machine in a thinning forest and was suitably impressed.

Juris Ruditīs and Kasparis Raipalis founded the harvesting company SIA RAI-RU in the village of Lizums, northeastern Latvia, 21 years ago. The company, which performs 80 percent of its work in stateowned forests, has 24 forest machines – 9 harvesters and 15 forwarders. And 19 of them are Komatsu machines. The company's oldest Komatsu is an 830.3 forwarder that's clocked up more than 50,000 hours.

"The normal service life of a machine is about 30,000 hours," Juris explains.

According to Juris, his long-standing request to the machine manufacturers for lighter forwarders has finally been met now that Komatsu Forest is launching the 825TX and the 835TX.

Today's machines are 15 percent more productive than the older models, and they're also extremely ergonomic. Especially positive are the Comfort Ride solution on Komatsu's forwarders and the fact that



one-meter (39") wide tracks fit the rear wheels, ensuring that the machine isn't too wide for thinning on soft ground. The company uses Komatsu's MaxiFleet service as much as possible to increase harvesting productivity.

JURIS FINDS the new tracking frame an interesting solution.

"We definitely want to test the 825TX once it's available. Our share of initial thinning assignments will increase by about 20 percent next year, which will mean smaller stem sizes, favoring the use of lighter machines," Juris reasons.

Juris has only good things to say about SIA Haitek Latvia for their flexibility and willingness to help out when problems arise, sometimes no matter what the time of day. Juris is also grateful to Haitek for the way in which they provide information about new products.

"Previously, people came to the machine presentations to party. Now though, Haitek's events are focused on providing useful information about new products and services. In this respect, things have changed for the better," Juris says with a laugh.



A head that's ideal for final logging

ERIK HAS operated the head for 2,800 hours, harvesting everything from large-diameter pine and spruce to crooked and wiry birch, and he's been extremely pleased with it.

"The saw unit has impressed me the most. It offers remarkable precision, it's incredibly fast, and the chain rarely jumps off," says Erik.

But what is it that makes the S132 so precise? Let's take a closer look at some of the improvements.

To ensure short cutting cycles and a head with a constant chain speed not exceeding 40 m/s (130'/s), the new S132 is equipped with Constant Cut as standard.

Improvements have been made to ensure that the measuring wheel follows the contours of the stem more closely, delivering even better measurement accuracy. The changes include a new measuring wheel system, new hydraulics, a separate valve for controlling the mea-



A great, versatile head for final logging. Really reliable.

suring wheel cylinder, a new measuring wheel cylinder, and brand-new measuring wheels.

To maximize timber length and increase production capacity, the head can be equipped with the Find End Laser function, which resets the length measurement without the need to make a new cut. This is useful when working with pre-felled forest or processing windthrown timber.

TO EXTEND the head's service life, the frame has also been reinforced where really needed, such as around the upper knife and the end position stops for the roller arms.

Another improvement is the head's larger tilt angle, which offers greater maneuverability while reducing the load on the head, especially when working in steep terrain.

"All in all, I think it's a great, versatile head for final logging. Really reliable," says Erik.





No two thinning assignments are the same, and an operator always faces a new set of conditions when starting a new thinning assignment. However, there are methods, approaches, and tips that always provide a good starting point. Our Swedish method instructor, Per Lysebäck, covers a few of them here.

"Over time, small changes can add up to large gains in production. However, it's important for me to emphasize that thinning assignments differ – depending on both the forest and the country. That being said, I think most operators can benefit from the following tips in some way."

Thinning tips for forwarders

1. The right crane settings

The right crane settings are extremely important to optimize your thinning work. The crane settings should be adapted to you as an operator, but also to the type of job you're working on. Always keep in mind that the speed of the crane isn't the be-all and end-all of production. Instead, it's more important to ensure steady and well-considered crane movements that allow for the greatest precision. This doesn't just mean taking the shortest route between timber and trailer, but also avoiding the need to correct your decisions.

2. The right speed for your forwarding

Moving your forwarder too fast compromises the precision of your crane operation. This often results in jerky crane movements

and poorer technique. So, try to stick to a speed that allows you to operate the crane with good technique, with smooth movements between timber and trailer. Crane operation – not machine speed – is where you can save time.

3. Combine assortments whenever possible

One basic principle is to gather a full load in the shortest possible distance. As such, it's always best to combine two or more assortments (where possible). Loading and unloading will take a little longer, but this will be compensated by fewer trips, saving you both time and fuel.

4. Keep a few steps ahead

Just like the previous tip, this is all about planning. Always try to plan the next two

or three loads in your head. Always have the next step in mind, so that you're ready when it's time. It's a good idea to have a thorough look around when gathering your first load, to gauge the conditions. The first load will take a few more minutes, but you'll gain this back several times over with the following loads.

5. Get a second opinion

Spend a day working with a method instructor. No matter what level you're at, it's always worthwhile getting your technique looked over by someone else.

Start by optimizing your machine together, and then get some feedback on your technique. Small pointers and adjustments will have a major impact on your production in the longer run.

Thinning tips for harvesters

1. Utilize the machine's automation

Using the right settings is important on a harvester as well. With the right settings, you can maximize use of the machine's automated functions - such as for timings, pulse openings, and knives.

This reduces the number of manual tasks and enables your machine to take care of these automated functions. With the right settings, not only will you have more energy at the end of the day, you'll also have produced more.

2. Perform non-value-creating tasks at the same time

The only time you make money during a working day is when feeding and processing a stem. So, whenever possible, be sure to perform several tasks at the same time. Such as moving the machine, maneuvering the crane, and processing the stem simultaneously.

In general, it's a good idea to slow things down and focus on your technique. Try to use several functions at the same time while maintaining good control of the crane.

3. Divide your thinning into sections

Thinning in sections offers a structured and efficient approach that entails dividing the area to be thinned into different zones. In practice, this means, for example, that you begin with a section in the middle of the strip road and make a space for your harvester. You then choose the left or right side as your next section - and begin by felling the trees closest to the strip road to make space for the trees you'll fell later. You continue in this way, section by section, until you're done.

By dividing the area to be thinned into different sections, you reduce the amount of crane operation and perform a more thorough job.

4. Become a forestry chess master

Just like thinking a few moves ahead in a game of chess, try thinking three to four trees ahead. Look around while crosscutting and consider your next move. If you manage to master this technique, you'll rarely need to interrupt a crane movement and will instead maintain a good workflow.



5. It's easy to get complacent

As with a forwarder, paying for an instructor is a worthwhile investment. To check both your settings and your technique. As with so many things, it's easy to get complacent - and a little feedback and advice from someone else almost always results in an operator leveraging a little more from their machine.



Per Lysebäck offering tips to increase production over time.

Komatsu Forest know-how not limited to red machines

"My position" is the name of a new MaxiFleet function. Together with your tablet or smartphone, it comprises an important tool for preparing work in the forest. This new technology also allows Komatsu Forest to make its way into machines from other manufacturers.

ON A PLOT MEASURING several hundred hectares (1 ha is roughly 2½ acres), forest contractor Philipp Henk is busy processing trees hit by a bark beetle infestation with the help of his Komatsu 951 harvester.

"The new MaxiFleet function makes the practicalities of dealing with disastrous infestations much easier," says Philipp, who is standing with his tablet in an area with about 15 infested trees.

Preparations directly on a tablet in the forest

The area, which the harvester operator can later select with just a few clicks, was mapped by Philipp just a few minutes ago on location in the forest. On his tablet, Philipp can see his current position in the MaxiFleet map view and select any relevant information from the symbol view, such as wood pile locations. These are then added to the map. He then makes a note in the text field that there are 5 m³ (180 cu ft) of bark beetle-infested timber.

"Just over a mile away, we need to fell several hectares of spruce. I've already mapped that area," says Philipp. With all relevant information added to the map and transferred to the harvester in real time, the harvester operator can start working immediately. This is made possible by MaxiFleet, with all data stored in the cloud.

All data exchanges between the machine and MaxiFleet are automated. The operator simply selects the appropriate area in the machine. The information previously added to the map is then immediately displayed in the MaxiVision GIS software.

"This system enables us to increase machine performance significantly as I can focus fully on operating the machine. Before, I had to survey the entire area in advance, either on foot or by truck. Now all this is done by the operations manager," says Florian Henk, Philipp's brother, and selects the new area in the harvester. He then makes his way determinedly toward the area with a bark beetle infestation. As he does so, the route he takes is recorded in the system.

Once the harvester has done its job, the timber is removed by two forwarders. The company's Komatsu 855 is also equipped with both MaxiFleet and MaxiVision. If this work is started a few days later, the operator can check an overview of the area before commencing: The number of stems and their locations? The number of





The information is transferred between the machines and MaxiFleet at regular intervals.



assortments? The wood pile locations? This important information enables the timber to be quickly and efficiently forwarded from the forest to the landing.

Smart solution even for older machines

The second forwarder, of a different brand, is being provided by a fellow forest contractor. If this machine is to be used in the area, Philipp hands his tablet to the operator. The appropriate area is selected, and the map is then displayed showing the harvester's route and production. And just like in the Komatsu forwarder, the timber can be marked as forwarded. This information is mirrored to the cloud and then conveniently downloaded by Philipp back at the office.

"Once the machines start working, I can keep track of everything from home without having to drive out to the worksite. The new My position function also enables me to incorporate older or other brands of machines in MaxiFleet without having to make any structural changes," says Philipp, who is already on site with his tablet at the next harvesting area.







- The "My position" function is included in our MaxiFleet Advanced Plus agreement
- This function can only be used on one device (computer, smartphone, tablet) per company at a time
- The device needs an internet connection and built-in GPS receiver

DEMANDING TERRAIN



Easy climbingeven on steep slopes

We visited Scotland and Thomson Timber Harvesting to get a look at a pretty special Komatsu 895. This version of Komatsu's largest forwarder has been further refined with a unique, tailor-made driveline for steep terrain and demanding applications, such as ground preparation.

THOMSON TIMBER HARVESTING is one of the first companies to have the pleasure of owning a Komatsu 895 equipped with the Xtreme Transmission (XT) option. An extra robust transmission and sturdier hub reductions make the 895XT an extremely powerful forwarder.

We met owner Mark Thomson and his operator Hugh Bannerman, who previously operated a Komatsu 895 with a regular driveline. The area they're currently harvesting is not particularly steep by Scottish standards.

They've only had the machine for a few months, but it's already been put to the test in steeper larch forests in and around Blair Atholl. There the machine was fully tracked for the best grip – and performed well. Hugh says that he noticed the difference in traction right away. And not only in hilly terrain.

"You don't have to tax the diesel engine that much with the driving pedal, instead the transmission powers through very easily and smoothly. This can be seen in the off-road driving speed, which is faster than our last Komatsu 895." he says.

Fuel economy has also improved, with Hugh managing to reduce consumption by several liters an hour compared to their previous machine. In a country such as Scotland, where the ground is either hilly or soft, these are ideal characteristics.

HUGH HAS ALSO operated a Komatsu 890 in the past, and he found it a dependable machine.

"But if I have to single out one of the many improvements, then it's got to be the visibility from the cab – it's just great on the newer machines."

ABOUT XTREME TRANSMISSION (XT)

With Xtreme Transmission, the already powerful Komatsu 895 forwarder gains additional traction that not only offers faster off-road speeds, but also helps to reduce fuel consumption.

This option is available for the Komatsu 895 and is ideal for machines used in hilly terrain or for ground preparation.



MJÄLTÖN





Holmen won the contract when two landowners on the northern part of the island sold some forest to a timber merchant.

"It's certainly not the easiest place to harvest timber, but everything's gone according to plan. The contractors have done a great job," says Anton Broman from Holmen.

Night-time barge trips

Eddie Edwinsson is the CEO of Mekanav, one of the contractors on the island. He's worked with harvesting for many decades, but he says that the assignment on Mjältön is unlike any other.

"I don't know when the forests were last harvested there, but it must've been a long time ago, so it's really great to be involved. The conditions are somewhat special, it's rocky and steep, so it takes a lot of planning. As an example, it's complicated and time-consuming to return to the mainland if you've forgotten anything."

When the Just Forest team meets up with Eddie, he's just returned from a night shift on the island. The barge that carries

the felled timber takes 24 hours to load, and that means quite a bit of night work.

"We've installed small lanterns on the island and the mainland that we can control with our phones to navigate in the dark, otherwise travelling to and from the island is difficult.

Steep and stony

Torsten Alnöfjärd and Markus Edwinsson are two of Mekanav's operators on the island.

"The slopes are covered in boulders, and that makes them tricky to drive on. And the undergrowth is full of leaves, which also makes driving more difficult. But it's worked out well anyway. And there are great views," says Torsten.

"Steep and rocky, and then quite choppy on the boat sometimes on the way there and back. We've been lucky with the weather, but one evening it was blowing 14-15 meters a second (32 miles per hour) and being out on the water in the dark with that wind wasn't much fun," says Markus.

Kristoffer Grundroth runs KJ Logging and also harvests on the island. Most of his company's assignments are north of Örnsköldsvik where everything is a little flatter, so the Mjältön job was a real change for them.

"It's a challenge with new areas and such hilly terrain. Some parts of the island







are extremely steep and difficult to access. The fact that many areas are too rocky to drive on also means that there are large areas that can't be harvested," he says.

Comfort Ride helps

Kevin Boman joined Mekanav as an operator in July, and Mjältön is one of his first jobs for the company. When Just Forest visited, he was operating a Komatsu 855.

"I'm really pleased with it. It's well designed and easy to operate. Everything I need to get at inside the cab is easily reached. And the fact that it has Comfort Ride hydraulic cab suspension makes it comfortable even in uneven terrain," he says.

Kevin has previous experience of working in extremely steep areas, which is an advantage now.



Kristoffer Grundroth

"The slopes are a challenge, and you have to think about how you load the timber. If you load too much, it's easy for the timber to fall out."

Beautiful views and fishing

Eddie is on the island to show us around.

"Holmen has given us the OK to cut slightly wider access roads so that we can carry wider loads and use larger load spaces. This has enabled us to forward more efficiently, with fewer trips from the harvesting sites to the landings. We've managed to forward a full extra load each day this way," he explains.

Mekanav's contract on the island will soon come to an end and Eddie sums it up:

"We had to flex our muscles and think twice on this harvesting assignment, but it's definitely been memorable. Another bonus is that we've also been able to lay nets after work and have caught a fair bit of whitefish and sea trout," he smiles.

Before we leave the island, we spot Kevin with his Komatsu 855 picking up a couple of logs that ended up at the water's edge. As the wet logs rise into the air, water drips from them; in the background, the highest point on Mjältön is silhouetted by the sun, the sea glistening. At that moment, it was easy to understand why Mjältön has often been called one of the most beautiful places in Sweden.



Kevin Boman feels comfortable operating the Komatsu 855.

KOMATSU MACHINES USED ON THE ISLAND

The three contractors on Mjältön used seven different Komatsu machines.

Torbjörn Jakobsson Skog & Entreprenad AB: Komatsu 951, 895, and 890.

Mekanav AB: 901 and 855. **KJ Logging AB:** 911 and 845.

Alongside the three forest contractors, the sea freight company **Höga Kusten Sjöentreprenad** was also involved, transporting all the machines to the island and supplying an excavator of their own.

5,500 hours a year

That's how many hours forest machines in the forests of South America work. Every year. So, as you can understand, any products used there face extremely tough demands.

EVER SINCE OUR barking heads were launched in South America almost 30 years ago, they've been continually refined. The first heads shipped from Scandinavia were quite small, such as the Valmet 942, which was about the same size as today's C93. However, it was soon discovered that they couldn't cope with such intensive use. As mentioned, the machines are often expected to operate 5,500 hours a year, which is essentially 24 hours a day, 365 days a year.

Common to these heads is that they've mostly been used on excavators. It was only ten years ago that wheeled machines also came into use, although even today some 75-80% of heads are still mounted on tracked machines.

When the 370E was launched in the early 2000s, it was designed for eucalyptus, with a more robustly constructed frame and a felling link dimensioned to handle the power of an excavator. This head has since acquired two stablemates in the eucalyptus forests - the Komatsu V132E and the Komatsu C202E. All of them have,

however, been modified, having originally been designed for softwood, that is, pine and spruce.

Increasing demands on performance

In the fall of 2020, we presented a brand-new head, the Komatsu S162E, specially designed for eucalyptus and these challenging conditions. Durability and service life have been to the fore throughout the development process, and each and every component is well proven.

The head is optimized for delimbing and barking eucalyptus trees with a diameter of 20-26 cm (8-10"). To optimize the barking process, the head has angled feed roller arms and the frame has a centered backing roller to minimize friction. The head is also equipped with four hydraulically controlled delimbing knives and an adjustable top knife, which further improves the

barking process. The head will mainly be mounted on excavators, but is also available for rubber-tired machines, such as the Komatsu 951 harvester.

Hardwood is harvested and barked in Brazil, Argentina, Chile, Paraguay, Uruguay, Laos, Spain, Portugal (eucalyptus), and Indonesia (acacia).



New office

Komatsu Forest is opening a new office in Paysandu, Uruguay. This is a strategically important step to strengthen our presence in the country, with both more machines and a stronger service organization.



ce in Uruguay

"THE LOCAL DEALER Roman SA will remain the company's partner and focus on small and medium-sized customers while our new local office will focus on customers with large fleets," says Jens Bengtsson, CEO of Komatsu Forest.

Antonio Pezzi has been appointed Acting General Manager. He has extensive experience of large full-service contracts in Brazil and will transfer this knowledge to the new business. The company moved into the new premises in Paysandu in December.

"Despite the ongoing pandemic, we're confident about the future of forestry and our establishment in Uruguay is proof of this," Jens ends.



Stepped out of his comfort zone

Conan Hemsworth, a contractor from Rotorua, New Zealand, recently stepped outside his comfort zone and tried something new. When his clear-fell contract finished, he decided to give something else a go. Production thinning – with a difference. Using a wheeled harvester instead of a tracked base.

A WHEELED HARVESTER made sense for Conan Hemsworth when he decided to pitch for a thinning job with the forest company Timberlands in Kaingaroa Forest that he heard about. He is not new to thinning. It is where Conan started 20-something years ago. His early thinning experience was as manual fall and trim and then as an operator of a forwarder and compact tracked harvester. Drawing on that background, Conan proposed an entirely new approach in Kaingaroa, which fitted in with the thinking of the team at Timberlands.

"Someone needed to do something different and wheeled harvesters seemed to be the way to go. Europeans harvest a lot of wood around this size using wheeled machines and they make it work." Conan says.

"The reason I went for wheels is partly environmental, but also the standard of quality of what I leave behind. Low impact on ground soils and no root plate damage. There's less compaction and disturbance with wheels."

ALL GOOD IN THEORY, but before putting that into practice, Conan needed to do more research, especially on which wheeled harvester would best suit his plans. Eventually he whittled it down to one of the products from Komatsu

Forest. Importantly, the Komatsu Forest NZ operation is based on his doorstep in Rotorua and there's solid back-up from Australia, where wheeled harvesters are popular in thinnings, which means parts/back-up are only a short flight away.

and the machine itself? Conan settled on a Komatsu 951 six-wheeler. But it was not his first choice. "Initially, I was looking at the smaller one, the 931, but I thought if I'm going to have a go with a wheeled harvester I probably need to go with something bigger, with a bit more strength to it," says Conan. "The 951 is not overkill for thinnings but it is probably the







Komatsu S172.







top end of what you'd want to put in here."

In Australia, Komatsu 951 harvesters used in production thinning operations mostly run heads made by Komatsu because the Swedish engineers design them to perform in unison. The head chosen by Conan to match his new 951 is the Komatsu S172. It's a good-sized implement, able to cope with larger trees typically found on forest edges, as well as the smaller ones under the canopy.

THE 951/S172 COMBO is now working in tandem with a brand-new Komatsu 875 forwarder, and has also been accompanied by another harvester. This time he went

with his original gut feeling and ordered the slightly smaller 931.

THE COMPARTMENT being worked by the team is a mixture of pruned and unpruned Radiata, planted under the prestructural regime, so the stocking suits the larger 951, with one in every two trees being removed to bring it down to around 383 stems per hectare.

Fortunately, the 951 centre pivot turns 40-degrees in either direction, so it can easily move around trees. The cab and crane rotate 360-degrees and there's a squirt boom on the end, which further enhances the pick-and-go manoeuvrability. But what has really impressed Conan is the

"It's fast, really fast," says Conan. "The speed is not just down to the wheels, it's the combination of the nimbleness of the base and quickness of the head - "we had to slow that head right down when we started, it was just too guick". Now they've got used to it, the head has been dialled back up to 100%.

ADD UP ALL THE ADVANTAGES and Conan reckons overall productivity is probably 40% better than an equivalent tracked harvester. No wonder he's smiling.





The harvester is both fast and agile.

Adaptive and determined

Bob Volz, age 70, of Minong, Wisconsin, USA has been associated with the forest industry for the last 40 years. Although disabled, Bob has been a forwarder operator for Volz Forestry Inc, for the past twelve years. Volz Forestry is a family business operating two Komatsu XT430-3 tracked harvesters and a Komatsu 855.1 forwarder. They operate in the dense and rolling hardwood forests of Northern Wisconsin which contain heavy and limby, large-diameter oak, maple, and poplar.

THE BUSINESS officially began operation in 2008, but in truth, Volz Forestry has been involved in logging and log hauling for decades prior to formally incorporating. Bob's youngest son, Adam (47) owns the business which is deeply woven into the fabric of the Volz family.

In good economic times running a logging business can be challenging. However, since the COVID-pandemic began maintaining the small family business has been extremely trying. Bob says, "In all my years in business there has never been a harder time to run a logging operation but like everything else we are finding ways and adapt."

Adaptability and determination are two traits that have served Bob well as he is one of only a small number of disabled forest machine operators working today. His story began many years prior to his forwarding career.

Bob grew up in the nearby town of

Spooner, Wisconsin. After graduating from high school and serving in the military, he took a job back home with the railroad. He rose to the rank of train conductor however, the railroad hub in his small town was waning and Bob knew he would eventually lose his job.

At the time, Bob was married with children, so a friend suggested that he buy a pulp truck and haul logs for extra income. As his railroad job ended Bob found that he liked hauling pulp and had a head for business. He was soon able to purchase three more trucks and hire drivers to help grow his business.

The future looked bright for Bob, but an accident in 1987 altered the course of his life. He had just finished an expansion to his shop and was working on a ladder when it slid away from the wall. Bob fell and landed hard in a seated position. He immediately felt his legs go numb and knew his situation was bad.

As luck would have it. Bob's son, Adam who was thirteen at the time was with him and called for help. Bob spent 3 months in the hospital recovering from his spinal cord injury but never regained use of his legs. He credits Adam with saving his life and to this day feels the accident could have been much worse.

AFTER HIS RECOVERY, Bob went back to work in earnest to support his family. He grew the business to include as many as 15 pulp trucks. The trucking business was good. In fact, Bob was asked by a local poultry company to begin driving refrigerated trucks for their growing business. That went so well that he eventually got out of log trucking and concentrated on refrigerated trucks. Eventually growing his fleet to as many as fifty refrigerated units.

During the 2008 economic downturn, fuel prices squeezed most of the profit out of the trucking industry leading Bob to close his business and consider an early retirement. His family always dabbled with a small logging operation as a side business and around that same time his sons were transitioning from their pulp trucking business to a full-time logging operation. The timing was right, so when asked if he wanted to join in, Bob went to work in his son's new logging business.

The logistics of how Bob could become a forwarder operator needed to be addressed. They contacted their local forestry dealer for ideas to adapt the machine to operate using only hand controls. The service manager at that time and long-time friend,



Bob Volz and Larry Jarecki have a longstanding business relationship.

Larry Jarecki, was tasked with developing a workable solution. He also helped the family devise a footrest that would allow Bob's legs to swing with the seat.

Bob enjoys forwarding and with his business background, he also manages the books for Volz Forestry. Bob says, "I am retired, but I like staying busy, being productive, and helping the family. 'Can't' is a word that I do not like to use in my vocabulary. I think a person can accomplish almost anything if they are determined and put their mind to it.

Bob continues, "My friend, Larry now works for the Komatsu distributor, Roland Machinery. We have purchased several machines from Roland in recent years. They have always been good with service. I like Komatsu forwarders. I really liked my older 860.3, that was a good machine. And I like the comfort in this 855.1 forwarder. It pulls hard and maybe too hard for its size. I would eventually like to try an 875 model. That seems like it would be the ideal size for our conditions.



"We harvest with XT430-3 non-leveling machines with controlled felling heads. The machines have proven they can stand up to the demands of our hardwood forests.

"We are evaluating what is next for the Volz Forestry. At this moment, we have some tough economic times, but are they going to last? Should we expand our workforce, and buy more equipment to gain efficiencies and increase our production? Those are hard questions for my sons Adam and Aric, and my Grandson Robbie need to answer. Whatever happens I will lend my support. A small forestry company can accomplish almost anything if it can stay focused, adaptive, and determined."



NEW PLANT TO BE INA



Cooperation is key

It's been about a year since Anna Fredriksson assumed the role of plant manager at Komatsu Forest in Umeå, Sweden. Just Forest decided to check in on Anna to hear her take on the future and the commissioning of the new plant.

by the coronavirus, it's been great to see the amazing dedication of our employees," says Anna. She doesn't deny that it's been

"DESPITE THE DIFFICULTIES caused

says Anna. She doesn't deny that it's been a challenge taking on the role of plant manager in these overwhelming times – at the same time that the company is upping the pace and building a new plant.

"The coronavirus has affected our order intake, our supply chain, and working conditions for our staff. And it's been challenging to keep production going with all the restrictions concerning social distancing

and so on. However, our staff have adapted their work methods in an impressive manner, and despite the circumstances we've been able to work relatively normally. There's a strong will here with everyone doing their best to resolve the challenges we've faced."

Anna points out that the plant's role is to deliver products of the right quality on time, with a focus on safety, employees, and the environment. As plant manager, her most important task is to ensure that everyone prioritizes and strives toward these goals.

ANNA HERSELF has worked in both production and quality assurance, and so she has knowledge of not only the products and operations, but also the company's strengths and challenges.

"Two important keys to success are finding the root cause of any problem and then working together to solve it. I try to base my leadership on this," says Anna.

And this is an approach she's bringing to the new plant.

"Gathering all our staff and expertise in one place sets the stage for further

UGURATED SOON

The construction of Komatsu Forest's new plant outside Umeå has entered an intensive phase. The walls and the roof are in place, and work is under way to complete everything inside. This is a busy time for Fredrik Hahlin, the principal project manager for the project known as Komatsu Forest One.



"RIGHT NOW, we're making great progress and everything's moving along nicely," says Fredrik. "We've completed the extensive phases encompassing blueprint reviews and O&M coordination, so now we're focused on ensuring that the needs of the entire business are met, that we get what we've ordered, quite simply."

The plant is expected to be completed in 2021, and the project is currently going to plan, despite the demanding schedule. In less than two years, a brand-new plant with

brand-new processes for forest machine production is to stand ready.

Once the building is watertight and commissioned, the final inspections can be performed in March, after which operations can be set up.

"The first forest machine will be assembled this coming summer," says Fredrik proudly.

The new plant won't only enable us to gather everything in one place, it will also change the way our forest machines are built when we move from two separate flows – one for forwarders and one for harvesters – to one joint flow. One production line.

"This will allow us to coordinate production to a greater extent and improve the conditions for maintaining consistently high quality and shortening lead times from order to delivery. We'll also be more flexible and able to adapt production regardless of the product mix. For the first time, we'll be able to do exactly what we want, without being limited by the building," Fredrik ends.

37,000 m²

Total size of the plant, that is, production floor plus sixstory office building some **530**

employees will work at the plant

28,000 m²

production floor

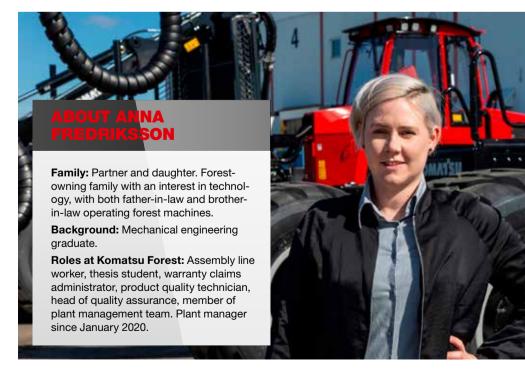
22,000 m²

own solar power plant

strengthening our cooperation and enabling us to develop our work methods," says Anna. "We're being given the opportunity to improve our work environment and our work processes, thanks to the larger production floor and brand-new premises. Gathering production in one place will also enable us to improve our logistics chain, and these are just a few examples."

THE NEW PLANT is a long-term investment that will firmly establish the company in both the region and the industry.

"The immediate future will entail major changes. Moving has its complexities, and it'll take some effort to optimize all our operations. Then we'll begin the long-term task of managing our new circumstances," Anna explains. "That's when the real fun will begin."



Our CEO sees many future development opportunities

Jens Bengtsson, you took over as CEO of Komatsu Forest at a very turbulent time, just as the coronavirus hit. You've held the position of CEO for almost a year now, so we're interested to hear your views on both the past year and the future.



"

... we're still seeing favorable long-term growth in the forest industry – the forest remains a future industry.

Jens Bengtsson, CEO of Komatsu Forest "YES. THAT'S TRUE. These are - and have been - somewhat unusual times, with a pandemic that affects us all. Throughout this period, it's been especially important for us to work proactively with our most important core value and highest priority - the safety of our employees, their families, and our customers and suppliers. Ensuring a safe and secure workplace while delivering machines, service, and spare parts to our customers in a safe manner has been, and remains, a challenge. At the time of writing, we're facing a situation with rapidly rising numbers of Covid-19 infections throughout much of the world. We're following developments closely so that we can act quickly while also feeling hopeful now that a vaccine will soon be available to the most vulnerable groups in our communities.

During 2020 and 2021, we're launching a brand-new range of machines, all compliant with the latest emission legislation. We are extremely proud of this and hope that customers both old and new will appreciate these new machines. Our road show was very well received and generated some great feedback. It'll be especially interesting to introduce our smallest forwarder, with a 9-tonne (9.9-ton) load capacity, due for launch in 2021. We hope that this will be a popular addition to our range for the smaller machine segment. Our goal is to strengthen our market position in the markets in which we operate and, naturally, to move closer to a market-leading position in our domestic

Although the pandemic is clearly continuing to affect our daily lives, we're still seeing favorable long-term growth in the forest industry – the forest remains a future

industry. Demand for renewable inputs and sustainable forestry is increasing markedly in society's efforts to achieve sustainable development. The forest is a major asset in this ongoing transition, and we'll continue to see increasing demand moving forward. New applications areas are emerging, such as the replacement of plastics with forest products, increased timber use in construction, and changing consumer patterns resulting in greater demand for cardboard. Population growth is driving demand, one positive example being that general improvements in welfare are increasing demand for, among other things, hygiene products. Naturally, our forest machines are being developed in the same direction, with a focus on cutting emissions, reducing ground damage, and improving operator ergonomics while increasing productivity. Is it challenging? Undoubtedly, but we're confident that we'll succeed, although it will take focused and determined efforts.

We have a lot of faith in greater digitalization. For some time now, we've been developing solutions for human-machine communication, an area that continues to see rapid progress. Our goal is to offer our customers a complete solution for ownership with peace of mind.

We've now entered an eventful year. Komatsu is celebrating 100 years as a company and Komatsu Forest 60 years. And at the same time that our new plant and adjoining office space will stand ready, which is great news. Naturally, this is something that we'll be focusing on throughout the year. I'm hopeful that this year we'll be able to meet at our new plant – customers, suppliers, and employees alike."



Plant for the Future has enabled Mr. Mennetrier to regenerate his forest faster.

Plant for the Future



Plant for the Future is a charitable fund, a non-profit sponsorship organization created in 2014 by active members of the silvicultural industry to address major forestry issues in France.

CORPORATE SPONSORS involved in Plant for the Future act within the framework of their social and environmental responsibilities and their donations contribute to reforestation throughout France. By becoming a patron of Plant for the Future, companies can have a profound effect on today's major environmental, societal, and economic challenges and take concrete action, here and now, in the battle to stop climate change.

Since being founded, the fund has raised EUR 4 million (almost USD 3.9 million), of which almost EUR 3.2 million has already been invested in 277 different reforestation projects, or 1642 hectares (4057 acres) of forest, throughout France. Komatsu Forest France has been a Plant for the Future patron since 2016.

As part of its planting program, the organization provides the money needed by forest owners involved in the regeneration and management of their forest holdings. This support is provided in the form of a repayable loan and gets forest owners involved in a positive spiral. By working with reforestation, the forest owner also participates in the fund's continued existence through their repayments, which are then used to finance new projects.

MR. MENNETRIER, a fish farmer and forest owner in Fayl-Billot, has benefited from the support of Plant for the Future to reforest 5 hectares (12.4 acres) of wasteland.

"I'm grateful to the organization's patrons, who have enabled me to regenerate my forest faster. Without this simple economic support, I wouldn't have been able to carry out the replanting necessary to manage my forestlands responsibly. After having faced an ecological impasse, today my lands are of environmental, social, and financial value - to the benefit of all!"

If you'd like to learn more about this project, visit: www.plantonspourlavenir.fr

Helping to counter the pandemic

THROUGHOUT KOMATSU'S

almost 100 years of business, the company has always considered it important to give back to the society in which we live and work. The ongoing pandemic has left no one untouched. The most vulnerable groups in society face an even worse situation and a show of solidarity has never been more important or more urgent.

Accordingly, Komatsu Forest has joined forces with our fellow Komatsu companies in Europe and our parent company Komatsu Ltd in Japan to donate some SEK 1.2 million (about USD 142,000 or EUR 117,000) to charitable causes. The recipients are the international organization Doctors Without Borders (Médecins Sans Frontières, MSF) and local support organizations in the UK, Italy, and Brazil.

"The situation faced by those who are already vulnerable is worsening. So, it feels important to be able to contribute to the global efforts of Doctors Without Borders to help those in need," says Jens Bengtsson, CEO of Komatsu Forest.

THIS IS A way for Komatsu to give Doctors Without Borders and local support organizations a helping hand, so that they can continue their valuable work.



A new master off-roader in

BORN AND RAISED in a house belonging to a sawmill, Clint Howland was literally born into the forest industry. Other than a four-year sabbatical within the agricultural industry, he's remained faithful to the forest. He spent his first eight years in the forest as a handcutter, but since 1998 he's been a machine operator.

Today, Clint is a harvester operator working with both thinning and final logging

in and around Aberdeenshire, in what he describes as varied environments.

"They're vastly different. Everything from steep terrain through rolling hills to flatlands. I enjoy the variation. I recently completed a job just outside Inverness. That was steep terrain, with about a 24-degree incline on the strip roads. We had to use switchbacks on the mountain and even some chainsaw felling where it was impossible to drive."

STEEP, CHALLENGING TERRAIN

demands a special kind of machine. In addition to good off-road performance, Clint had some other important criteria when deciding on a new machine in 2020:

"Comfort is my top priority. Closely followed by service, reliability, and fuel economy," he explains.

Clint decided on a Komatsu 931XC, the 2020 version, to replace an earlier version









place in Scotland

of the same model. In a direct comparison, he can see many improvements, mentioning, for example, the new AdBlue®/DEF system, the new hose routing, and the improvements to MaxiXT. However, most important to him are the new planning features.

"Yes, MaxiVision is probably the most important new feature for me. The map and production planning functions enable me to get a better grasp of the entire plot and to plan my work accordingly. This cuts thousands of meters from the total forwarding distance, and shorter transport distances save both time and fuel."

"Plus, I already knew what the Komatsu 931XC is capable of. I like the comfort, not having the crane right in front of me, the 360-degree work area, and the mobility in steep terrain."

TODAY, AFTER MORE THAN four months with his new machine, he remains satisfied. He explains that even during longer shifts, the machine is comfortable and easy to use while still delivering extremely high productivity. However, as with all things, there's always room for improvement, says Clint.

"In the next model, I'd like to see a little more storage space for consumables, I'd appreciate that," Clint ends.

NEWS

Continual improvement is one of our watchwords. We constantly strive to refine our products and create new services and functions – always with the aim of simplifying your working day! Here are a few examples of the improvements and new features from the past year.



NEW SAW MOTOR FOR CONSTANT CUT

Constant Cut is a function that helps you to maintain a constant and high chain speed throughout the cutting cycle without the risk of running the chain too fast. The Constant Cut function has now been improved with the addition of a new saw motor with an integrated speed sensor.

This integrated speed sensor offers advantages such as even more precise chain speed control and easier chain speed adjustments during servicing.

IMPROVED FORWARDER CRANE PRECISION

A control system upgrade enabled us to improve crane precision on our forwarders. The upgrade requires a visit from a service technician.

This improvement is available for Maxi-Xplorer 3.20.0 and above. Contact your Komatsu workshop for more information about your particular machine.

REINFORCED GUARD FOR C144 FEED ROLLERS

Helping you to avoid unnecessary downtime is important to us, and one of the ways we do this is to identify the more vulnerable areas of our machines that can be reinforced. One such area is the feed roller guard on the C144, which has been reinforced with a wedge for increased durability and reliability.



SIT UPRIGHT IN THE CAB WITH THE NEW SITRIGHT OPTION

You can now order the SitRight seat leveling option for forwarders. This enables the operator to sit upright despite a sideways tilt of up to 13 degrees, which is good news for operator comfort.





ROBUST LAMINATED POLYCARBONATE FRONT WINDSHIELD - A CRYSTAL-CLEAR IMPROVEMENT FOR HARVESTERS

The 2020 harvester models saw the introduction of a completely new type of windshield made from laminated polycarbonate, an exceptionally durable and tough material with a number of advantages. This robust windshield is 20 mm (0.79") thick – an increase of more than 35% – and is designed for the harsh work environment of the forest. The front windshield's protective surface layer also boasts additional improvements to better withstand wear and abrasion, such as from windshield wipers.

Visibility is important in harvesting work, both when collaring the tree and when assessing timber quality during processing. One of the unique features of Komatsu's harvesters is the good visibility of the work area, with a large vertical viewing angle. The front windshield also has excellent optical properties, ensuring high-quality work performance.

"It's great to be able to offer our customers a thicker and more durable windshield. We've long had one of the market's thickest windshields, but now we're taking the cab to the next level in terms of ergonomics and the work environment," says Tobias Ettemo, Product Manager Harvesters and Harvester Heads.





NEW STORAGE BOX UNDER FORWARDER CRANE

You can never have too much storage space! This is why you can now add a storage box under the forwarder crane a practical place to stash equipment such as grease guns. hoses, and much more.

NEW QUICK CONNECTOR FOR COOLANT

Every task that we can simplify saves you time and makes your working day that bit easier. This is why we've developed a new quick connector for topping up the coolant, found on the bottom of the radiator. This connector is available for both harvesters and forwarders.



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