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Advantages

**WITOS FLEET VIEW IN DAY-TO-DAY LIFE**

The *WITOS FleetView* telematics system supports processes for fleet and service management by systematically pre-processing, transmitting, visualising and evaluating machine and position data.

*WITOS FleetView* helps you keep perfect track of your machine fleet – anywhere, at any time. Benefit from knowing what your machines are currently doing, where they are doing it and in what operating mode!*

*WITOS FleetView* supports you in every area and does not make any compromises. Intuitive navigation gives you a quick and easy overview of the current operating mode of your fleet. You can also take a look back into the past of your machines, with a detailed and targeted analysis of their operational behaviour and usage patterns. The information required for this is structured in a clear and compact manner.

*The currentness of the data is dependent on mobile network coverage.*
The service portfolio of the **WITOS FleetView** module ranges from targeted monitoring of machines in your day-to-day operation to supporting maintenance and diagnostics processes. This keeps you informed of the location and operating mode of your machines, at any time and anywhere.

The **WITOS FMI** module provides you with the opportunity to export data from the **WITOS** system and to import it into other existing systems as a server-to-server solution. In doing so, the data corresponds to the internationally applicable AEMP standard.
WITOS FleetView is a web application. Simply enter the address www.witos.com into the address line of your browser, and log in with your access data. You will receive this information directly from the administrator or your WITOS support team.
WITOS FleetView supports the most popular Windows browsers. All settings and configurations are saved locally in the cookies of your browser.

> You can easily test whether your current system meets the requirements for the WITOS FleetView web application via the following link:

https://ready.witos.com

> If the front-end check is successful, you can start using WITOS FleetView immediately. Detailed information on the system requirements can be found at the end of this brochure and in the front-end check.
WITOS FleetView application

FLEET OVERVIEW

The fleet overview provides a compact overview of the current operating mode of your fleet. You can select one or several machines for more detailed views and analyses. Comprehensive filtering and sorting functions will help you to customise the overview to your requirements. Once customised and saved locally, this ensures that the information you want is always available to you at a glance.

You can access the various functions of WITOS FleetView using the navigation bar (1).

The Machines direct view (2) shows you an excerpt from the master data of the selected machine, the last transmitted position on a mini map, cumulative operating modes for the machine and the last transmitted messages. You can access the geo-position data (5) with a click of the mouse on the machine’s symbol on the mini map.

Compactly displayed machine statuses (3) provide you with a fast overview of the machine: status for warning and fault messages, communication status, operating mode, monitoring status, due and overdue maintenance, service agreement.

The table (4) shows the last transmitted operation data and system data for your fleet, along with minimum, maximum and average values for the key operation data. The data displayed can be hidden or unhidden, as required.

By selecting machines in the fleet overview, you can define which machines are displayed in the other windows of the navigation bar (1).
WITOS FleetView application

MAP VIEW

The map view shows the current location of the machines in your fleet. The coloured border provides an initial indication of the current operating mode of the machines. This shows you at a glance whether there are faults, whether maintenance is due or whether an alarm has been triggered during monitoring.

> In the message window (1) you can obtain information regarding operation, communication, monitoring, maintenance and message statuses and regarding any possible existing service agreements.

> The radius search (2) lets you identify and select machines in an area that you define.

> The machine path function (3) (machine path) allows you to follow the route taken by a machine for a freely definable time period.

> The green points on the machine path indicate that the machine was turned on. The red and yellow triangles on the machine path indicate the machine’s movement messages when turned off. Red represents the cyclical movement message (named shock report), and yellow represents the last movement message (named wake-up report).
This section shows all the active messages of the machines that you have selected in the fleet overview.

- The report status (1) is divided into four categories:
  - **Remarks**: show non-critical states of the machine system that must be taken into account when operating the machine.
  - **Alarms**: represent an abnormal machine state and an impending critical state, allowing you to specifically monitor it and avoid subsequent damage to the machine.
  - **Faults**: indicate critical machine states that require the machine to be stopped immediately.
  - **Messages**: The messages from the machine’s diesel engine are also displayed without colour coding.

All data records displayed can be grouped according to column contents (2). Messages, for example, can be grouped according to machine or error code.
### WITOS FLEET VIEW APPLICATION / MESSAGES

<table>
<thead>
<tr>
<th>Message ID</th>
<th>Date/Time</th>
<th>Fleet No.</th>
<th>Operating Hours</th>
<th>Notification No.</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>31130206</td>
<td>19/07/2017 12:40</td>
<td>VC_011_00-07-00</td>
<td>45.9</td>
<td>267</td>
<td>1346-01</td>
<td>Fuel tank minimum level &lt; 15%</td>
</tr>
<tr>
<td>31220254</td>
<td>03/25/2017 10:51</td>
<td>VC_011_00-07-00</td>
<td>6.9</td>
<td>0</td>
<td>130-1</td>
<td>Diesel engine 1</td>
</tr>
<tr>
<td>31220255</td>
<td>03/25/2017 10:51</td>
<td>VC_011_00-07-00</td>
<td>6.9</td>
<td>0</td>
<td>130-1</td>
<td>Diesel engine 1</td>
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<tr>
<td>31220256</td>
<td>03/25/2017 10:51</td>
<td>VC_011_00-07-00</td>
<td>6.9</td>
<td>0</td>
<td>130-1</td>
<td>Diesel engine 1</td>
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<tr>
<td>31220257</td>
<td>03/25/2017 10:51</td>
<td>VC_011_00-07-00</td>
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<tr>
<td>31220258</td>
<td>03/25/2017 10:51</td>
<td>VC_011_00-07-00</td>
<td>6.9</td>
<td>0</td>
<td>130-1</td>
<td>Diesel engine 1</td>
</tr>
</tbody>
</table>

**1.** Sort Ascending
**2.** Sort Descending
**3.** Unlock
**4.** Lock
**5.** Group By This Field
**6.** Show in Groups
WITOS FleetView application

MONITORING

The **monitoring activation** (1) lets you define when and where your machines are permitted to operate. By activating monitoring protection, you will receive immediate notification of unauthorised access. As well as display in the portal, a message can also be sent to an e-mail address of your choice.

- **Area monitoring (geofences)**
  - As soon as the machine moves outside of the permitted host area, it is indicated on the system and a notification is sent.

- **Timed monitoring (curfew)**
  - If the machine is turned on outside of the pre-determined working hours, it is indicated on the system and a notification is sent.

- **Movement monitoring**
  - If the machine is moved when turned off, it is indicated on the system and a notification is sent.

- **Fault / alarm message monitoring**
  - Where there are fault or alarm messages, they are indicated on the system and a notification is sent.

**Maintenance message**

- Should a machine reach its defined maintenance window, this will be indicated on the system and a notification sent. A further notification shall occur if the machine’s operational hours exceed the time stipulated for maintenance. You are able to customise the time for maintenance notification here. Should a longer lead time be required for planning maintenance, the period prior to the maintenance due can set from the standard 50 hrs to e.g. 70 hrs.

The **monitoring configuration** (2) lets you define the radius of the geofences and the working times (from which the monitoring times are derived). The maintenance window for notification of pending maintenance is set on the monitoring activation page.

---

**By holding down the Ctrl key at the same time, you can select multiple machines (3) and configure settings for the selected fleet. Settings can be edited using the button. If a monitoring alarm has been triggered, you can use the button to reset it.**
WITOS FleetView application

MAINTENANCE

The maintenance overview provides comprehensive information about upcoming maintenance dates for your machinery.

The maintenance status for a machine (1) shows the type and schedule of the previous maintenance work and all information on upcoming maintenance work for one or more machines.

The overview of the machine fleet (2) provides an overview of the maintenance status of your entire machine fleet. When maintenance has been carried out, this can be filed via the input fields (3) on the system. The system calculates subsequent scheduled maintenance using the data entered.

The status is indicated by the symbols

- no maintenance required,
- maintenance due and
- maintenance overdue.

Maintenance can be entered in any order. Maintenance that is not entered can be subsequently entered at any time to enable a complete maintenance history.
WITOS FleetView application
OPERATION DATA HISTORY

Take a look back into the past of your machines. The **history view** (1) allows you to display operational and position data for your machines over a freely definable period in a clear and easily readable layout. Standard reports incorporating graphics enable fast and simple analysis. Create individual operational reports, and derive conclusions for the future.

The **operation data history** selection window (2) lets you choose between a calendar-based or operational hours-based view. You can also set whether you want to look at a period before or after the selected time, and the time period that you wish to look at (year, month, week, day, hour, minute).

You can change the selected observation period at any time using the button.

In addition to the table view, you can use the button (3) to see a graphical view. The **diagram view** (4) lets you compare up to three pieces of data for a particular machine or data for several machines.

Choose the **diagram view** for graphical display of your data (3)!

In addition to the export in CSV format, you can also use the **PDF export** (5) to create standard reports!
WITOS FLEET VIEW APPLICATION / OPERATION DATA HISTORY

WIRTGEN GROUP

1. Operation data History (Daten zur Anzeige)

- Customer data
- S/N
- Product
- Notification type
- Distance (km)
- Fuel rate (g/km)
- Fuel consumption overall (g/km)
- Engine RPM (rpm)
- Operating hours (h)

- Field wear
- Field alcohol
- Field height
- Field width
- Field width
- Field position
- Field position

2. Selection

- Calendar
- Operating hours

- Reference time: 12/21/2016, 08:11
- Direction: backward
- Range of time: 1, +, - Month(s)
WITOS FleetView application
MESSAGE HISTORY

All current and past messages from the machine at a glance: see a summary of past messages, and decide how far back you want to go.

Clear message categorisation and documented display/deactivation times enable you to draw significant conclusions regarding the machine’s service status.

All messages are displayed and described exactly as they are on the machine.
<table>
<thead>
<tr>
<th>Customer designation</th>
<th>Reported by</th>
<th>Reported at</th>
<th>WITOS MetaData Version</th>
<th>Operating hours [%]</th>
<th>Notification No.</th>
<th>SFD-196 Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>X4H40001</td>
<td>J07742025</td>
<td>09/29/2016 15:18</td>
<td>09/29/2016 09:34</td>
<td>45.4</td>
<td>1203230000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>X4H40002</td>
<td>J12265013</td>
<td>05/12/2016 19:13</td>
<td>09/28/2016 06:17</td>
<td>34.3</td>
<td>1203230000</td>
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<tr>
<td>X4H40003</td>
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<td>45.4</td>
<td>1203230000</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
The history view of the maintenance section (1) contains all the information you need to ensure optimally maintained machinery.

From information on the type and schedule of upcoming maintenance work to documentation on previous maintenance - the maintenance functions reliably ensure that your machines remain operational.

In addition to having an overview of your machine fleet (2) and maintenance that has already been carried out, you can also edit previous maintenance activities (3).

**If incorrect data was given during the maintenance entry or if maintenance has been entered that has not yet been carried out, this can be deleted via the recycle bin symbol.**
WITOS FleetView application

MASTER DATA

The master data provides you with an overview of your machine’s master data, associated maintenance schedules and the WITOS FleetView basic settings. The machine’s master data (1) is subdivided into:
> Master data of the machines (customer designation, S/N, TCU serial number, machine type)
> Contact and related headquarters, subsidiary, service office, dealer
> Fleet affiliation

The machine transfer function is available to the user on the machine tab (1). Thus, the machine proprietor can transfer possession to another user for a defined period of time. Thereupon, the machines appear in the WITOS FleetView system of the other user.

The maintenance overview (2) shows not only the maintenance intervals for a selected machine, but also, in the machine overview, the previous and upcoming maintenance work for your machine fleet.

In the configuration tab (3), you can configure basic settings in WITOS FleetView, such as the:
> Language
> Unit (metric or imperial)
> Start page (fleet or map)

Changes to language, units and start page are only effective after restarting the application.
## WITOS Fleet View Application

### Master Data

<table>
<thead>
<tr>
<th>Machine</th>
<th>Maintenance</th>
<th>Configuration</th>
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<td>1</td>
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<table>
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<tr>
<th>Type / appendix</th>
<th>SUPER 3000-2</th>
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### Machine Data

<table>
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<tr>
<th>Machine</th>
<th>Product</th>
<th>S/N TCM Master</th>
<th>S/N TCM Master Data</th>
<th>SIM No Machine</th>
<th>SIM No Master</th>
<th>Type / appendix</th>
<th>Operating hrs</th>
<th>Name</th>
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<td>FW1002</td>
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</tbody>
</table>

**Contact Information**

- **Support:** support@witos.com
- **Phone:** +49-6451309999

**Company:**

- **Type:** Joseph Vögele AG
- **Address:**
  - **Headquarters:**
  - **Subsidiary:**
  - **Owner:**
  - **Service:**
  - **Responsible service:**
  - **Owner:**
  - **Holder:**

**Other Information:**

- **Copyright:** 2012-2014, Version 2012.03.01-2014.09.19
WITOS FleetView application

EXPORT OF DATA

The exported records from the operation data history are available in the exports area. Data exports can be downloaded from here as often as you like via the Download button.

The most important cornerstones (monitoring period, monitoring start, viewing direction etc.) are summarised at a glance in the table overview.

Existing data exports can be removed from the list via the delete button.

New data exports can be added via the operation data history.

In the meantime, created data exports are saved in the system and can be retrieved at any point until the data has been selectively removed.
In all the overviews presented, you can use the following basic functions to organise your data within the columns:

**Sort ascending/descending (1)**

**Lock / unlock (2)**
- If the window contents are moved, the columns to the left of the locked column remain visible.

**Filter (3)**
- As well as classic filtering by text content, you can also filter the operation data by value range.

---

*After you have filtered the data once, you can save the filter settings using the button.*
Table configuration allows you to arrange and sort the columns as you wish using drag-and-drop.

Existing table configurations can be reset to the standard configuration (4).
The volume of data listed here conforms with the machine type and the machine software currently installed. The maximum data record per machine type can only be retrieved on the most current machine software.

### Transmittable data

<table>
<thead>
<tr>
<th>Transmittable data</th>
<th>GPS Position Lon / Lat / Alt</th>
<th>Distance</th>
<th>Speed</th>
<th>Total fuel consumption</th>
<th>Fuel rate</th>
<th>Diesel tank level</th>
<th>AdBlue® / DEF tank level</th>
<th>Engine speed</th>
<th>Engine load factor</th>
<th>Cooling water temperature</th>
<th>Operational hours</th>
<th>Machine status</th>
<th>Error messages</th>
<th>Movement messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
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</tbody>
</table>

*AdBlue® is a registered, protected trademark of Verband der Automobilindustrie (VDA) e. V. (German Association of the Automotive Industry).*
WITOS FleetView

SYSTEM REQUIREMENTS

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Intel Pentium 1 GHz or above (recommended)</td>
</tr>
<tr>
<td>RAM</td>
<td>2 GB or more (recommended)</td>
</tr>
<tr>
<td>Hard disk</td>
<td>10 GB usable memory (recommended)</td>
</tr>
<tr>
<td>Display</td>
<td>16-bit, 1024 × 768 or higher (recommended)</td>
</tr>
</tbody>
</table>

The system requirements for the browser and operating system can be found in the front-end check (1).

If you have any questions, please contact your service subsidiary.
LEGEND

- Activate/deactivate filter
- Add filter
- Delete
- Delete filter
- Download
- Export.csv
- Export.pdf
- Invert selection
- Machine path
<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring period</td>
<td></td>
</tr>
<tr>
<td>Radius search</td>
<td></td>
</tr>
<tr>
<td>Select all</td>
<td></td>
</tr>
<tr>
<td>Undo selection</td>
<td></td>
</tr>
<tr>
<td>Update</td>
<td></td>
</tr>
</tbody>
</table>
WE HOPE YOU ENJOY USING THE WITOS FLEET VIEW TELEMATICS SYSTEM FROM THE WIRTGEN GROUP.
The **WITOS FleetView** telematics system with **WITOS FMI** includes the **WITOS** control unit (TCU), use of the web-based fleet management system and the **WITOS** maintenance fee for 3 years from start-up (further free use of the system is possible after this term has elapsed, but cannot be guaranteed due to changes to mobile phone standard [e.g. from 2G to 3G], network coverage problems or similar).

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