



# **MAXIFLEET**

Control, profitability and  
greater convenience

# MAXIFLEET

Full control over both machines and production

**MaxiFleet is a service that gives forest machine contractors full control over the status and performance of their forest machines. Users gain access to all information in each machine's MaxiXplorer control system and can follow up production in order to increase profitability.**

- MaxiFleet is a powerful tool that makes it easy to plan, follow up and refine productivity
- Users can review in real time the status and performance of their machines and retrieve updates on any adjustments or actions
- Gathering everything in one place makes it easy to compare data between machines, areas and dates and to track progress in different areas
- The system is web-based and accessible from PCs, tablets, smartphones and machines – no matter where you are, even offline



# PROFITABLE BUSINESS

**MaxiFleet is the difference between believing and knowing. With all the facts on hand, contractors can more easily make educated decisions and thereby increase profitability.**

- With MaxiFleet, users always have access to important KPIs
- Users can easily see any alarms from their machines should anything out of the ordinary happen, enabling quick action – whether that means planning resources to avoid production losses or conducting preventive maintenance to avoid downtime
- MaxiFleet provides effective tools for analysing and comparing detailed information about different areas, machines, models and harvester heads
- Users can keep track of fuel consumption and even access information that helps to optimise the machine and head for the work at hand



# GREATER CONVENIENCE – FOR EVERYONE

Countless tasks need to be done throughout the working day, some involving several different people. MaxiFleet offers many smart functions to simplify such matters and smooth things out.

- Administrators can view all data in one place and already when planning an area optimise how to handle the harvesting in terms of wood piles, primary routes and so on.
- Data is pushed to the machines and operators can easily retrieve the information directly from the cab. Data can also be sent between harvesters and forwarders.
- MaxiFleet makes it easy for contractors to gain an overview of their operations and facilitates planning, calculations and follow-ups.
- Should a machine malfunction in any way, our experienced technicians are but a button press away. They can connect to the machine and troubleshoot it remotely – which means the machine owner doesn't need to book a callout visit to get someone to look at the machine.



# SIMPLE, FLEXIBLE AND FULL OF POSSIBILITIES

MaxiFleet is a user-friendly tool that allows users to access the exact information they need – with the level of complexity left to the user. MaxiFleet is also constantly being developed and regularly updated with new, smart functions and solutions for simpler business management.

- All data is sent automatically and is available in MaxiFleet. Users decide which information is most valuable, such as for use in reports, KPIs and so on.
- Users can start on a small scale. The next step might be to contact our experts for further guidance.
- The subscription includes all new functions and users can also suggest new functions, which are evaluated and can be selected for development.



# BETTER SERVICE WITH MAXIFLEET

With MaxiFleet, it's not only the machine owner who becomes an expert on their machine – we do too! This allows us to provide even better service as we can prepare by checking a number of aspects of machine status and performance.

- Active alarms
- Events
- Machine status
- Engine hours
- Has the machine been running well? Has it sent reports?
- Is the recorded downtime reasonable or an indication that something is wrong?
- Does it have the latest version of MaxiXplorer?
- Are the machine model and chassis number details correct?
- Are the head model and chassis number details correct?
- Where is the machine used and who is operating it?
- Milestones – historical events that can affect the machine and its performance
- Fuel economy – unexpected consumption can indicate a fault
- Operator training – indicates whether the machine is 'used correctly'
- We can also see the precise location of the machine, which gives us directions and makes it easier to estimate journey time





WHAT'S INCLUDED IN  
MAXIFLEET?

# MAXIFLEET INCLUDES ALL THIS

MaxiFleet is offered with three alternative service levels: Base, Advanced and Advanced Plus. The machine owner chooses the level that best suits their business.

## Base

The base level gives users access to basic information in the machine overview, remote connection for our technicians, remote-controlled diesel heater and real-time maps.

## Advanced

For users who want to be able to make comparisons, use map layers, track KPIs and receive reports as well. Also for users who want to work with area planning and follow-ups.

## Advanced Plus

This is the level for users who want total control over their business in terms of harvesting, production and productivity. This level also enables users to control their machines remotely.

	Base	Advanced **	Advanced Plus
Machine overview	●	●	●
Remote connection Komatsu personnel	●	●	●
Remote-controlled diesel heater	●	●	●
Offline Sync	●	●	●
Map	●	●	●
Map layers		●	●
KPI:s		●	●
Report		●	●
Area management		●	●
Milestones		●	●
Production and operational monitoring		●	●
Machine analysis		●	●
In-depth Machine analysis			●
Remote access and file transfer machine owners			●

# MACHINE OVERVIEW

- Base
- Advanced
- Advanced Plus

The machine overview provides users with a comprehensive picture of their machine or machines. It includes the following information:

The screenshot shows the 'MACHINES' tab in the Komatsu Maxifleet system. It features a navigation bar with options like AREAS, WORKING TIME, MAP, ADMINISTRATION, and SERVICE. Below the navigation is a search bar and a 'Create report' button. The main content is a table with columns for various machine attributes.

Select All	★ ↑	CUSTOMER NAME	FLEET	MACHINE	TYPE	HEAD	HEAD CHASSIS NUMBER	STATUS	LAST REPORTED	AREA	OPERATOR	WARNINGS	ENGINE HOURS	HEAD HOURS	PROGRAM VERSION
<input type="checkbox"/>	★	Demo	Demo	931XC.2 0000400034 Demo 931XC		C123	C123xxxDEMO	Active last 24h	2 hours ago	Area 362	Operator 40		3,147	1,948	MaxiXplorer 3.15.0.34015
<input type="checkbox"/>	★	Demo	Demo	901XC.5 0000400033 Demo 901XC		C93	C93xxxDEMO	Active last 24h	2 hours ago	Area 360	Operator 34		7,565	2,269	MaxiXplorer 3.16.0.35474
<input type="checkbox"/>	★	Demo	Demo	895 0000400032 Demo 895				Active last 24h	an hour ago	Area 356	Operator 38		11,089	0	MaxiXplorer 3.14.0.33009
<input type="checkbox"/>	★	Demo	Demo	855.2 0000400031 Demo 855				Active last 24h	3 hours ago	Area 360	Operator 36		3,975	0	MaxiXplorer 3.14.0.33009

- Status – whether a machine is in operation
- Last report sent – to ensure that the information flow is functioning and reports are sent regularly
- Utilisation – basic time, idle time and interruption time
- Production – actual production
- Area – which area the machine is working in
- Operator – which operator is using the machine
- Active alarms – whether the machine has any active warnings (yellow) or alarms (red) that should be looked into
- Milestones – the milestones registered for the machine
- Software version – which MaxiXplorer version is installed in the machine

# REMOTE SUPPORT

**MaxiFleet gives users access to remote support, allowing experts at Komatsu Forest to connect to the machine and troubleshoot any problems remotely. The result is readily available and efficient support with minimised downtime.**

- Remote support saves both time and money as lengthy downtime and expensive travel time are avoided and Komatsu Forest's experts are always on hand.
- Our technicians can use the remote support service to provide training, troubleshoot problems, adjust machine settings, update software and so on.
- The machine overview in MaxiFleet even enables our technicians to monitor alarms and other signs indicating that a machine needs to be checked. The technician can then contact the machine operator and connect to the machine to investigate.
- Even scheduled services can be made more efficient as the technician can prepare for the visit by connecting to the machine remotely.
- What's more, MaxiFleet Advanced Plus enables you to provide your own remote support to all machines within your company/fleet.

Base

Advanced

Advanced Plus



# REMOTE-CONTROLLED DIESEL HEATER

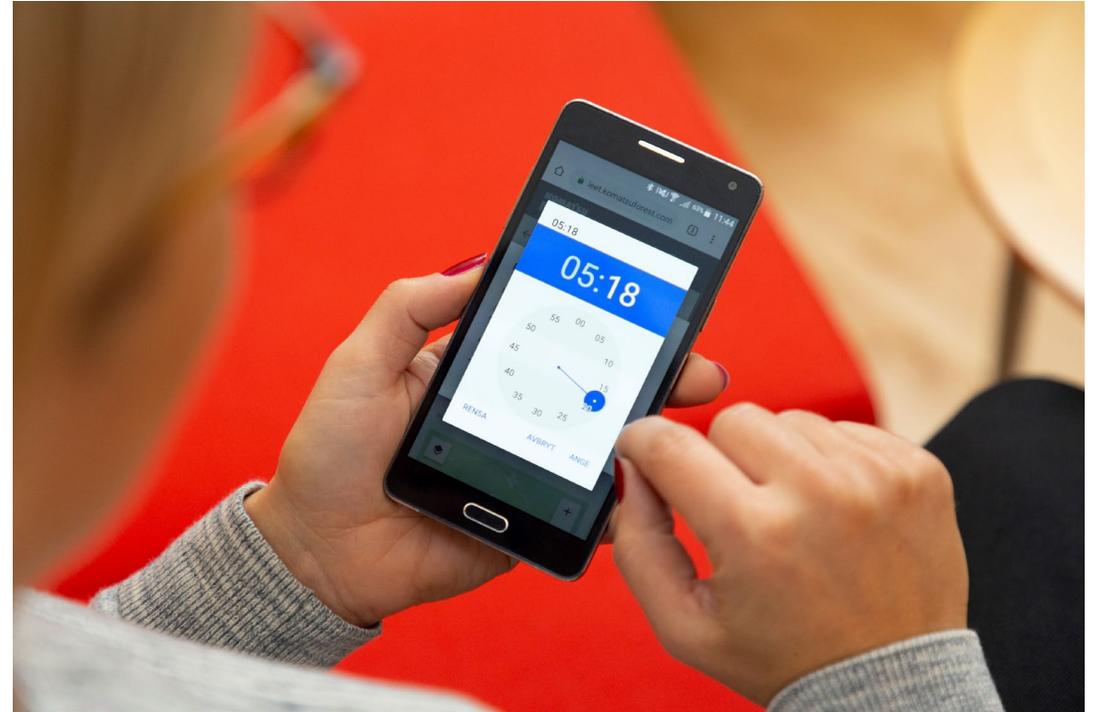
Base

Advanced

Advanced Plus

With MaxiFleet, users can easily set up their diesel heater from home.

- Select the day and time the diesel heater is to start.



Base

Advanced

Advanced Plus

# OFFLINE SYNC

**Offline Sync is a convenient function for contractors who often work in areas with poor network coverage.**

- Offline Sync can be used as either a complement in areas where network coverage is poor or in areas with no network signal.
- The function is designed for seamless operation and allows operators to focus on their work while the technology quietly does its job in the background.
- Here's how it works:
  - The operator downloads an app on their smartphone
  - With the press of a button, data is transferred from the machine to the app
  - Later when the operator is in an area with coverage, the app automatically synchronises with MaxiFleet
- One prerequisite for the app is that the machine has a Wi-Fi network. There are two alternative solutions for this:
  - Wi-Fi dongle in Komatsu modem
  - WLAN device connected directly to the PC
- Functions that require a network connection are remote-controlled diesel heater, real-time machine location and remote support.

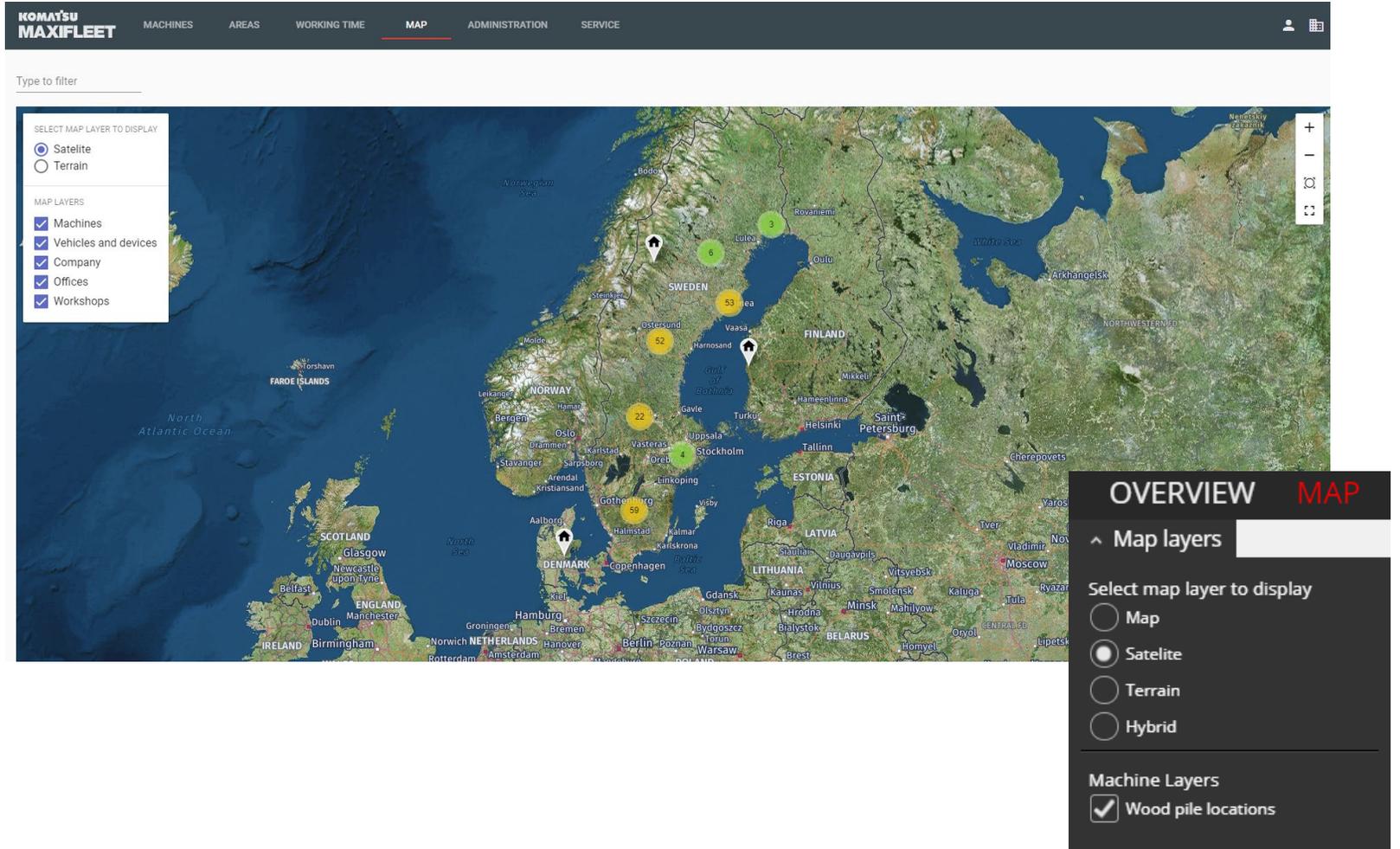


# MAP

- Base
- Advanced
- Advanced Plus

Ability to see machines, workshops, wood piles and more on a map in real time.

- Basic map layers include:
  - Map
  - Satellite
  - Terrain
  - Hybrid
  - Wood piles



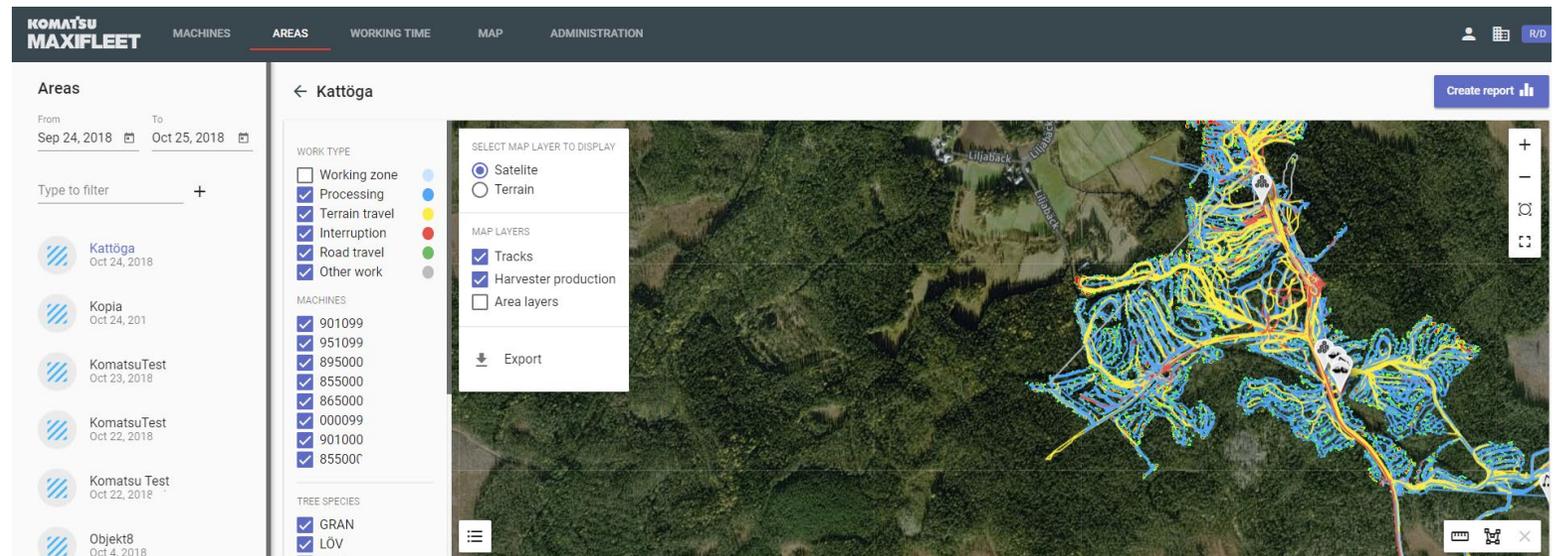
# MAP LAYERS

Advanced

Advanced Plus

The map layers offer an improved overview of the area. You can easily discern harvested areas, forwarder and harvester tracks, whether the timber has been forwarded and wood piles. This makes it even easier to plan schedules and timber transport.

- From the area overview in MaxiFleet, users can now choose to display map layers for tracks, harvester production and area boundaries. The function is available for both older areas and current areas. There is also a map layer showing forwarder wood piles.
- The map layers are updated several times each day, enabling you to monitor how work is progressing in real time.
- You can, for example, view timber locations and see whether a forwarder has been there.
- The portion of an area that has been harvested can also be seen, as well as the share of timber that has been moved to the wood piles.

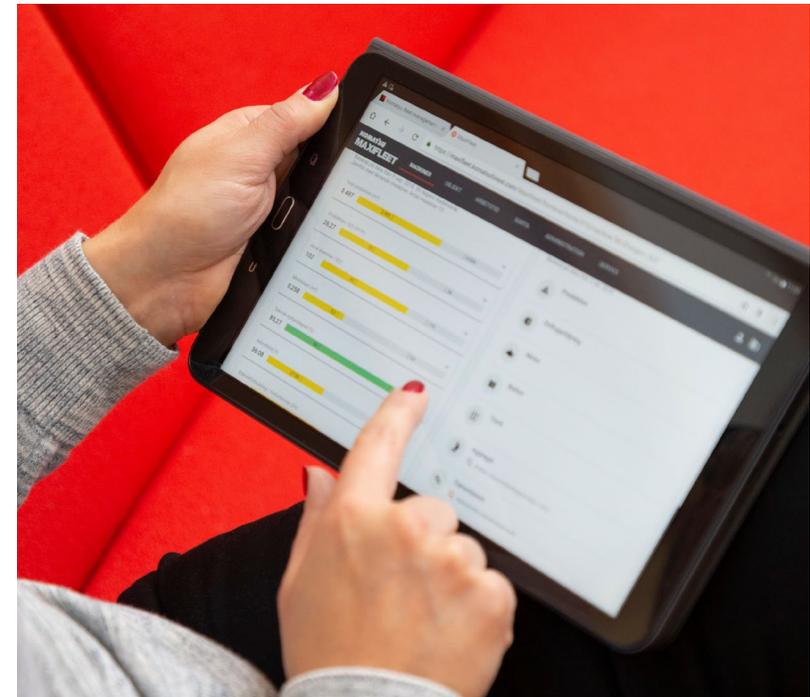
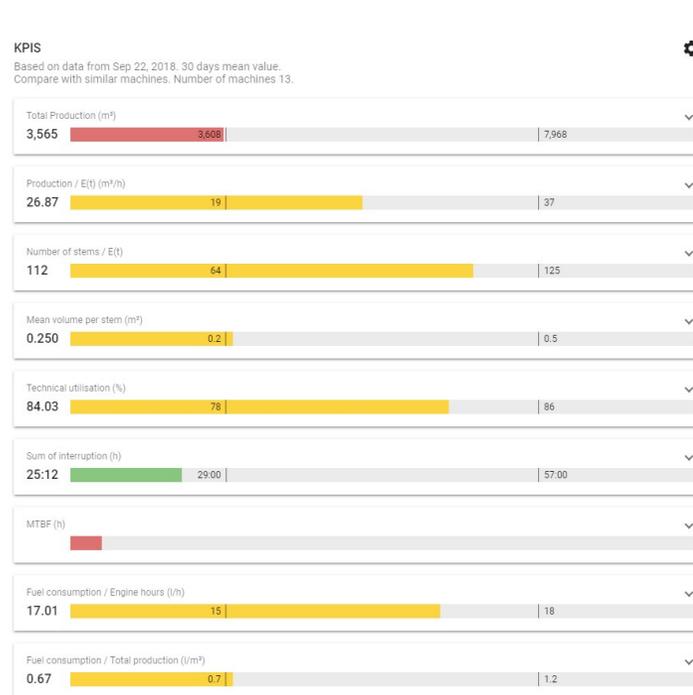


# KPIs

Advanced  
Advanced Plus

On the KPI tab, users can see the key performance indicators for the machine. The function symbols are identical to those in the MaxiXplorer control system.

- A machine can be compared with all machines or similar machines, the latter being useful if the contractor has only a few machines, for instance.
- The KPIs are colour coded using green, yellow and red. Green means all is well while red means not so good, the colours making it easy to quickly assess machine status.
- You can also view detailed information in chart form to see how an indicator has changed over the past three months.



# REPORT

Advanced

Advanced Plus

While the KPI tab only presents the most important indicators for a machine, users can switch to the report function to view more detailed information.

- Area report
- Machine report
- Operator report
- Event report

The screenshot displays the Komatsu Maxifleet web interface. At the top, a dark navigation bar contains the 'KOMATSU MAXIFLEET' logo and several menu items: 'MACHINES', 'AREAS', 'WORKING TIME', 'MAP', 'ADMINISTRATION', and 'SERVICE'. A user profile icon and a calendar icon are visible on the right side of the navigation bar. Below the navigation bar, the main content area is titled 'Report 0000400034'. It features several filters: 'From' (Oct 15, 2018), 'To' (Oct 22, 2018), 'Operators' (All (2)), 'Areas' (All (3)), and 'Templates' (Machine report). A 'Report Format' dropdown is set to 'Full'. Below the filters, there are four tabs: 'Area', 'Machine', 'Operator', and 'Events'. The 'Machine' tab is currently selected. The main content area shows a 'TIME OVERVIEW' section with a pie chart. The pie chart is divided into three segments: a large orange segment representing 84.1%, a smaller blue segment representing 8.1%, and a green segment representing 7.8%.

# AREA MANAGEMENT

Advanced

Advanced Plus

The user-friendly area management features in MaxiFleet enable you to take care of and automate a large number of administrative tasks from your office, smartphone or home.

- An area registered in MaxiFleet includes information about wood piles, timber concentration, machine tracks and more.
- An administrator can prepare an area in MaxiFleet in advance. When the operator then enters the machine, all areas that were prepared are available for selection in MaxiXplorer.
- The area overview in MaxiFleet enables the user to follow progress in each area. It displays information about the shares of harvested and forwarded volumes, the mean volume per stem and a map of wood pile locations.
- Users can also create reports for a particular area, so as to quickly gain an idea of how much work remains in the area and how the work could be further optimised.
- Area management also makes it easy to follow up an area as regards both production and map data. The map shows tracks, logging area boundaries, sub-areas, wood piles and completed and current areas.



# MILESTONES

**A milestone symbolises a major event during the machine's life cycle, such as a service or operator training. This function makes it easier to follow up and compare machine performance before and after an event that affects production.**

- Milestones can be created automatically by the system, such as when the head is replaced, but can also be added manually by a technician or instructor.
- When a milestone is registered, it makes it easy to follow up machine performance and to compare various factors before and after the event.
- The *Analyse Machine* report presents KPIs for productivity and fuel consumption both before and after a specific milestone.
- The *KPI* tab of the overview page presents the registered milestones in charts to highlight any trends. There you can see how a particular event affects a specific KPI.

Advanced

Advanced Plus

### Milestones

-  MaxiExplorer 3.15.0.34015  
May 15, 2018
-  Fleet changed (Demo)  
Nov 30, 2017
-  No connection to fleet  
Nov 30, 2017
-  MaxiExplorer 3.12.0.31479  
Nov 15, 2017
-  Head changed (C123xxxDEMO)  
Nov 14, 2017
-  Machine added to system  
Nov 14, 2017

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Date  
Oct 22, 2018 

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Add milestone description \*

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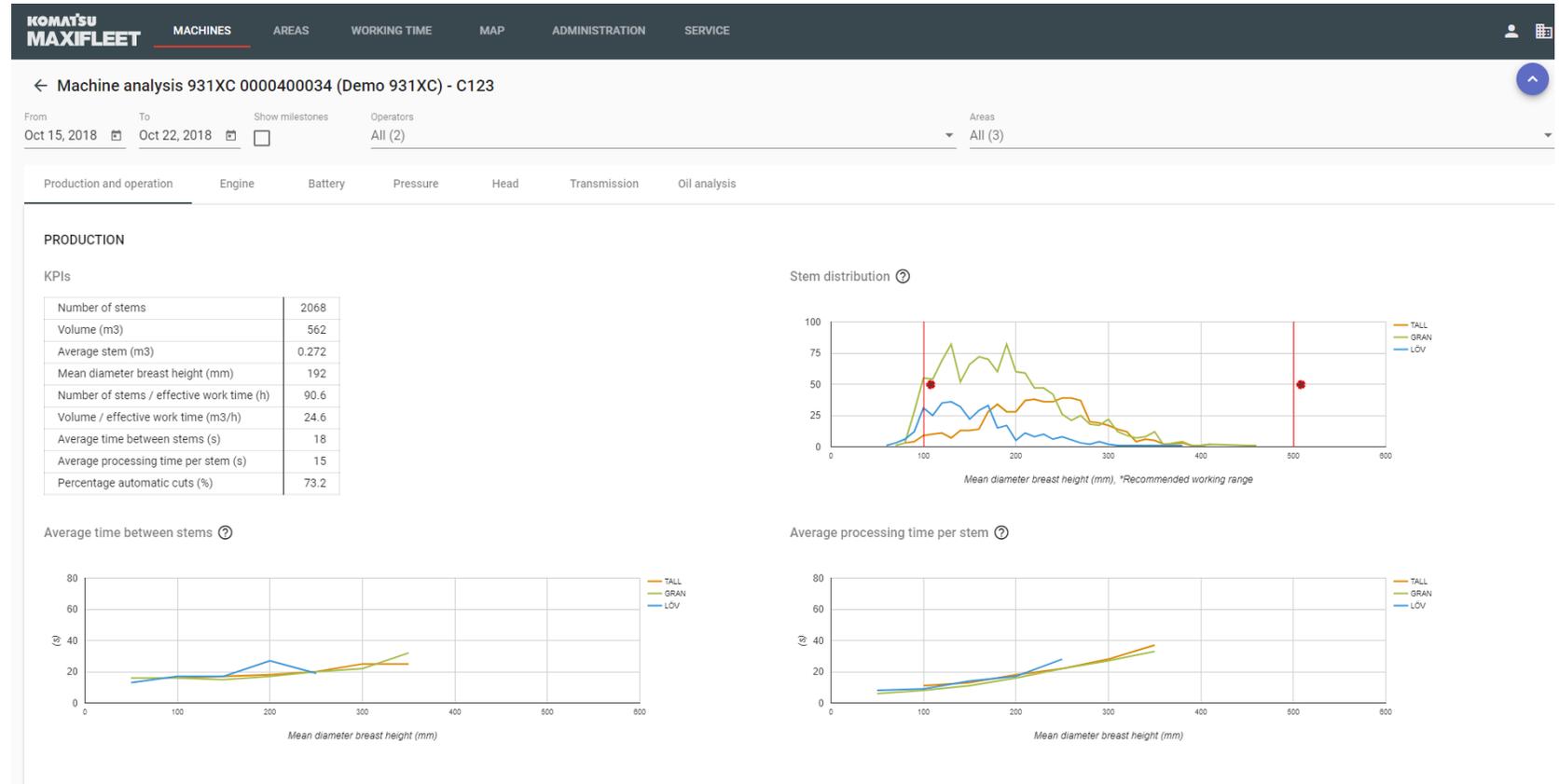
Close Save

# PRODUCTION FOLLOW-UP

Advanced  
Advanced Plus

The *Production Follow-up* function offers users detailed analyses of their machines.

- A machine analysis provides information on number of loads, volume, distance travelled between loads, mean volume and more. It also presents these indicators in relation to effective working time.
- Fuel consumption details are presented as different KPIs, such as fuel consumption per harvested volume or per engine hour, as well as the outcome of Eco mode and more.
- Users are also able to view the average fuel consumption for different tasks, such as loading and unloading or transport with and without a load.



# OPERATIONAL MONITORING

Advanced  
Advanced Plus

The *Operational Monitoring* function offers users detailed analyses of their machines.

- Operational monitoring with utilisation, as well as the division of time between:
  - Processing
  - Off-road driving
  - Miscellaneous
  - Driving on roads
  - Interruption time
- In order to identify potential improvements, interruption time can be broken down into causes, such as:
  - Repair
  - Waiting for repairs
  - Maintenance
  - Trailer transport
  - Disturbance

**OPERATIONAL MONITORING TIME**

KPIs

Utilisation (%)	13.0
Technical utilisation (%)	91.5

Total time

76.9% (Processing), 8.1% (Off-road driving), 7.8% (Miscellaneous), 6.2% (Driving on roads), 1.0% (Interruption time)

Processing	20:52:57
Terrain travel	01:41:58
Other work	00:14:33
Road travel	00:00:00
Downtime	02:07:14
Unutilized time	02:12:35
<b>Total</b>	<b>27:09:17</b>

**Settings**

Short filter (s)	20
Main filter (s)	90
Downtime filter (minutes)	5

**Downtime**

49.7% (Repair), 26.6% (Waiting for repair), 23.7% (Maintenance)

Repair	00:00:00
Waiting for repair	00:00:00
Maintenance	01:03:16
Trailer transport	00:33:47
Disturbance	00:30:11
Unspecified	00:00:00
<b>Total</b>	<b>02:07:14</b>

# MACHINE ANALYSIS

Advanced

Advanced Plus

The Machine Analysis function enables contractors to effectively monitor their machines and maintain an overview of their status. Utilisation and KPIs are presented while alarms and warnings clearly indicate if a machine deviates from the expected in any way. Advanced Plus also provides access to the Detailed Machine Analysis function.

- A
A+
**Production follow-up:** This gives contractors a clear overview of production: number of stems, volume, volume/hectare and mean volume per stem. Users can see the stem distribution and the recommended working range (diameter at breast height) for the head. If a large share of the stems are outside the recommended range, MaxiFleet issues a warning.
- A
A+
**Operational monitoring:** Here you can review KPIs for utilisation and capacity utilisation. MaxiFleet warns you if the machine has a large share of interruption time. Fuel consumption can be monitored both here and in the Production view, as well as on the KPI tab accessed directly from the overview page.

- A+
**Engine follow-up:** The machine's AdBlue®/DEF consumption and engine speed are presented here. If the time spent idling is high, MaxiFleet issues a warning.
- Battery follow-up:** Battery sensor required.
- A+
A+
**Scale follow-up:** The scale follow-up shows the number of loading cycles, the number of unloading cycles and the average volume loaded and unloaded.
- A+
**Head follow-up:** Here you can follow up diameter measuring via KPIs, as well as get an overview of level area lengths, to check whether the head has the right settings for holding and processing stems in a favourable manner.

# REMOTE CONNECTION/FILE TRANSFER

Advanced Plus

MaxiFleet remote support enables support to be accessed directly from the cab if necessary.

- The operator need not wait for a technician to arrive and can instead receive prompt help via a remote connection.
- Advanced Plus also enables users to establish remote connections to their machines.

## File transfer

Version:



To machine

From machine

**i** Instruction files (\*.spi, \*.pin, \*.fdi) will be automatically imported in MaxiXplorer

Select file(s) for upload

Cancel



## AGREEMENT TYPES

# MAXIFLEET TERMS & CONDITIONS

## MaxiFleet

- Agreements are signed for one of the three service levels **Base**, **Advanced** and **Advanced Plus**
- Rolling agreement with 3-month period of notice

	Base	Advanced **	Advanced Plus
Machine overview	●	●	●
Remote connection Komatsu personnel	●	●	●
Remote-controlled diesel heater	●	●	●
Offline Sync	●	●	●
Map	●	●	●
Map layers		●	●
KPI:s		●	●
Report		●	●
Area management		●	●
Milestones		●	●
Production and operational monitoring		●	●
Machine analysis		●	●
In-depth Machine analysis			●
Remote access and file transfer machine owners			●

# PREREQUISITES

- The machine must have been updated to the latest version of MaxiXplorer
- A Komatsu modem is required to communicate with the MaxiFleet database/MaxiFleet app
- Communication options
  - ✓ Modem – Wi-Fi
  - ✓ Modem – Bullet
  - ✓ Satellite
  - ✓ Offline Sync



# TRIED AND TESTED

Today, MaxiFleet users are found in all countries where Komatsu forest machines are used, and the number is growing steadily.

A few of the benefits enjoyed by our customers:

- "MaxiFleet has made my working day easier"
- "There's less administration"
- "I can easily access my production data"
- "It makes planning your work easier"
- "Convenient access to a service mechanic via the support function saves time!"



*Dieter Wiese from Germany says that MaxiFleet offers many advantages*

# MORE ABOUT MAXIFLEET

Since MaxiFleet is a service that is constantly being developed, with new, smart functions regularly added, keeping tabs on the latest new features is a good idea.

## Komatsu Forest's website

Here you can read about the different facets of MaxiFleet and be inspired by how other MaxiFleet users make the most of the system in their day-to-day work.

The latest system updates are also published on our website in informative articles.

*If you have any questions about MaxiFleet functions or new features, you're always welcome to contact your nearest workshop.*

