

# Jungheinrich Fleet Management System

## System presentation

Jungheinrich Lift Truck UAB  
Servečes g. 1  
Vilnius  
[Maris.supe@jungheinrich.lv](mailto:Maris.supe@jungheinrich.lv)  
+371 29437206

Māris Supe  
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# Agenda

- 1 Benefits and product highlights
- 2 The right modules for your requirements
- 3 A customisable and safe IT system

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- 1 Benefits and product highlights**
- 2 The right modules for your requirements
- 3 A customisable and safe IT system

# Forklift Accidents





# Rack damages





# Warehouse collapse



# Are you facing the following challenges when managing your fleet?

Missing information on the use and productivity of your own fleet make it difficult to come to concrete decisions.

## Accidents, damages & warehouse safety



- ▶ **High number of accidents and damages**
- ▶ **Low sense of responsibility of your drivers**
- ▶ **Frequently changing drivers with little experience**
- ▶ **High follow-up costs due to not reported damages**



## Are you facing the following challenges when managing your fleet?

Missing information on the use and productivity of your own fleet make it difficult to come to concrete decisions.



### High administrative burden

- ▶ **Too little time** for managing your fleet
- ▶ **Lack of relevant data** for **comparing** your **locations**
- ▶ **High effort** for **investment decisions**
- ▶ **Increased professionalisation** required (fleet manager's position)



## Are you facing the following challenges when managing your fleet?

### Lack of transparency for optimising costs & fleet efficiency

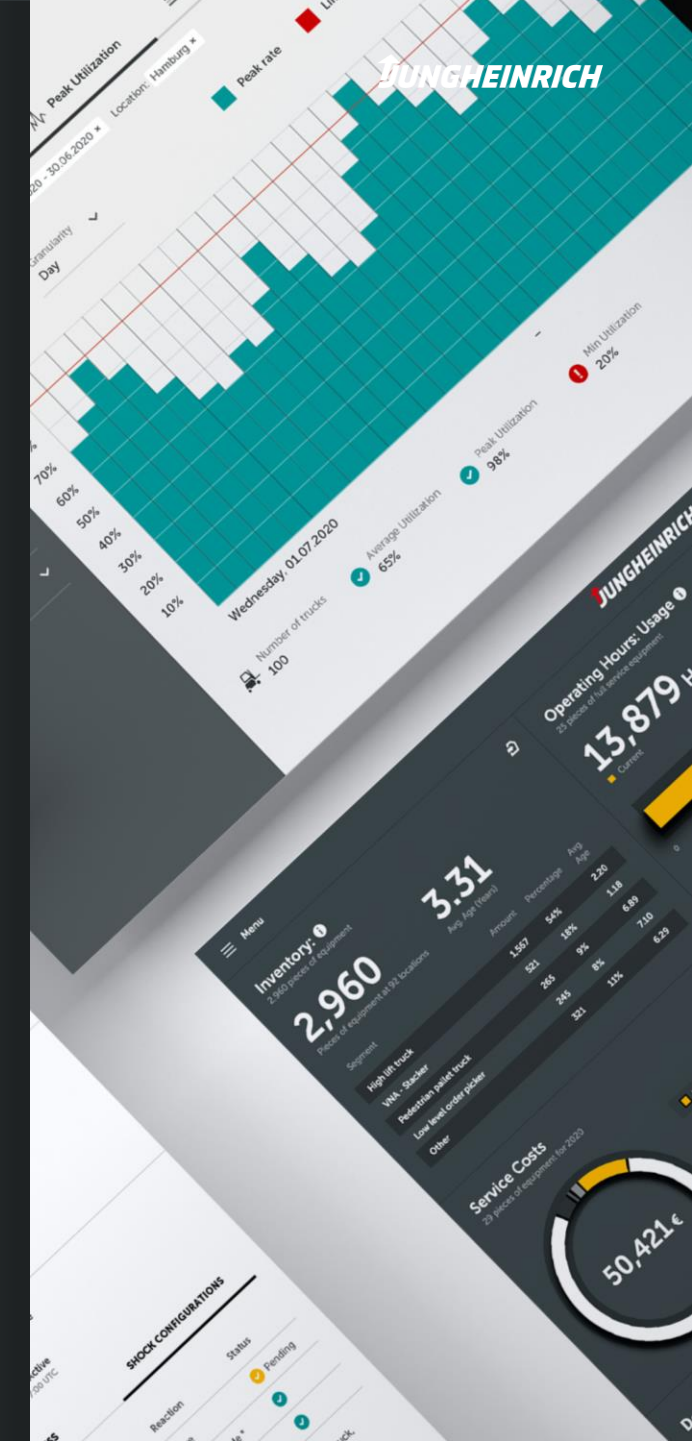


- ▶ **Missing information** on the actual **productivity** of your fleet
- ▶ **Exceeding** of the **agreed operating hours**
- ▶ **Truck failures** due to **high degree of wear**
- ▶ **No transparency** of **total costs** for your fleet
- ▶ **No comparability** of **different locations**

Missing information on the use and productivity of your own fleet make it difficult to come to concrete decisions.

# JUNGHEINRICH FLEET MANAGEMENT SYSTEM

The digital solution for the sustainable optimisation of your fleet!



# Jungheinrich FMS

## Your benefits



### MAXIMUM SAFETY FOR PEOPLE, FACILITIES AND MACHINES

Protect your trucks from unauthorised use and sustainably reduce collision damages.



### INCREASED PRODUCTIVITY AT LOWER COSTS

Raise the availability and productivity of your fleet, while reducing your operating costs.



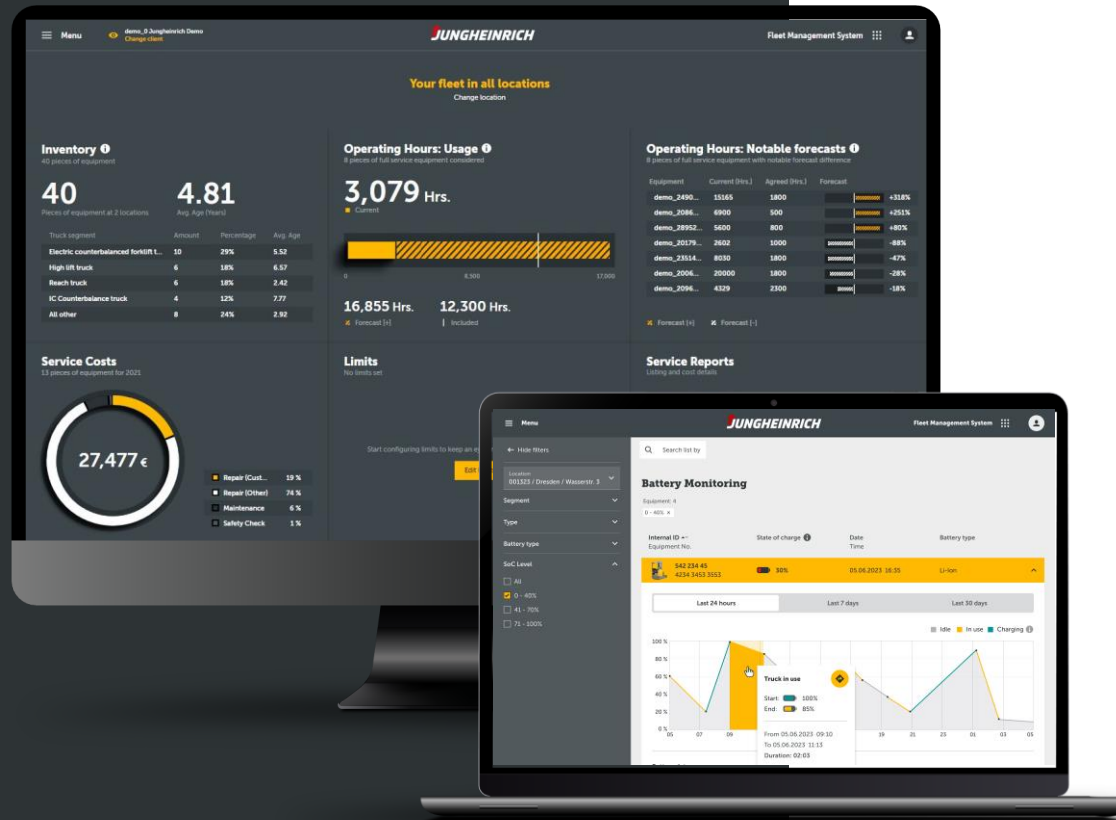
### EFFICIENT WORKING & FASTER DECISION-MAKING

Save valuable time through the transparent display of all relevant data.



# Jungheinrich FMS

## Our solution



The **Jungheinrich Fleet Management System (FMS)** is a **digital solution** for the efficient management of intralogistics fleet from multiple locations. The **web-based tool** combines business data, operational truck and shock data and provides concrete data for concrete decisions by detailed analyses.





Thanks to digital **access management**, the **reporting of shock events** and various **cost and productivity analyses**, you raise the availability and productivity of your fleet, while reducing your operating costs and increasing the safety for people and machines.

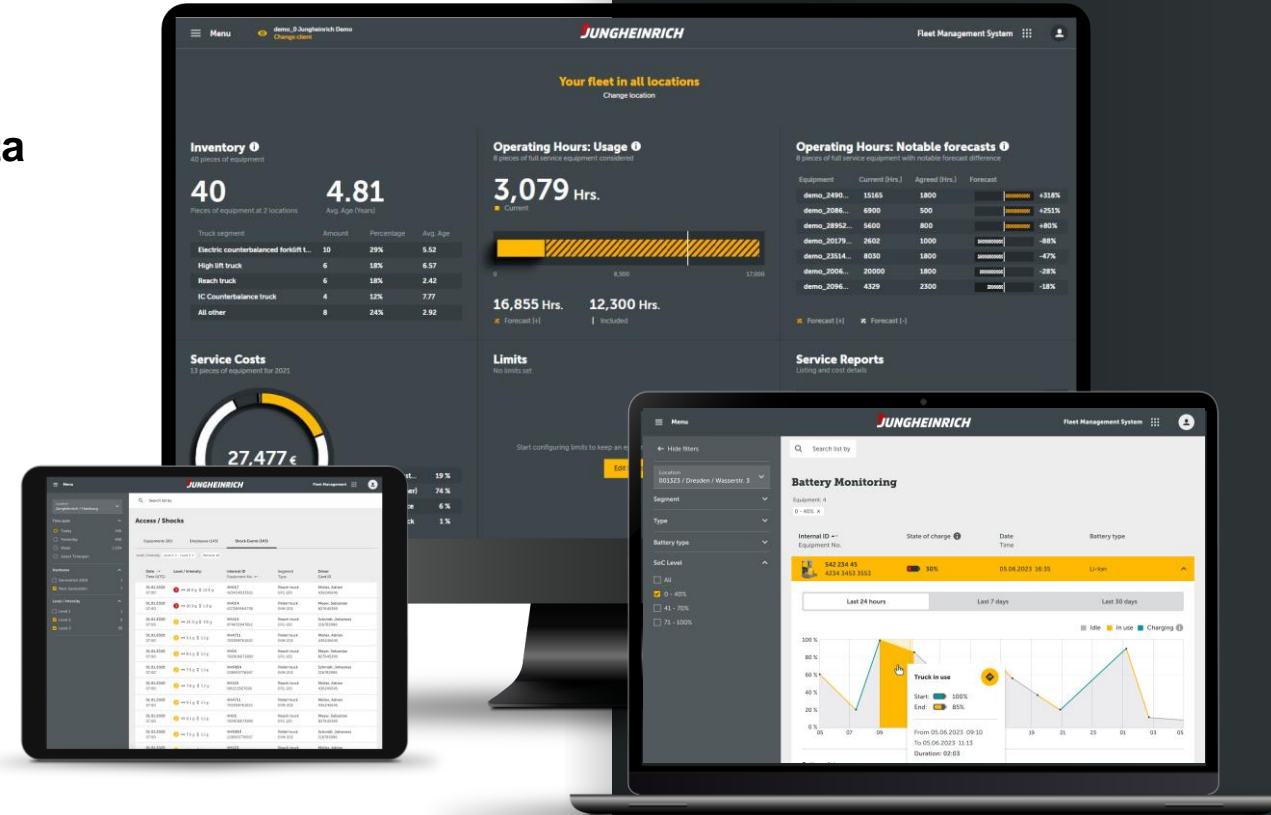
The system consists of **different modules**, that are individually adapted to your requirements.

# Jungheinrich FMS

## Product highlights

### Optimisation of your fleet


- 
**Transparent overview of all relevant truck data & analyses**
- 
**Detailed cost overview to identify cost drivers and potential savings**
- 
**Automatic warnings when individual limits are exceeded**
- 
**Detailed evaluations about the use and productivity of the vehicles**





# Jungheinrich FMS


## Product highlights

Maximum security not only for your warehouse

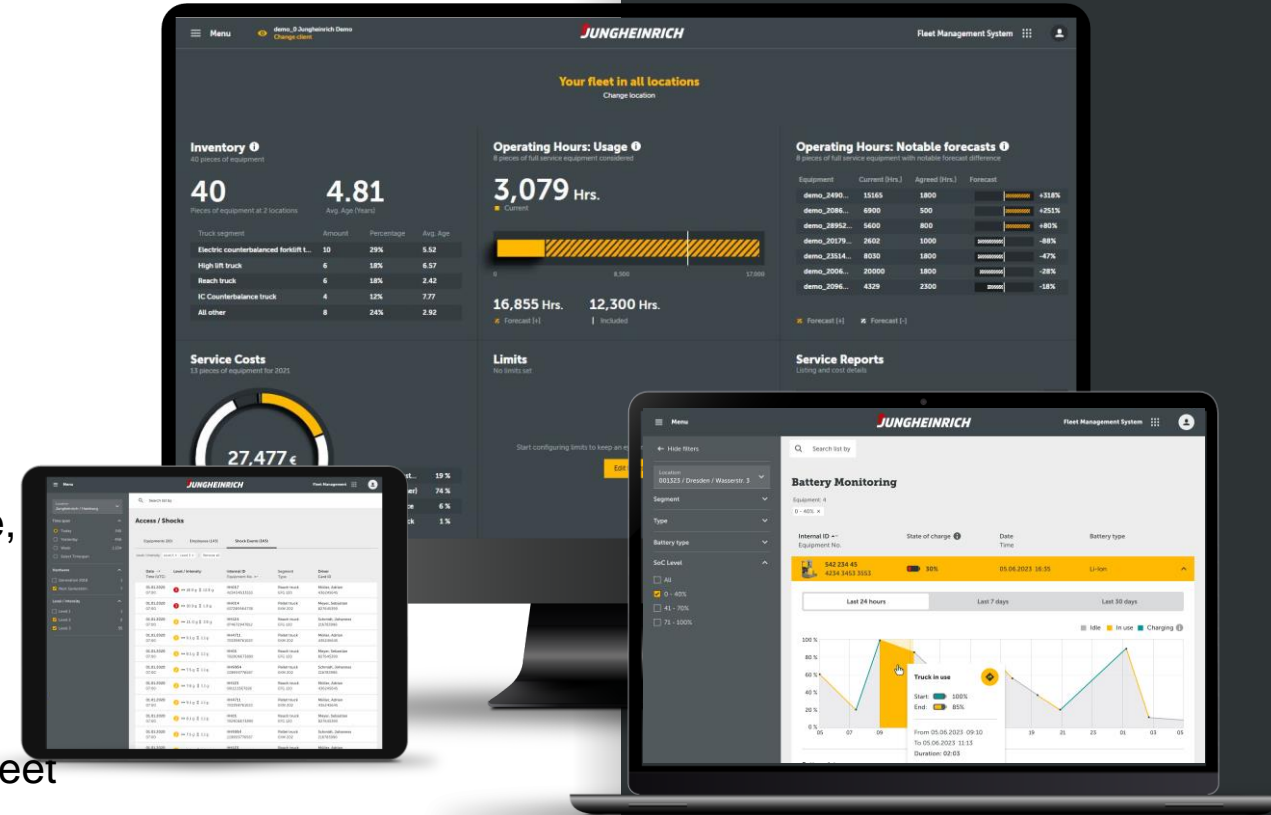
- 

Simple assignment of driver **access rights** and **reporting of shock events**
- 

Future-proof IoT platform with optional, standardised **data interface/API**
- 

Modern, **web-based user interface** for a simple, **location-independent fleet management**
- 

**Detailed rights** and **role concept** for a **centralised or decentralised control** of the fleet





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## 01

## Future-proof platform

## IT security and scalability due to state-of-the-art technologies. Continuous investment into further development and new features.

- + **State-of-the-art** technologies for a secure, high-performance and highly flexible platform for future requirements
- + **IT security and scalability “by design”**
- + **Encrypted storage of personal, fleet and company data**
- + **EU-GDPR compliant**
- + Modern look & feel and optimised user flows to support your critical fleet analyses. Continuous **further development** based on customer feedback. Improvements and enhancements are constantly incorporated into the product and can be **used immediately**.
- + **Workflow automation** through seamless integration with other Jungheinrich services and a modern cloud interface (API) for easy integration with your IT and BI systems

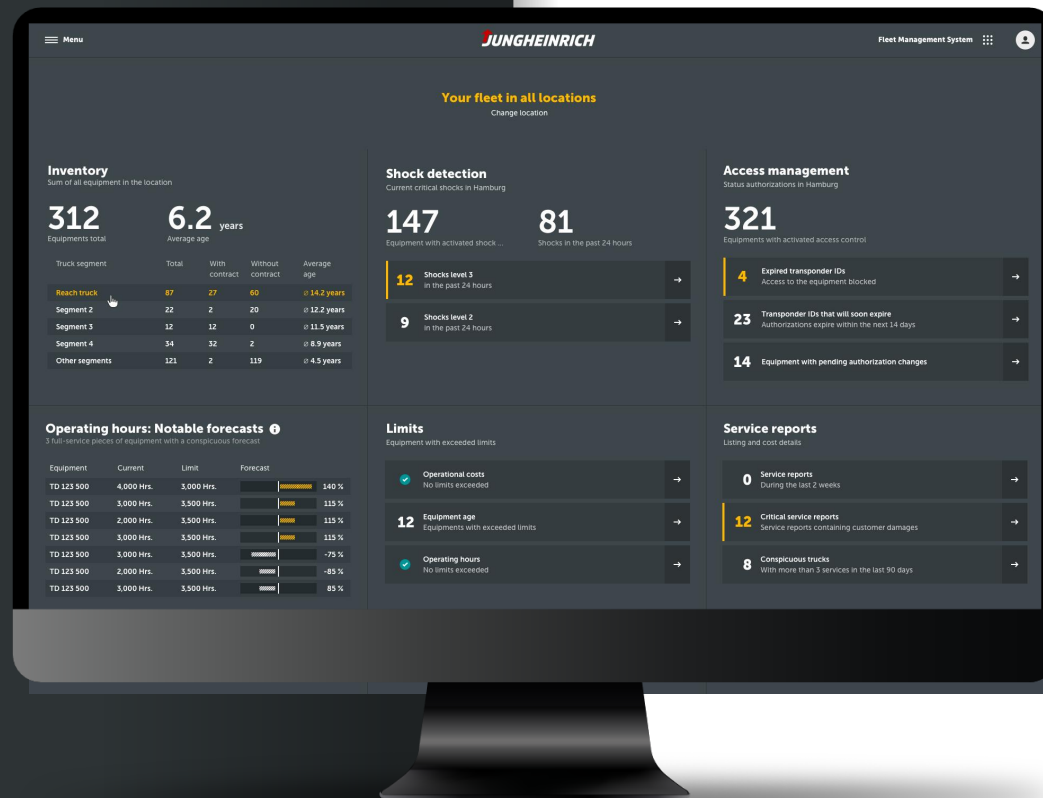


**Migrate to Jungheinrich FMS** to ensure IT security and EU-GDPR compliance based on a future-proof data & services platform.

# 02

The most important information at a glance

Critical events and important information highlighted directly on the dashboard.  
Focus on relevant info saves you time & money.



- + **Operating hours forecast** on truck or on fleet level for trucks contracted with full-service contracts
- + Faster **identification of trucks** with a **high or low number of operating hours** in the context of the contracted operating hours volume
- + Warning at dashboard and module level when **critical limits are exceeded**
- + **Severe shocks** on a gliding window of the last 24 hours
- + **Warning** on the dashboard when **permissions are expired** or will expire soon
- + Indication of **suspicious service reports**, i.e., reports that contain damages or a high frequency of services





## Your fleet in all locations

Change location

## Inventory ⓘ

40 pieces of equipment

40

Pieces of equipment at 2 locations

4.81

Avg. Age (Years)

Truck segment	Amount	Percentage	Avg. Age
Electric counterbalanced forklift t...	10	29%	5.52
High lift truck	6	18%	6.57
Reach truck	6	18%	2.42
IC Counterbalance truck	4	12%	7.77
All other	8	24%	2.92

## Operating Hours: Usage ⓘ

8 pieces of full service equipment considered

3,079 Hrs.

■ Current



16,855 Hrs.

■ Forecast [ + ]

12,300 Hrs.

| Included

## Operating Hours: Notable forecasts ⓘ

8 pieces of full service equipment with notable forecast difference

Equipment	Current (Hrs.)	Agreed (Hrs.)	Forecast
demo_2490...	15165	1800	+318%
demo_2086...	6900	500	+251%
demo_28952...	5600	800	+80%
demo_20179...	2602	1000	-88%
demo_23514...	8030	1800	-47%
demo_2006...	20000	1800	-28%
demo_2096...	4329	2300	-18%

■ Forecast [ + ]

■ Forecast [ - ]

## Service Costs

13 pieces of equipment for 2021



■ Repair (Cust...)	19%
■ Repair (Other)	74%
■ Maintenance	6%
■ Safety Check	1%

## Limits

No limits set

Start configuring limits to keep an eye on your most important numbers.

[Edit limits](#)

## Service Reports

Listing and cost details

- 0 **Service Reports**  
During the last 2 weeks >
- 0 **Critical Service Reports**  
Service reports containing customer damages >
- 0 **Conspicuous trucks**  
With more than 3 services in the last 90 days >



### Your fleet in all locations

Change location

#### Inventory

Sum of all equipment in the location

# 312

Equipments total

# 6.2

 years

Average age

Truck segment	Total	With contract	Without contract	Average age
Reach truck	87	27	60	∅ 14.2 years
Segment 2	22	2	20	∅ 12.2 years
Segment 3	12	12	0	∅ 11.5 years
Segment 4	34	32	2	∅ 8.9 years
Other segments	121	2	119	∅ 4.5 years

#### Shock detection

Current critical shocks in Hamburg

# 147

Equipment with activated shock ...

# 81

Shocks in the past 24 hours

- 12** Shocks level 3 in the past 24 hours →
- 9** Shocks level 2 in the past 24 hours →

#### Access management

Status authorizations in Hamburg

# 321

Equipments with activated access control

- 4** Expired transponder IDs  
Access to the equipment blocked →
- 23** Transponder IDs that will soon expire  
Authorizations expire within the next 14 days →
- 14** Equipment with pending authorization changes →

#### Operating hours: Notable forecasts

3 full-service pieces of equipment with a conspicuous forecast

Equipment	Current	Limit	Forecast	
TD 123 500	4,000 Hrs.	3,000 Hrs.		140 %
TD 123 500	3,000 Hrs.	3,500 Hrs.		115 %
TD 123 500	2,000 Hrs.	3,500 Hrs.		115 %
TD 123 500	3,000 Hrs.	3,500 Hrs.		115 %
TD 123 500	3,000 Hrs.	3,500 Hrs.		-75 %
TD 123 500	2,000 Hrs.	3,500 Hrs.		-85 %
TD 123 500	3,000 Hrs.	3,500 Hrs.		85 %

Forecast [+]  
Forecast [-]

#### Limits

Equipment with exceeded limits

- Operational costs  
No limits exceeded →
- 12** Equipment age  
Equipments with exceeded limits →
- Operating hours  
No limits exceeded →

#### Service reports

Listing and cost details

- 0** Service reports  
During the last 2 weeks →
- 12** Critical service reports  
Service reports containing customer damages →
- 8** Conspicuous trucks  
With more than 3 services in the last 90 days →

# 03

Consolidate and compare information across locations easily

## Location filters on dashboard and detail level enable easy comparison of key KPIs between sites.

- + Most relevant fleet information consolidated either on **local** or **multi-location level** directly on the dashboard
- + Easy comparative analysis between locations, segments, etc. thanks to **filters in the modules, including time filters**
- + Data from the filtered lists can be exported as XLS/CSV **for further analysis**

**Inventory**  
Sum of all equipment in the location

**312** Equipments total  
**6.2** years Average age

Truck segment	Total	With contract	Without contract	Average age
Reach truck	87	27	60	⌚ 14.2 years
Segment 2	22	2	20	⌚ 12.2 years
Segment 3	12	12	0	⌚ 11.5 years
Segment 4	34	32	2	⌚ 8.9 years
Other segments	121	2	119	⌚ 4.5 years

**Change location**

All locations (2)

Filter list by number or location

Number	Location
demo_21285613	Kleve
demo_21341714	Stuttgart

Cancel Save changes

**Access man**  
Status authorizations

**94** Equipments with act

**5** Expired tr  
Access to

**15** Transpon  
Authoriza

**74** Equipment with pending authorization changes →

**Inventory**  
Sum of all equipment in the location

**194** Equipments total  
**2.5** years Average age

Truck segment	Total	With contract	Without contract	Average age
Reach truck	17	10	7	⌚ 4.2 years
Segment 2	4	2	2	⌚ 8.2 years
Segment 3	25	12	13	⌚ 16.5 years
Segment 4	34	32	2	⌚ 5.6 years
Other segments	104	2	102	⌚ 7.3 years

**100** Equipment with pending authorization changes →





- Timespan
  - This calendar year
  - Last calendar year
  - All time
  - Select timespan
- Construction year
- Location
- Segment
- Manufacturer
- Limits
- Cost center

Search list by

Add limits

Add equipment

Export list

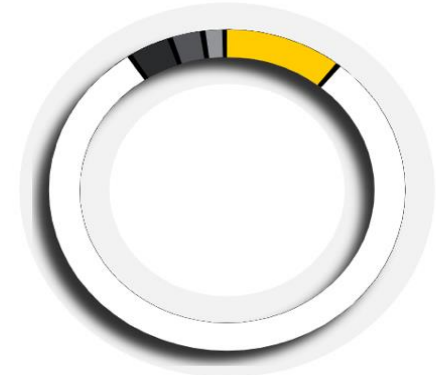
### Operational Costs (5 equipments with conspicuous limits)

**Total cost**  
**78.803,00 €**

**Costs per operating hour**  
**250 €/h**

#### Service cost split

<input checked="" type="checkbox"/>	Repair (Customer Damage)	25 %	250,90 €
<input type="checkbox"/>	Repair (other)	25 %	250,90 €
<input checked="" type="checkbox"/>	Maintenance	25 %	300,50 €
<input checked="" type="checkbox"/>	Safety Check	20 %	48,000,50 €
<input checked="" type="checkbox"/>	Oil Service	10 %	30,000,20 €
<b>Total service costs</b>			<b>78.803,00 €</b>



Internal ID Equipment No. ▲▼	Location Number	Cost/ Operating hour	Total costs	Service costs	Rental costs	Customer damages
HH017 423434533553	Hamburg 12345	NA	2,000,90 €	800,90 €	200,00 €	90,50 €
HH014 637289564738	Hamburg 12345	NA	2,000,90 €	800,90 €	200,00 €	90,50 €
HH124 874672947812	Hamburg 12345	NA	2,000,90 €	800,90 €	200,00 €	90,50 €
HH4711 720308761033	Hamburg 12345	NA	2,000,90 €	800,90 €	200,00 €	90,50 €

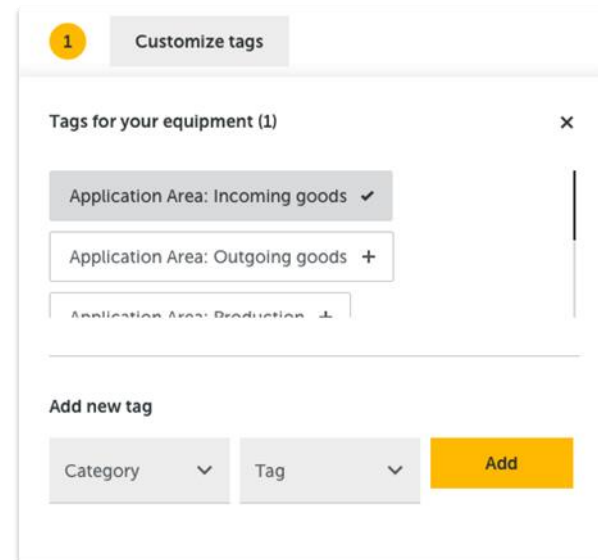


# 05

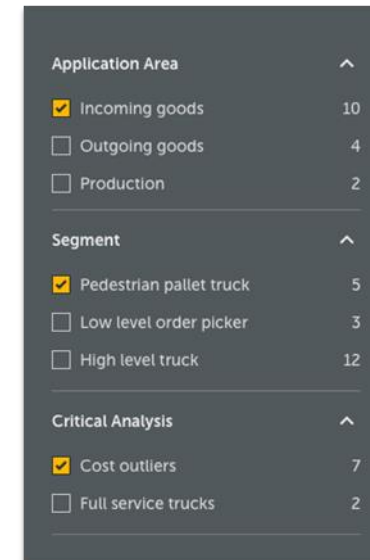
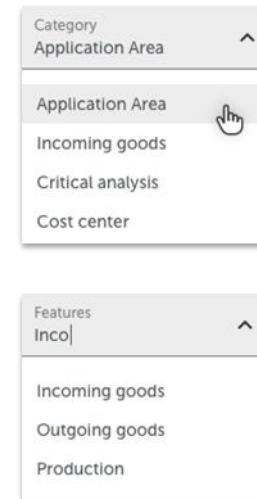
## More possibilities for customisation

# Better accommodate your fleet and company operational structures by means of custom truck attributes and possibility to add & track your own equipment.

- + Full flexibility through extensive number of **free attributes (“tags”)** (e.g. cost center, location, ...)
- + **Attributes available as filters** for targeted analyses across several modules, incl. **multi-filter selection**
- + Extensive possibilities to **add own data**, e.g. further equipment, own costs, read operating hours, etc.



Free definition of attributes ...



...available as individual filters in modules

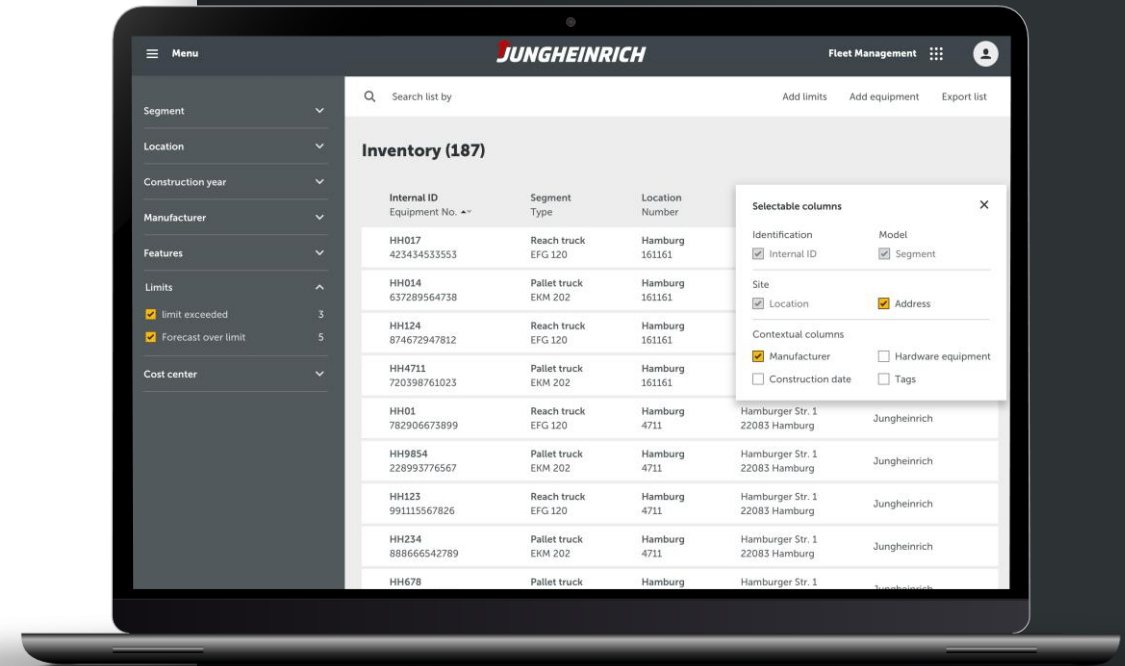


# Optimum Overview

## Starter Kit: Inventory/Location Management

### What do the Inventory & Location Management offer?

- ▶ **General overview** of the size and composition of **your fleet** on a **local** and **global** level
- ▶ **Automatic import** of Jungheinrich trucks via SAP and **manual adding** of additional inventory (third-party trucks, cleaning machines, etc.)
- ▶ Storage of inventory **master data**, e.g. truck type, manufacturer, age, specifications & location
- ▶ Simple assignment of **customer-specific attributes** and notes, such as cost centres for each vehicle
- ▶ **Simple export** of the inventory list in Excel and .csv



#### Hardware requirements

Optional hardware for automatic recording of operating hours:  
Telematics Box is recommended



# Full availability

## Starter Kit: Operating Hours

### What does the Operating Hours module offer?

- ▶ **Automatic recording** of the current operating hours for all Jungheinrich trucks and the possibility of **manual entries** for equipment added by the customer
- ▶ Helpful **operating hours forecast** for trucks with Full Service contracts\* to meet the agreed volumes, and warning when **critical limits are reached**
- ▶ Rapid identification of trucks with a high or low amount of operating hours in the context of the contracted operating hours volume **prevents wear\***

The screenshot shows the 'Operating Hours (41 pieces of equipment)' section of the Jungheinrich Fleet Management software. The table displays the following data:

Internal ID Equipment No.	Location Number	Meter reading (Hrs.)	Date	Forecast (Difference)
HH017 423434533553	Hamburg 161161	9,847	21.02.2021	Included hours <b>122%</b>
HH014 637289564738	Hamburg 161161	4,887	21.02.2021	(2) Reference values <b>122%, 121%</b>
HH124 874672947812	Hamburg 161161	4,923	21.02.2021	(2) Reference values <b>112%, 95%</b>
HH4711 720398761023	Hamburg 161161	8,234	21.02.2021	Yearly max. usage 105%
HH01 782906673899	Hamburg 4711	8,567	21.02.2021	Yearly max. usage 103%
HH9854 228993776567	Hamburg 4711	9,523	21.02.2021	Yearly max. usage 95%
HH123 991115567826	Hamburg 4711	9,673	21.02.2021	Yearly max. usage 25%
HH234 888666542789	Hamburg 4711	5,678	21.02.2021	(2) Reference values <b>112%, 95%</b>
HH678	Hamburg	9,876	21.02.2021	Yearly max. usage



#### Hardware requirements

Optional hardware for automatic recording of operating hours:  
Telematics Box is recommended

\* Only applies to customers with a Full Service contract

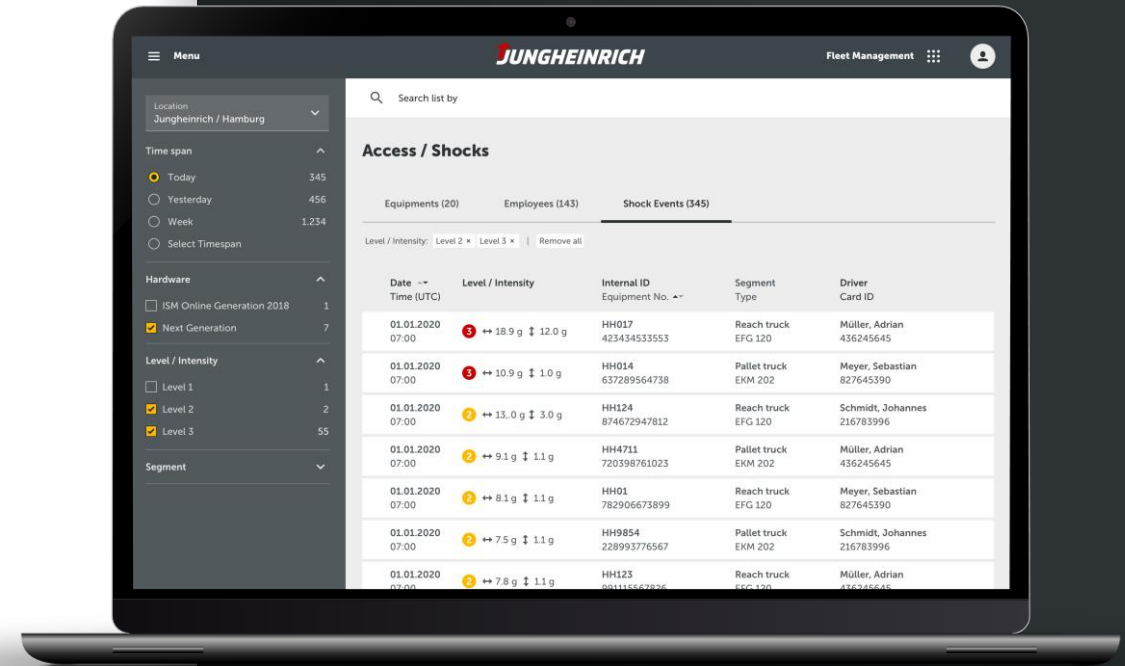


# Protection from unauthorized use

## Access Bundle: Access Management

### What does the Access Management offer?

- ▶ Time-efficient assignment and editing of **driver authorisations** for individual vehicles, all trucks or groups of vehicles
- ▶ **Proactive information on expiring driver authorisations**
- ▶ **Individual configuration of groups** according to the customer's needs
- ▶ **Evaluation of driver assignments**



**i Hardware requirements**  
Telematics Box, transponder cards, transponder reader, display



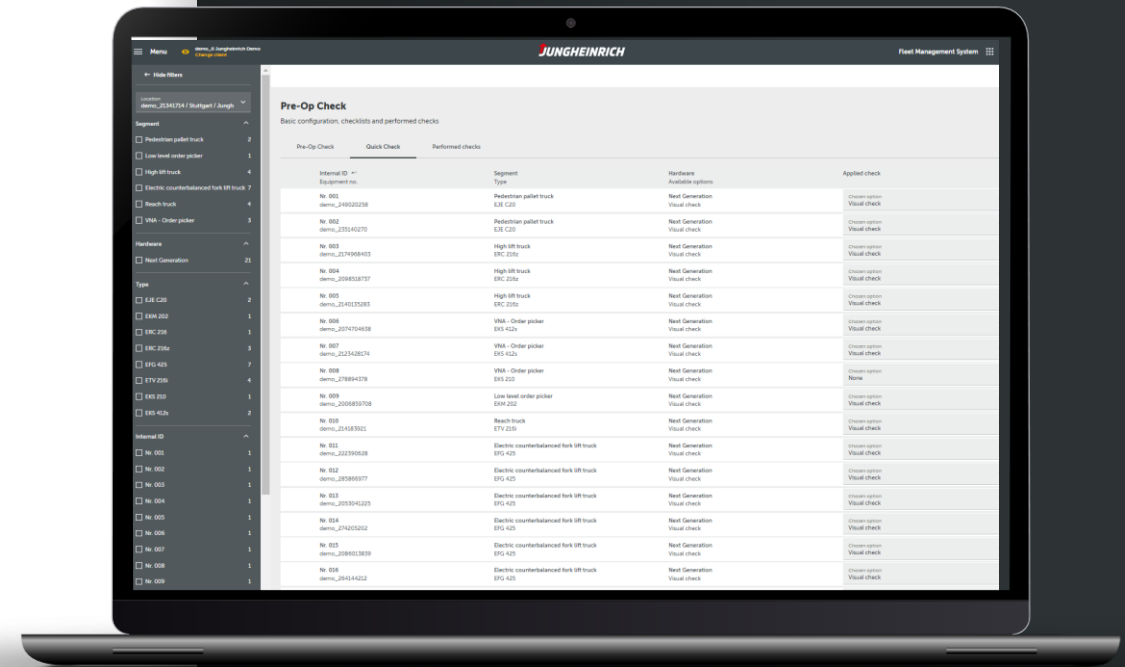


# Detect and avoid damages

## Access Bundle: Quick Check

### What does the Quick Check offer?

- ▶ **Quick inspection before departure by asking the question truck “ok?”**
- ▶ **Documentation** of the Quick Check in a specific area of the system with export function into Excel
- ▶ **Helpful filter options** to quickly find individual trucks and checks that have been carried out
- ▶ **Increased safety in the warehouse** and early detection of truck defects



**Hardware requirements**  
Telematics Box, transponder cards, transponder reader, display

← Hide filters

Location  
demo\_21341714 / Stuttgart / Jungh

Segment

- Pedestrian pallet truck 2
- Low level order picker 1
- High lift truck 4
- Electric counterbalanced fork lift truck 7
- Reach truck 4
- VNA - Order picker 3

Hardware

- Next Generation 21

Type

- EJE C20 2
- EKM 202 1
- ERC 216 1
- ERC 216z 3
- EFG 425 7
- ETV 216i 4
- EKS 210 1
- EKS 412s 2

Internal ID

- Nr. 001 1
- Nr. 002 1
- Nr. 003 1
- Nr. 004 1
- Nr. 005 1
- Nr. 006 1
- Nr. 007 1
- Nr. 008 1
- Nr. 009 1
- Nr. 010 1

## Pre-Op Check

Basic configuration, checklists and performed checks

Pre-Op Check	Quick Check	Performed checks	
Internal ID ^ Equipment no.	Segment Type	Hardware Available options	Applied check
Nr. 001 demo_249020258	Pedestrian pallet truck EJE C20	Next Generation Visual check	Chosen option Visual check
Nr. 002 demo_235140270	Pedestrian pallet truck EJE C20	Next Generation Visual check	Chosen option Visual check
Nr. 003 demo_2174968403	High lift truck ERC 216z	Next Generation Visual check	Chosen option Visual check
Nr. 004 demo_2098518737	High lift truck ERC 216z	Next Generation Visual check	Chosen option Visual check
Nr. 005 demo_2140135283	High lift truck ERC 216z	Next Generation Visual check	Chosen option Visual check
Nr. 006 demo_2074704638	VNA - Order picker EKS 412s	Next Generation Visual check	Chosen option Visual check
Nr. 007 demo_2123428174	VNA - Order picker EKS 412s	Next Generation Visual check	Chosen option Visual check
Nr. 008 demo_278894378	VNA - Order picker EKS 210	Next Generation Visual check	Chosen option None
Nr. 009 demo_2006859708	Low level order picker EKM 202	Next Generation Visual check	Chosen option Visual check
Nr. 010 demo_214183921	Reach truck ETV 216i	Next Generation Visual check	Chosen option Visual check
Nr. 011 demo_222390628	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
Nr. 012 demo_285866977	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
Nr. 013 demo_2053041225	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
Nr. 014 demo_274205202	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
Nr. 015 demo_2086013839	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
Nr. 016 demo_264144212	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
Nr. 017 demo_289529578	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check

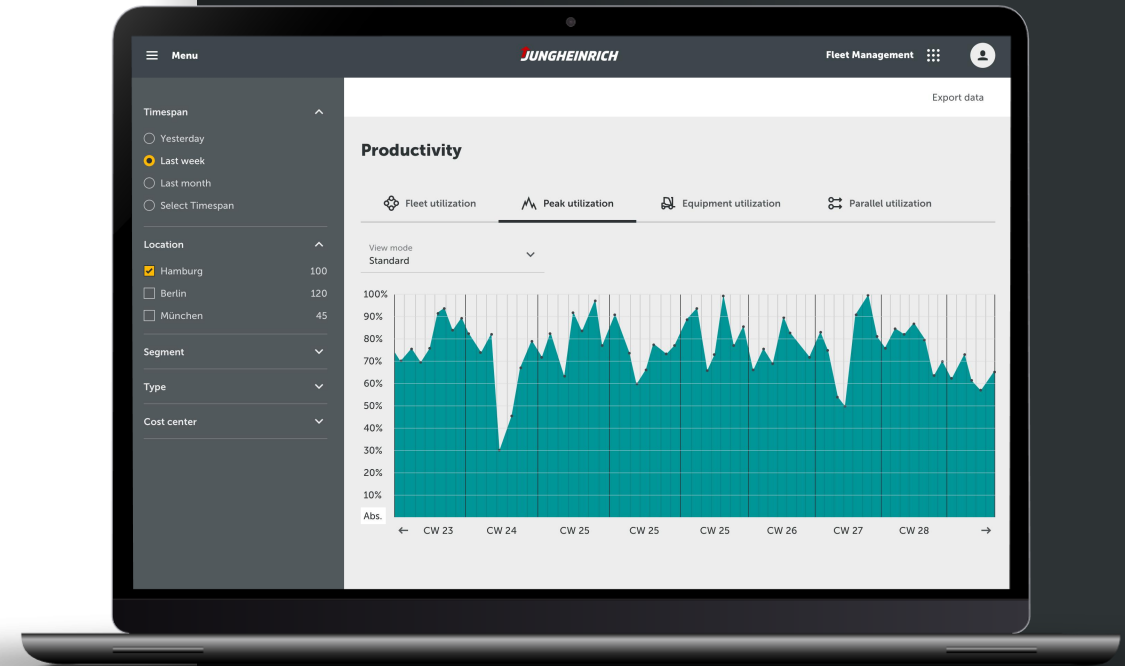


# Increasing efficiency

## Productivity Bundle

### What does the Productivity module offer?

- ▶ Possibility to analyse the fleet/parts of the fleet according to **peak and parallel utilisation**
- ▶ Possibility to analyse **utilization on a detailed equipment level**, based on the **opening hours** of each specific location
- ▶ Simple identification of unused or missing capacities for the **optimisation** of your **fleet composition**
- ▶ Great **overview** and **comparability of productivity** across all locations in an individually defined period using various filter options and setting of **individual limits** for peak and equipment utilisation
- ▶ **Share the analysis as a detail link**, so that the recipient adopts the pre-selected view when opening it



**Hardware requirements**  
Telematics Box, transponder cards, transponder reader, display



Timespan ^

- Yesterday
- Last week
- Last month
- Select Timespan

Location ^

- Hamburg 100
- Berlin 120
- München 45

Segment v

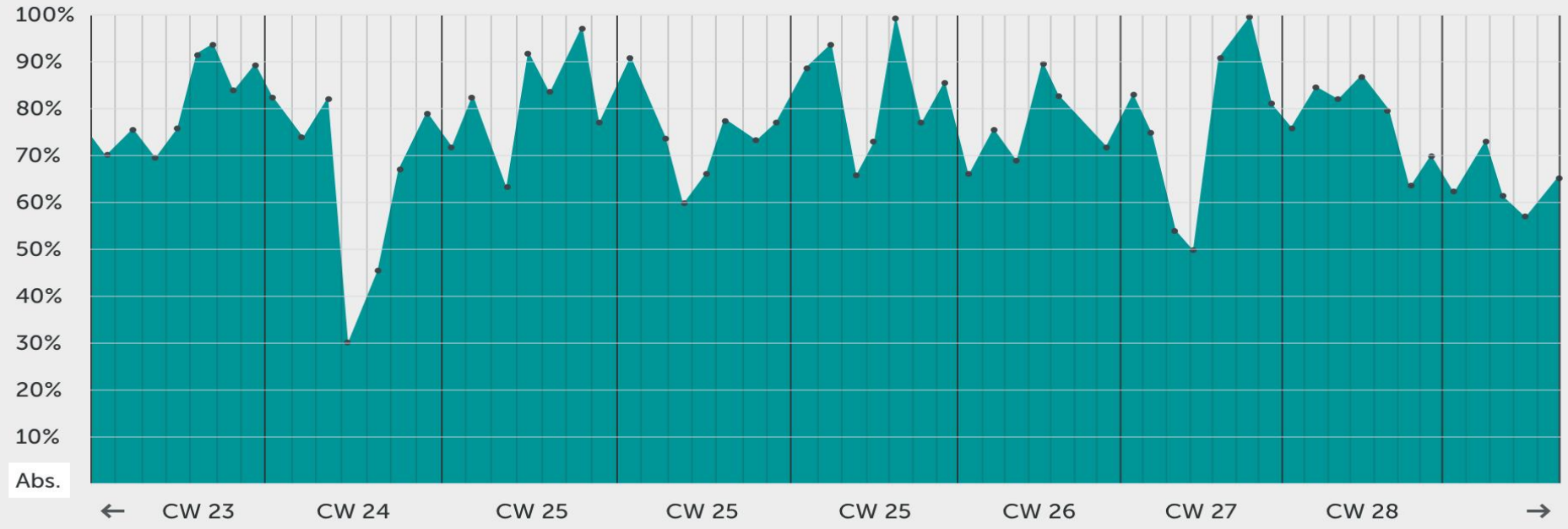
Type v

Cost center v

# Productivity

- Fleet utilization
- Peak utilization**
- Equipment utilization
- Parallel utilization

View mode Standard v



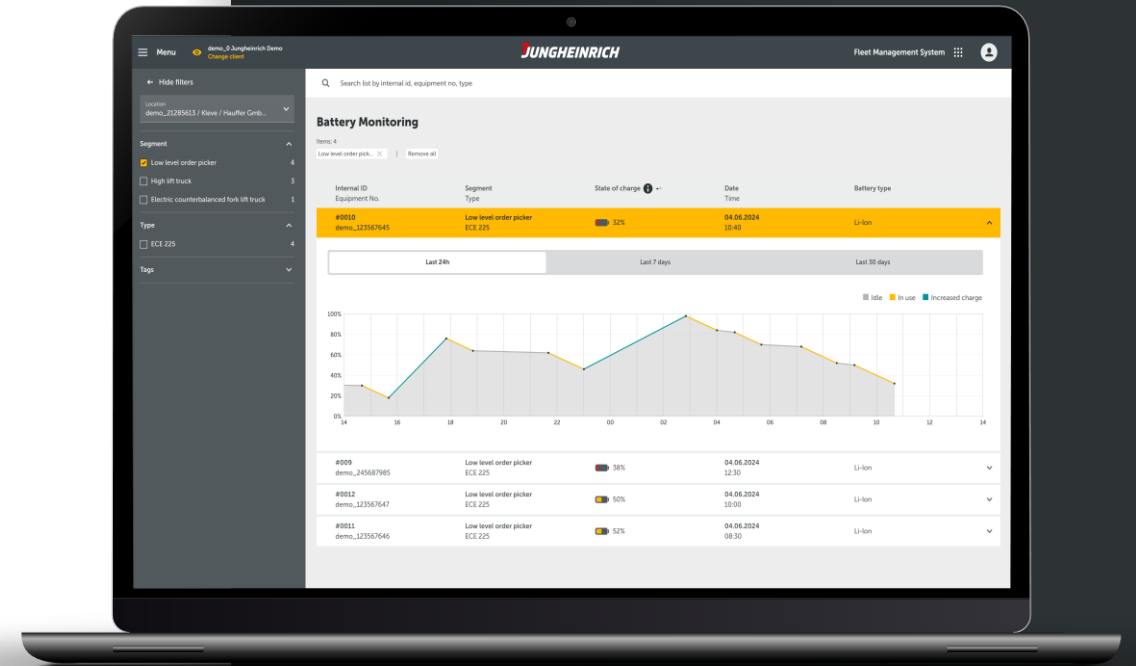




# Optimized Charging and Availability Energy Bundle

## What does the Battery Monitoring module offer?

- ▶ Possibility to analyse the **state of charge** of **li-ion and lead-acid** batteries of the truck fleet for the **last 24 hours / 7 days / 30 days**.
- ▶ Possibility to analyse **battery usage at a detailed equipment level**, based on the **state of charge** of each specific truck battery.
- ▶ Easy identification of missed opportunity charges of li-ion batteries for the **optimisation** of your **fleet availability**.
- ▶ Easily identify intermediate charges of lead-acid batteries and deep discharges to **prevent misuse** and **reduce damage costs**.
- ▶ Excellent **overview** of fleet state of charge and battery utilisation.



Hardware requirements  
Telematics Box

← Hide filters

Location  
demo\_21285613 / Kleve / Hauffer Gmb...

Segment

- Low level order picker 4
- High lift truck 3
- Electric counterbalanced fork lift truck 1

Type

- ECE 225 4

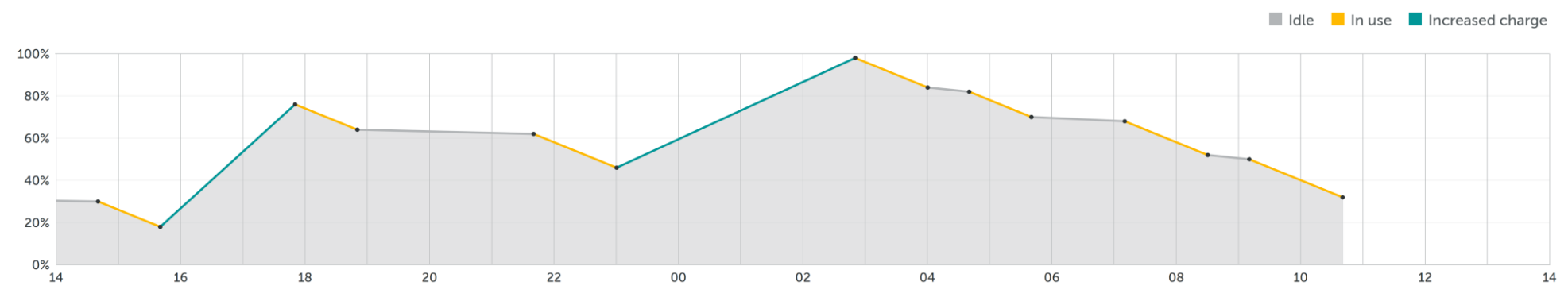
Tags

Search list by internal id, equipment no, type

## Battery Monitoring

Items: 4  
 |

Internal ID Equipment No.	Segment Type	State of charge	Date Time	Battery type
#0010 demo_123567645	Low level order picker ECE 225	32%	04.06.2024 10:40	Li-Ion



#009 demo_245687985	Low level order picker ECE 225	38%	04.06.2024 12:30	Li-Ion
#0012 demo_123567647	Low level order picker ECE 225	50%	04.06.2024 10:00	Li-Ion
#0011 demo_123567646	Low level order picker ECE 225	52%	04.06.2024 08:30	Li-Ion



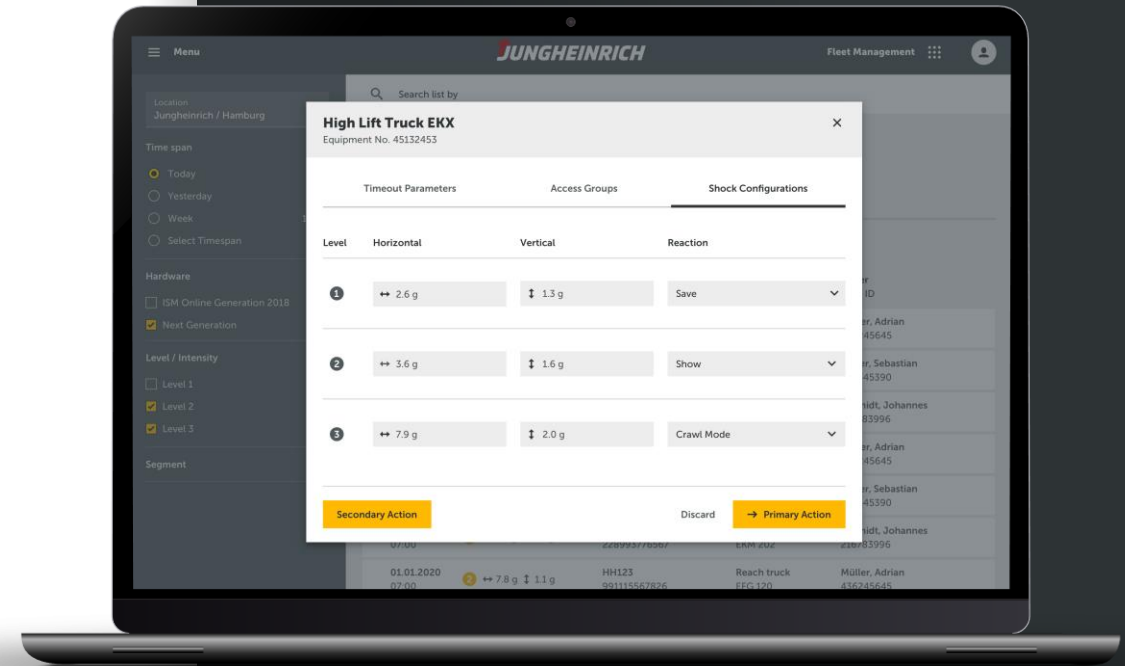
# Keep risks at bay

## Safety Bundle: Shock Management

### What does the Shock Management module offer?

- ▶ Always in control: overview of all **shocks of the last 24 hours** directly in the dashboard as well as comprehensive documentation
- ▶ **Notification via e-Mail** in case of moderately severe and severe **shock events** in the fleet management
- ▶ Increased safety by **specifying appropriate reactions** such as **crawl speed** or **truck stop**
- ▶ **Easy configuration of shock sensors** due to truck-specific OEM default setting/ resetting for all truck segments
- ▶ **Analysis** and filter option for **all shock events** over a specified period of time

**Also includes the functionalities of the Access Bundle**



- i Hardware requirements**  
Telematics Box, transponder cards, transponder reader, shock sensor & display



Location  
Jungheinrich / Hamburg

Time span

- Today 345
- Yesterday 456
- Week 1.234
- Select Timespan

Hardware

- ISM Online Generation 2018 1
- Next Generation 7

Level / Intensity

- Level 1 1
- Level 2 2
- Level 3 55

Segment

Search list by

## Access / Shocks

Equipments (20)

Employees (143)

**Shock Events (345)**

Level / Intensity: Level 2 × Level 3 × | Remove all

Date <small>Time (UTC)</small>	Level / Intensity	Internal ID <small>Equipment No.</small>	Segment Type	Driver Card ID
01.01.2020 07:00	<b>3</b> ↔ 18.9 g ↓ 12.0 g	HH017 423434533553	Reach truck EFG 120	Müller, Adrian 436245645
01.01.2020 07:00	<b>3</b> ↔ 10.9 g ↓ 1.0 g	HH014 637289564738	Pallet truck EKM 202	Meyer, Sebastian 827645390
01.01.2020 07:00	<b>2</b> ↔ 13.0 g ↓ 3.0 g	HH124 874672947812	Reach truck EFG 120	Schmidt, Johannes 216783996
01.01.2020 07:00	<b>2</b> ↔ 9.1 g ↓ 1.1 g	HH4711 720398761023	Pallet truck EKM 202	Müller, Adrian 436245645
01.01.2020 07:00	<b>2</b> ↔ 8.1 g ↓ 1.1 g	HH01 782906673899	Reach truck EFG 120	Meyer, Sebastian 827645390
01.01.2020 07:00	<b>2</b> ↔ 7.5 g ↓ 1.1 g	HH9854 228993776567	Pallet truck EKM 202	Schmidt, Johannes 216783996
01.01.2020 07:00	<b>2</b> ↔ 7.8 g ↓ 1.1 g	HH123 991115567826	Reach truck EFG 120	Müller, Adrian 436245645

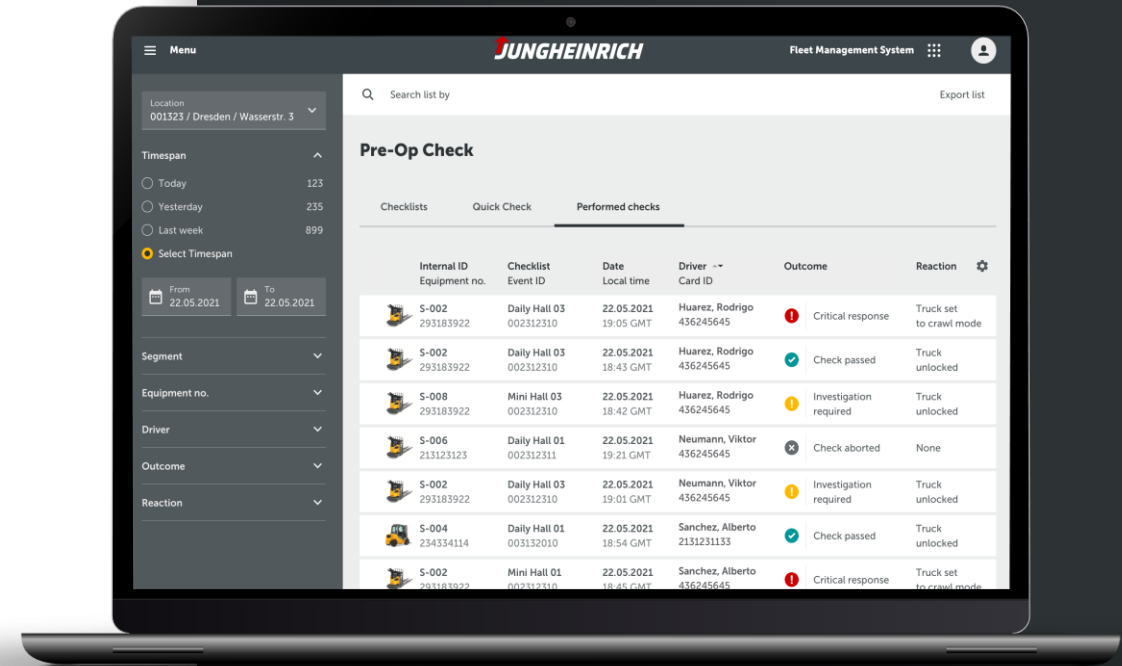


# Optimize maintenance and increase safety

## Safety Bundle: Pre-Op Check

### What does the Pre-Op Check module offer?

- ▶ Creation of individual **checklists for visual and functional** checks with scheduling either **event-based** (login, driver change) or **time-based**
- ▶ **Flexible allocation of checklists** to truck segments, truck types and single trucks
- ▶ **Customized truck responses for each answer** of the checklist (no reaction, crawl speed or lock-down)
- ▶ Customization of questions in **local language** and **randomization of order of answer options**
- ▶ **Detailed reporting and various filter options** to optimize fleet maintenance, including export functionality to Excel
- ▶ **E-mail notification** for critical responses within a checklist



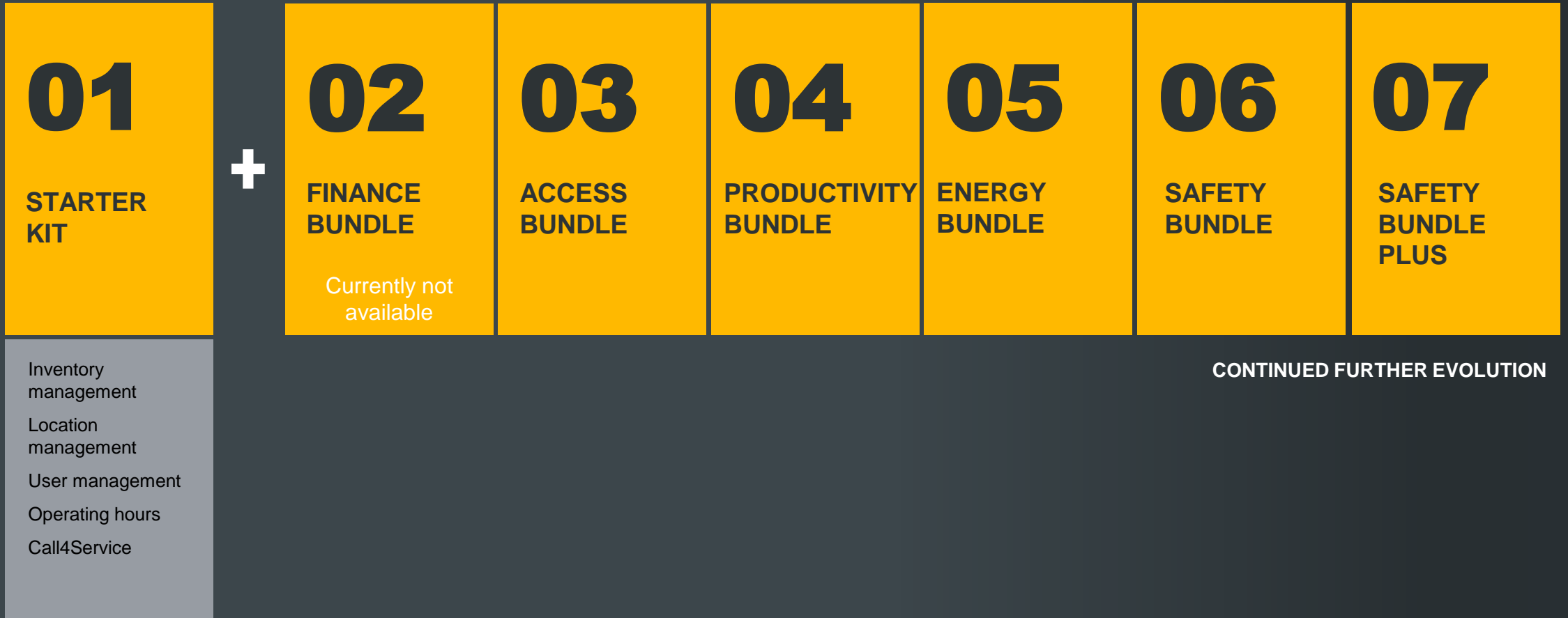
#### Hardware requirements

Telematics box, transponder cards, transponder reader, shock sensor & Pre-Op Check display



# Jungheinrich FMS

## Available bundles



# Agenda

- 1 Benefits and product highlights
- 2 The right modules for your requirements
- 3 A customisable and safe IT system**

# Data for your Systems

## Jungheinrich FMS API



**API**

### What does the FMS API offer?

- ▶ **Modern IT interface** between the Jungheinrich fleet management platform and a **customer's IT system** for the exchange of data and control information
- ▶ **The area of application** ranges from the provision of data for the customer's own BI systems over integration in access management systems to the creation of comprehensive (data) dashboards
- ▶ **The benefits** are in the extent and **QUALITY** of the data, the gain in efficiency through high degree of **WORKFLOW AUTOMATION**, the **ACTUALITY** of the data and the high **SCALABILITY & FREQUENCY** in the accessibility of data

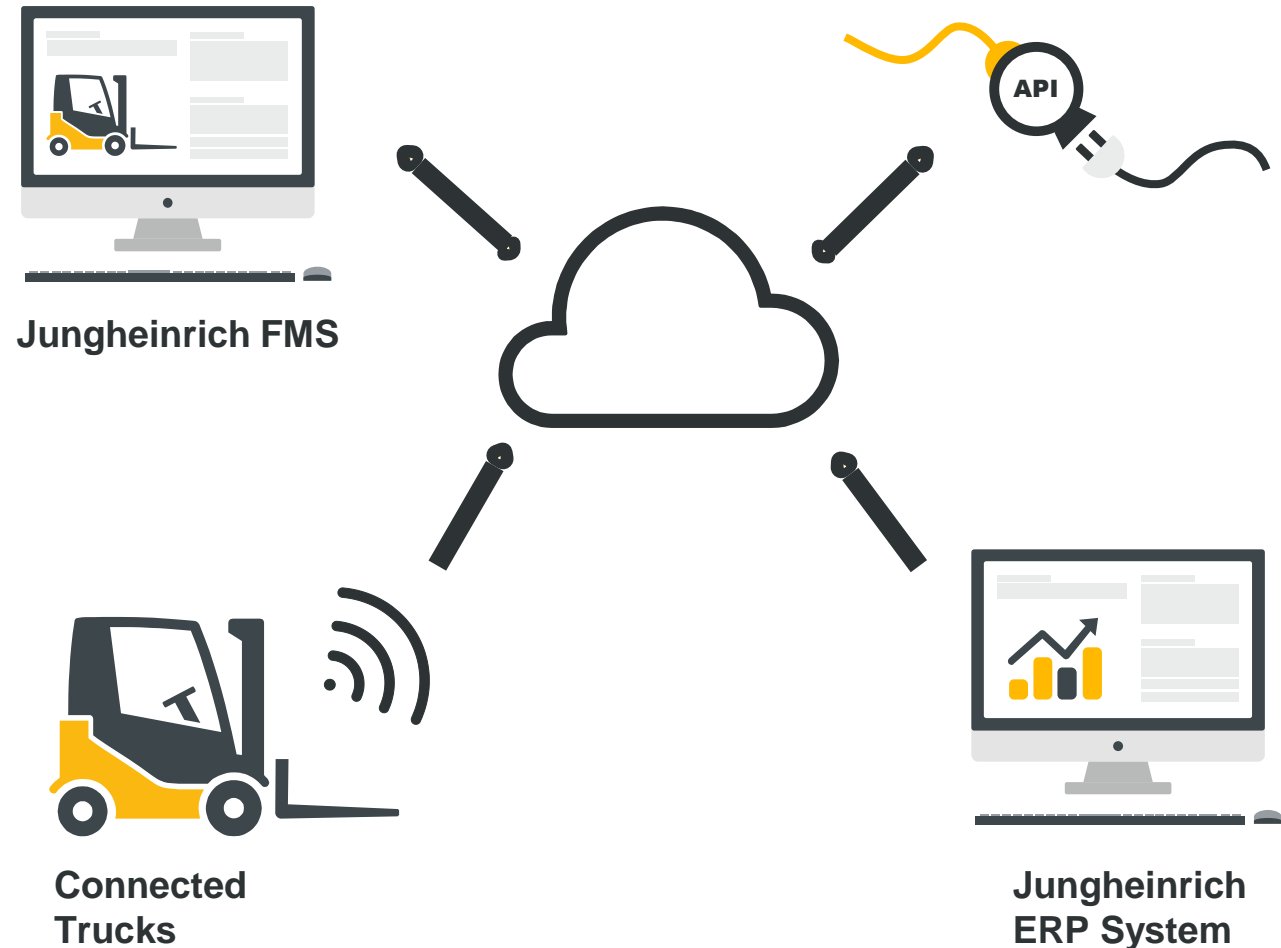
**i Software requirement**

In order to provide data via the FMS API, the respective bundle of the Jungheinrich FMS is required.

# Jungheinrich FMS

## Telematics & Service Platform

A cloud based services architecture based on modern technologies and design principles as a solid foundation for FMS, FMS API and more while maintaining highest standards in terms of data privacy (EU-GDPR) and IT security.



# Jungheinrich FMS

## The right choice also from a technology perspective



**HIGHEST DATA & IT SECURITY**



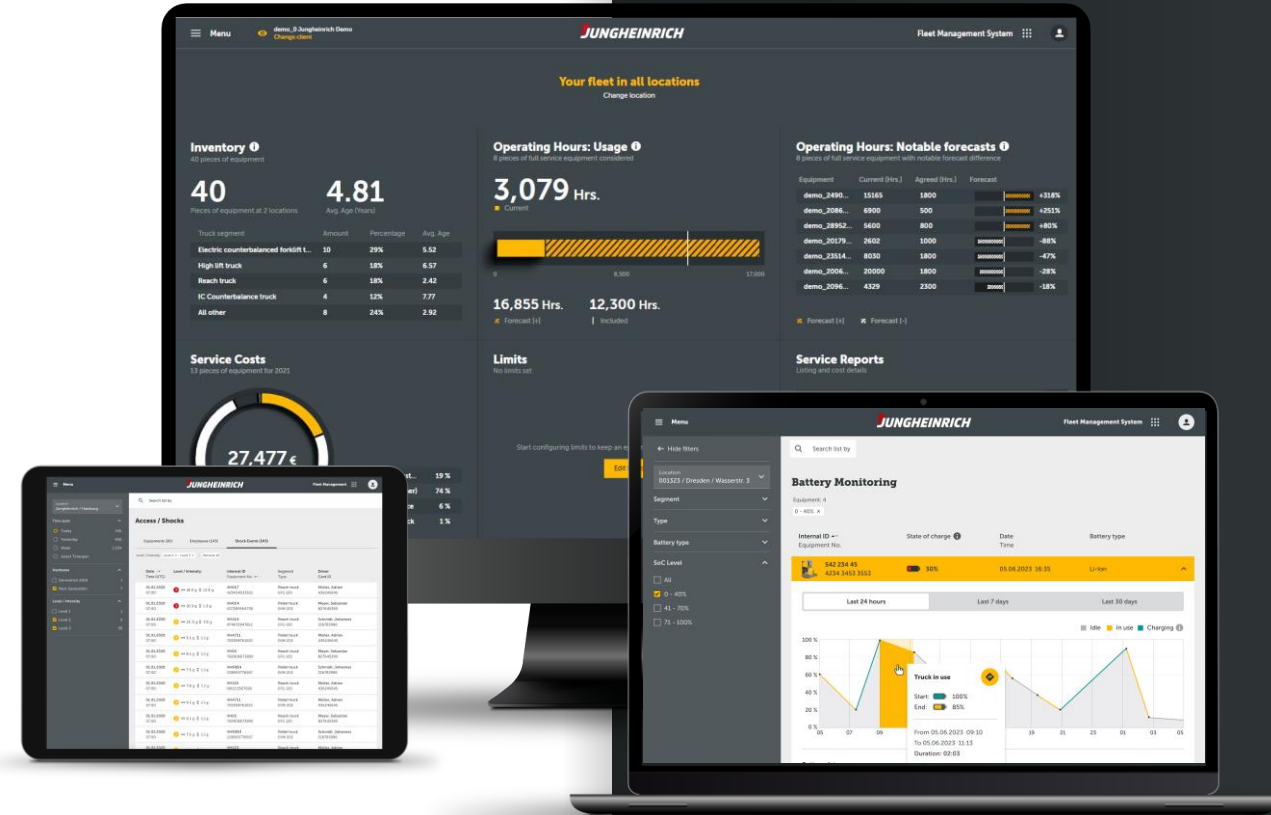
**INDIVIDUALLY CUSTOMISABLE FLEET MANAGEMENT SYSTEM**



**FUTURE-PROOF AND INCREASE OF SUSTAINABILITY**



**JUNGHEINRICH AS A STRONG PARTNER FOR YOUR ENTIRE FLEET**





# On the safe side – also digitally

## Maximum data protection for your intralogistics fleet

- Compliance with **GDPR**
- Data **storing** and **processing inside the EU**
- **Role-based access permissions** to ensure confidentiality; users have only access to the data and information they need for their work
- State-of-the-art **end-to-end encryption**
- IT security as a firmly established part of the Jungheinrich development process



**Highest degree of data security based on European standards!**

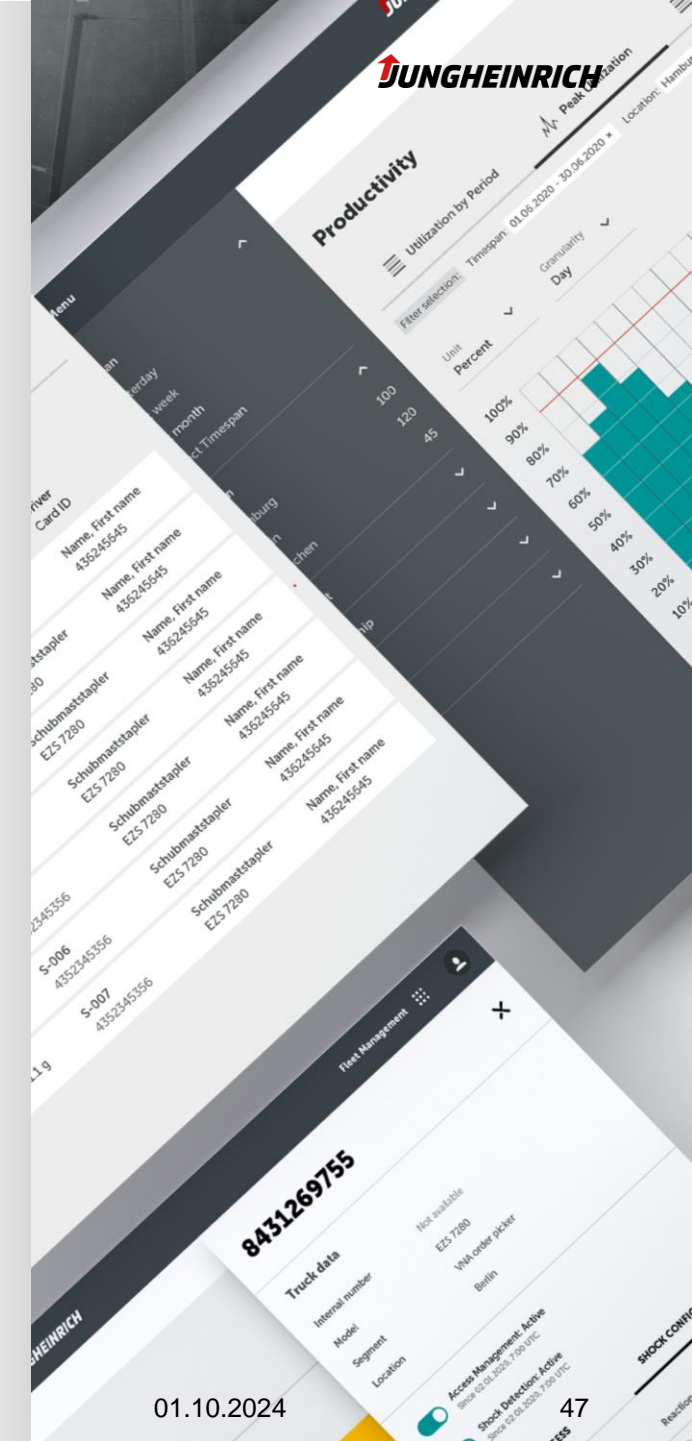


# Individually customisable Fleet Management System

- ▶ **Modular design:** Select exactly the functions you need!
- ▶ Mapping of **individual organisational structures** (e.g. cost centres, production lines)
- ▶ **Manual addition** for capturing all fleet data, also from third-party vehicles
- ▶ Extensive individualisation by **customer-specific attributes** (e.g. assignment of serial numbers, internal location names)
- ▶ **Individual** definition of **limits** and **groups** within the modules
- ▶ **Optional data API** – integrate the data directly into your systems



**Standard software with individual functions & customisation options!**



# Future-proof System

## Sustainability for your fleet

### FUTURE-PROOF

- ▶ Quick implementation & **use of innovative functions** and **improvements simply via update**
- ▶ Exploit the full potential of new industrial trucks through immediate system integration and **scalability** of the system

### SUSTAINABILITY FOR YOUR FLEET

- ▶ **Increased lifetime** of your industrial trucks
- ▶ **Less wear** by optimised utilisation and less damages
- ▶ **Optimisation** of the **fleet size** based on your actual needs



**Creation of a sustainable fleet thanks to an increased lifetime and transparent information!**



 ***JUNGHEINRICH***