

Jungheinrich Fleet Management System System presentation

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Agenda

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

Agenda

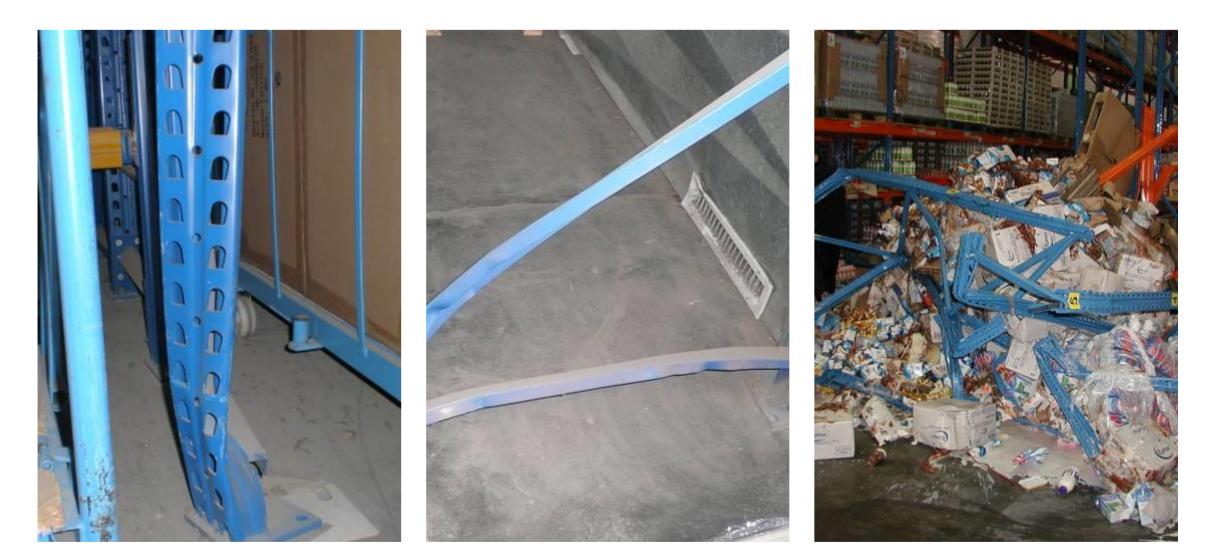
1 Benefits and product highlights

- 2 The right modules for your requirements
- 3 A customisable and safe IT system

Forklift Accidents



Rack damages



Warehouse collapse



Missing information on the use and productivity of your own fleet make it difficult to come to concrete decisions. Are you facing the following challenges when managing your fleet?

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



Missing information on the use and productivity of your own fleet make it difficult to come to concrete decisions. Are you facing the following challenges when managing your fleet?

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)

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



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

JUNGHEINRICH

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.



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

Jungheinrich FMS Our solution

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Henu I denne, 8 Jungheinrich Denno Change client		JUNGHEINRICH	Fleet Management System	
		Your fleet in all locations Ownge location		
Inventory 0 40 pieces of equipment	Operating H If pieces of full service		Operating Hours: Notable forecasts 0 8 perces of full service equipment with reliable forecast difference	
40 4.81	3,079	Hrs.	Equipment Current Dirs.) Agreed Dirs.) Foirecast demo_2490 15165 1800 (mmmot + demo_2086 4990 500 (mmmot +	31.0% 2513
Truck segment Amount Percentage Bectric counterbalanced forklift L. 10 29% High tilt truck 6 18%	Avg. Age 5.52		dema_20179 2602 1000 accessed -	80% 88% 47%
High lift truck 6 1.8% Reach truck 6 1.8% IC Counterbalance truck 4 1.2% All other 8 24%	2.42 7.77 16,855 Hrs.			28% 18%
Service Costs	× Forecast [+]		X Forecast(+) X Forecast(-)	
13 pieces of equipment for 2021	No limits set		Service Reports Lizzag and cost details	
		ing Emits to keep an ey	JUNGHEINRICH	Fleet Management System 🔢 🔳
27,477 € ■ Repair (Cur ■ Repair (Cur	er) 74 %	Location Coastan / Wassentr, 3 * Segment	Battery Monitoring	
Aaintenam Safety Che		Typel v Battery type v	0 - 405. x Internal ID +- State of charge Date Equipment No. Time	Battery type
		54C Level ▲	542 234 45 BB 30% 05.06.2023 16	35 U-lon A
		□ 41 - 70% □ 72 - 2005	Last 24 hours Last 7 days	Last 30 days
		_	ao x	
			20 % Start: ■ 100% End: ■ 85% End: ■ 85% 65 07 09 From 05.06.2023 09:10 39	21 23 01 03 05
			To 05 08 2023 31 13 Duration: 02:05	

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.

ÎJUNGHEINRICH

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



Agenda

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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.



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.

i Menu						JUNGI	HEINRICH	FL	eet Management System	•
						Your fleet in a Change Io				
Inventory Sum of all equipment in t						k detection		Access management Status authorizations in Hamburg		
312 Equipments total	6. Average	2 year			14	7 nt with activated shock	81 Shocks in the past 24 hours	321 Equipments with activated access control		
		With contract	Without contract	Average age	12	Shocks level 3 In the past 24 hours		4 Expired transponder IDs Access to the equipment blocked		
Reach truck					<u> </u>					
Segment 2 Segment 3	22	2	20 0	© 12.2 years © 11.5 years	9	Shocks level 2 in the past 24 hours		23 Transponder IDs that will soon expl Authorizations expire within the nex	re t 14 davs	
Segment 4	34	32		© 11.5 years		in the past 24 nours				
Other segments	121		119	© 4.5 years				14 Equipment with pending authorizat	ion changes	
Operating hou 3 full-service pieces of eq	rs: Notabl	le forec	asts 🚯			S nt with exceeded limits		Service reports Listing and cost details		
						Operational costs		Service reports		
TD 123 500 4,00	Hrs. 3,00	00 Hrs.		140 %		No limits exceeded		Service reports During the last 2 weeks		
TD 123 500 3,000	Hrs. 3,50	10 Hrs.								
TD 123 500 2,000		10 Hrs.		115 %	12	Equipment age Equipments with exceeded lim		12 Critical service reports Service reports containing customer		
TD 123 500 3,000		10 Hrs.								
TD 123 500 3,000		10 Hrs.	*****	-75 %		Operating hours No limits exceeded		8 Conspicuous trucks With more than 3 services in the last		
TD 123 500 2,000		10 Hrs.		-85 %		NO emits exceeded		 with more than 3 services in the last 	an naàz	
TD 123 500 3,000	Hrs. 3,50	10 Hrs.	*****	85 %						

- + **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

Operating Hours: Usage () 8 pieces of full service equipment considered

3,079 Hrs.

Current

Inventory 0 40 pieces of equipment

40

Pieces of equipment at 2 locations

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

Service Costs

13 pieces of equipment for 2021



01	ł.
.0.	-
ge (Years)	

Repair (Cust...

Repair (Other)

Maintenance

Safety Check

19 %

74 %

6%

1%

	8,500	17,000
16,855 Hrs. Z Forecast [+]	12,300 Hrs. I Included	
Limits No limits set		

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



Operating Hours: Notable forecasts ①

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	5000000L	-88%
demo_23514	8030	1800		-47%
demo_2006	20000	1800		-28%
demo_2096	4329	2300	20002	-18%

Forecast [+] Z Forecast [-]

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

Shock detection Current critical shocks in Hamburg

147

Shocks level 3 12 in the past 24 hours

Shocks level 2 9 in the past 24 hours Access management Status authorizations in Hamburg

321

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 %

Limits

Equipment with exceeded limits

- Operational costs ~ No limits exceeded
- Equipment age 12 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

740		~		
512 Equipments total				
Truck segment	Total	With contract	Without contract	Averaç age
Reach truck	87	27	60	Ø 14.2
Segment 2	22		20	Ø 12.2
Segment 3	12	12	0	Ø 11.5
Segment 4	34	32		Ø 8.9 j
Other segments	121		119	⊘ 4.5 j
				-
	Truck segment Reach truck Segment 2 Segment 3 Segment 4 Other segments	Equipments total Average Truck segment Total Reach truck 87 Segment 2 22 Segment 3 12 Segment 4 34 Other segments 121	Equipments total Average age Truck segment Total With contract Reach truck 87 27 Segment 2 22 2 Segment 3 12 12 Segment 4 34 32 Other segments 121 2	Equipments total Average age Truck segment Total With contract Without contract Reach truck 87 27 60 Segment 2 22 2 20 Segment 3 12 12 0 Segment 4 34 32 2

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

			_		_	_		
All locations (2)			ss man	194 Equipments total	2.	5 years		
Q Filter list by number o	r location	94	nts with act	Truck segment		With contract	Without contract	Average age
		 Equipme	its with act	Reach truck	17	10		Ø 4.2 years
Number 😁	Location		Expired to	Segment 2	4	2	2	Ø 8.2 years
	111	 5	Access to	Segment 3	25	12	13	Ø 16.5 year
demo_21285613	Kleve			Segment 4	34	32		Ø 5.6 years
demo_21341714	Stuttgart	15	Transpon Authoriza	Other segments	104	z	102	⊘ 7.3 years
		74	Equipment	with pending authorization	ı changes		→	
		 _	-/			-	-	



Add equipment

Add limits



Export list

Timespan

- This calendar year
- O Last calendar year
- All time
- Select timespan

Construction year	~
Location	~
Segment	~
Manufacturer	~
Limits	~
Cost center	~

Q

~

Search list by



Operational Costs (5 equipments with conspicuous limits)

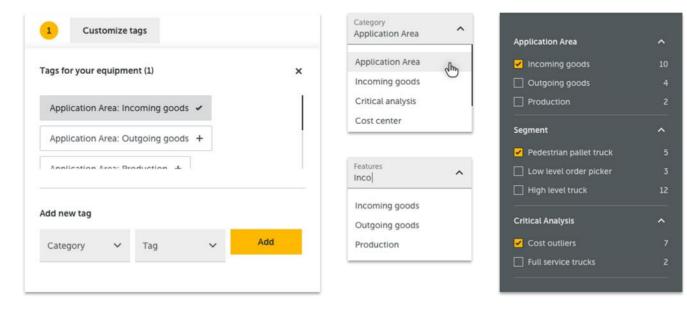
Total cost 78.803,00 €		Service cost	split				
/8.803,0	U€	Repair (Cu	ustomer Damage)	25 %	250,	,90€	
		Repair (ot	her)	25 %	250,	,90€	
		Maintena	nce	25 %	300	,50 €	
Costs per	0	Safety Ch	eck	20 %	48,000,5	50 €	
operating hour		Oil Servic	e	10 %	30,000,2	20 €	
250 €/h		Total service c	osts		78.803,0	00€	$\overline{}$
Internal ID Equipment No. 🕶	Location Number	Cost/ Operating hour	g Total costs	Serv	vice 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	Hamburg	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

JUNGHEINRICH

Your benefits

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

≡ Menu		1	UNGHEINR	Fleet M	Fleet Management 🔢 💶		
Segment	~	Q Search list by			Add limits Ad	d equipment Export list	
Location	~	Inventory (187)					
Construction year	* *1						
Manufacturer	~	Internal ID Equipment No. 🕶	Segment Type	Location Number	Selectable columns	×	
Features	~	HH017 423434533553	Reach truck EFG 120	Hamburg 161161	Identification Internal ID	Model Segment	
Limits	^	HH014 637289564738	Pallet truck EKM 202	Hamburg 161161	Site	Address	
limit exceeded Forecast over limit	3 5	HH124 874672947812	Reach truck EFG 120	Hamburg 161161	Contextual columns		
Cost center	~	HH4711 720398761023	Pallet truck EKM 202	Hamburg 161161	Manufacturer	 Hardware equipment Tags 	
		HH01 782906673899	Reach truck EFG 120	Hamburg 4711	Hamburger Str. 1 22083 Hamburg	Jungheinrich	
		HH9854 228993776567	Pallet truck EKM 202	Hamburg 47 <u>11</u>	Hamburger Str. 1 22083 Hamburg	Jungheinrich	
		HH123 991115567826	Reach truck EFG 120	Hamburg 4711	Hamburger Str. 1 22083 Hamburg	Jungheinrich	
		HH234 888666542789	Pallet truck EKM 202	Hamburg 4711	Hamburger Str. 1 22083 Hamburg	Jungheinrich	
		HH678	Pallet truck	Hamburg	Hamburger Str. 1		



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*

ĴUNGHEINRICH

Your benefits



≡ Menu			JUNGHEIN	RICH	FI.	eet Management	
Meter reading	~	Q Search list by			Add limits	Add equipment Expo	rt list
Construction year	× (Operating Hours	(41 pieces of	f equipment)			
Location	~ ~	Internal ID Equipment No. 🕶	Location Number	Meter reading (Hrs.)	Date	Forecast (Difference)	
Manufacturer	~	HH017 423434533553	Hamburg 161161	9,847	21.02.2021	Included hours	
Limits	^	HH014 637289564738	Hamburg 161161	4,887	21.02.2021	(2) Reference values 122%, 121%	
 Iimit exceeded Forecast over limit 	3 5	HH124 874672947812	Hamburg 161161	4,923	21.02.2021	(2) Reference values 112%, 95%	
Cost center	~	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 112%, 95%	
		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



Your benefits



≡ Menu			JUNGHEII	NRICH		Fleet Management	
Location Jungheinrich / Hamburg	~	Q Search list b	1				
Time span	^	Access / Sh	ocks				
 Today 	345						
	456	Equipments (20) Employees (143)	Shock Events (345)			
	1.234			ах	-		
		Level / Intensity: Leve	2 × Level 3 × Remove all				
Hardware	^	Date	Level / Intensity	Internal ID	Segment	Driver	
	1	Time (UTC)		Equipment No. **	Туре	Card ID	
Vext Generation	7	01.01.2020 07:00	3 ↔ 18.9 g ‡ 12.0 g	HH017 423434533553	Reach truck EFG 120	Müller, Adrian 436245645	
Level / Intensity	^	01.01.2020	3 ↔ 10.9 g \$ 1.0 g	HH014 637289564738	Pallet truck EKM 202	Meyer, Sebastian 827645390	
	1	07:00	07.3	637289564738	ERM 202	827645390	
Level 2	2	01.01.2020 07:00	🥝 ↔ 13.0 g ‡ 3.0 g	HH124 874672947812	Reach truck EFG 120	Schmidt, Johanne 216783996	s
Level 3	55						
Segment	~	01.01.2020 07:00	<mark>⊘</mark> ↔ 91g ‡ 11g	HH4711 720398761023	Pallet truck EKM 202	Müller, Adrian 436245645	
		01.01.2020 07:00	🧿 ↔ 8.1g ‡ 1.1g	HH01 782906673899	Reach truck EFG 120	Meyer, Sebastian 827645390	
		01.01.2020 07:00	🣀 ↔ 7.5g ‡ 1.1g	HH9854 228993776567	Pallet truck EKM 202	Schmidt, Johanne 216783996	s
		01.01.2020	↔ 7.8 g \$ 1.1 g	HH123	Reach truck	Müller, Adrian	



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





Mensa otros, 8 Junghelanich Denne Change claure		JUNGHEINRICH		Fleet Management System
+ Hide filters				
Location demo_201341714 / Stuttgart / Jungh	Pre-Op Check			
Segment ^	Basic configuration, checklists and performed checks			
Pedestrian pallet truck 2	Pre-Op Check Quick Check Perform	ned checks		
Low level order picker 1				
High lift truck 4	Internal ID ** Equipment no.	Segment Type	Hardware Available options	Applied check
Electric counterbalanced fork lift truck 7	Nr. 001	Pedestrian pallet truck	Next Generation	Choose autors
Reach truck 4	demo_249020258	EJE C20	Visual check	Visual check
UNA - Order picker 3	Nr. 002 demo_235140270	Pedestrian pallet truck EJE C20	Next Generation Visual check	Chosen option Visual check
Hardware ^	Nr. 003	High lift truck	Next Generation	Chosen option
Next Generation 21	demo_2174968403	ERC 216z	Visual check	Visual check
Тури ^	Nr. 004 demo_2098518737	High lift truck ERC 236z	Next Generation Visual check	Chainen aption. Visual check
□ EEC8 2	Nr. 005 demo. 2140135283	High lift truck ERC 216z	Next Generation Visual check	Choosen option Visual check
EKM 202 1	Nr. 006	VNA - Order picker	Next Generation	
□ ERC 216 1	demo_2074704638	DKS 412s	Visual check	Choise option Visual check
C ERC 236z 3	Nr. 007 demo_2123428174	VNA - Order picker EXS 412s	Next Generation Visual check	Choose option Visual check
🗌 tra 425 7	Nr. 008	VNA - Order picker	Next Generation	Crosen option
□ ETV 2161 4	demo_278894378	EKS 210	Visual check	None
1 015 210 1	Nr. 009 demo_2005859708	Low level order picker EXM 202	Next Generation Visual check	Choise option Visual check
EX5.412h 2	Nr. 010 demo214183921	Reach truck ETV 216	Next Generation Visual check	Churten option Visual check
Internal ID ^				
🔲 Nr. 001 1	Nr. 011 demo_222390528	Electric counterbalanced fork Lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
□ Nr. 002 1	Nr. 012	Electric counterbalanced fork lift truck	Next Generation	Choise option
□ Nr. 003 1	demo_285866977	EFG 425	Visual check	Visual check
□ Nr. 004 1	Nr. 013 demo_2053041225	Electric counterbalanced fork UR truck EFG 425	Next Generation Visual check	Crusen option Visual check
□ Nr. 005 1 □ Nr. 006 1	Nr. 014 demo_274205202	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
□ Nr. 007 1	Nr. 015 demo_2006013839	Electric counterbalanced fork lift truck EFG 425	Next Generation Visual check	Chosen option Visual check
□ Nr.008 1 □ Nr.009 1	Nr. 016 demo_264144212	Electric counterbalanced fork Uft truck EFG 425	Next Generation Visual check	Chosen agition Visual check



Hardware requirements

Telematics Box, transponder cards, transponder reader, display

O demo_0 Jungheinrich Demo Change client 🗮 Menu

Location demo_21341714 / Stuttgart / Jungh

← Hide filters

Pedestrian pallet truck

Low level order picker High lift truck

Segment

JUNGHEINRICH

Pre-Op Check

Basic configuration, checklists and performed checks

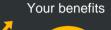
Pre-Op Check Quick Check Performed checks

High lift truck 4	Internal ID 🔺 Equipment no.	Segment Type	Hardware Available options	Applied check
Electric counterbalanced fork lift truck 7 Reach truck 4	Nr. 001	Pedestrian pallet truck	Next Generation	Chosen option
	demo_249020258	EJE C20	Visual check	Visual check
VNA - Order picker 3	Nr. 002	Pedestrian pallet truck	Next Generation	Chosen option
	demo_235140270	EJE C20	Visual check	Visual check
	Nr. 003	High lift truck	Next Generation	Chosen option
	demo_2174968403	ERC 216z	Visual check	Visual check
Next Generation 21	Nr. 004	High lift truck	Next Generation	Chosen option
	demo_2098518737	ERC 216z	Visual check	Visual check
Type ^	Nr. 005	High lift truck	Next Generation	Chosen option .
☐ EJE C20 2	demo_2140135283	ERC 216z	Visual check	Visual check
☐ EKM 202 1	Nr. 006	VNA - Order picker	Next Generation	Chosen option
	demo_2074704638	EKS 412s	Visual check	Visual check
ERC 216 1	Nr. 007	VNA - Order picker	Next Generation	Chosen option
	demo_2123428174	EKS 412s	Visual check	Visual check
□ EFG 425 7	Nr. 008 demo_278894378	VNA - Order picker EKS 210	Next Generation Visual check	Chosen option
□ ETV 216i 4	Nr. 009	Low level order picker	Next Generation	Chosen option
	demo_2006859708	EKM 202	Visual check	Visual check
EKS 412s 2	Nr. 010	Reach truck	Next Generation	Chosen option .
Internal ID ^	demo_214183921	ETV 216i Electric counterbalanced fork lift truck	Visual check Next Generation	Visual check Chosen option
□ Nr. 001 1	demo_222390628	EFG 425	Visual check	Visual check
□ Nr. 002 1		Electric counterbalanced fork lift truck	Next Generation	Chosen option
□ Nr. 003 1	demo_285866977	EFG 425	Visual check	Visual check
□ Nr. 004 1	Nr. 013	Electric counterbalanced fork lift truck	Next Generation	Chosen option
	demo_2053041225	EFG 425	Visual check	Visual check
□ Nr. 005 1	Nr. 014	Electric counterbalanced fork lift truck	Next Generation	Chosen option
	demo_274205202	EFG 425	Visual check	Visual check
	Nr. 015	Electric counterbalanced fork lift truck	Next Generation	Chosen option
Nr. 007 1	demo_2086013839	EFG 425	Visual check	Visual check
□ Nr. 008 1	Nr. 016	Electric counterbalanced fork lift truck	Next Generation	Chosen option
	demo_264144212	EFG 425	Visual check	Visual check
Nr. 010 1	Nr. 017	Electric counterbalanced fork lift truck	Next Generation	Chosen option
	demo 289529578	EFG 425	Visual check	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

☰ Menu			1	UNGHEINR	ИСН			Fleet Management	··· 🕒
Timespan	م م	Search list by						Add limit	Export list
 Yesterday Last week 	Pro	oductivity	,						
 Last month Select Timespan 		C Fleet utilizat	ion	M Peak u	tilization	🔒 Equipmer	nt utilization	O→ Parallel ut	tilization
Location	∧ Sor Inte	ernal ID	•					perating 📕 Tir	neout Off
✓ Hamburg	100								
🗌 Berlin	120 S-0	001 🔁							
München	45	002							
Segment	∽ S-0	003							
Туре	S -0	004							
Cost center	∽ S-0	005 🔁							
	S-0	006							
	S-0	007 🚯							
	S-0	008 🔁							
	S-0	009 🚯							
		Mo, 12.0	7.2020 Tu, 13	3.07.2020 ['] M	1i, 14.07.2020	Th, 14.07.2020	Fr, 14.07.2020	Sa, 14.07.2020	Su, 15.07.2020

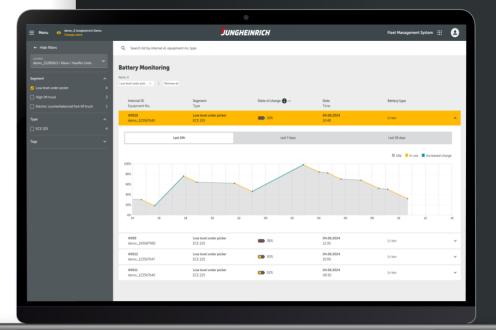
≡ Menu		JUNGHEINRICH		Fleet Management : 👤
Timespan ^				Export data
 Yesterday Last week Last month 	Productivity			
 Select Timespan 	Reet utilization	M Peak utilization	Equipment utilization	O→ Parallel utilization
LocationImage: Hamburg100Berlin120München45SegmentTypeCost center	View mode Standard 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% Abs. ← CW 23 CW	V V V V V V V V V V V V V V V V V V V	CW 25 CW 25 CW 26	CW 27 CW 28 →

Optimized Charging and Availability Energy Bundle

What does the Battery Monitoring module offer?

- Possibility to analyse the state of charge of li-ion and leadacid 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 demo_21285613 / Kleve / Hauffer Gmb...

← Hide filters

Q Search list by internal id, equipment no, type

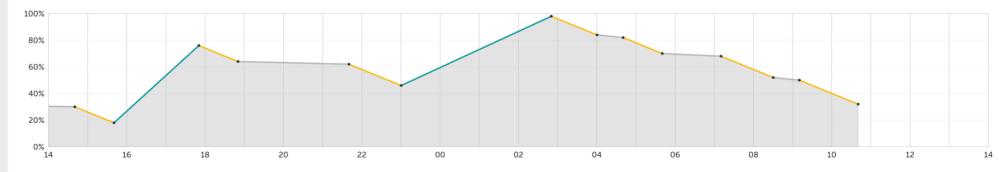
Battery Monitoring

Segment	^
Low level order picker	
High lift truck	
Electric counterbalanced fork lift truck	
Туре	^
CE 225	
Tags	~

Items: 4 Low level order pick... × | Remove all

Internal ID Equipment No.	Segment Type	State of charge 🔒 🕶	Date Time	Battery type	
#0010 demo_123567645	Low level order picker ECE 225	11 32%	04.06.2024 10:40	Li-lon	^
Last 24h		Last 7 days		Last 30 days	

📕 Idle 📕 In use 📕 Increased charge



#009 demo_245687985	Low level order picker ECE 225	11 1 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	5 2%	04.06.2024 08:30	Li-Ion	~

Keep risks at bay Safety Bundle: Shock Management

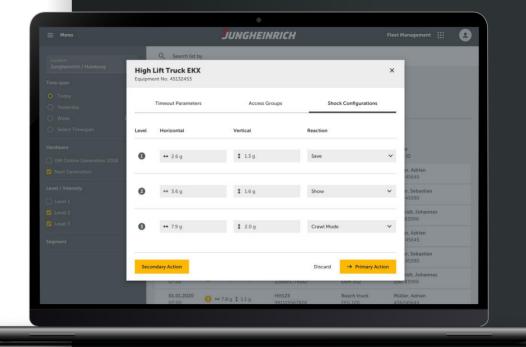
What does the Shock Management module offer?

- 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









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	~

Q Search list by

Access / Shocks

Equipments (20) Employees (143)	Shock Events (345)	_				
Level / Intensity: Level 2 × Level 3 × Remove all							
Date 🗢	Level / Intensity	Internal ID Equipment No. ▲▼	Segment Type	Driver Card ID			
01.01.2020	3 ↔ 18.9 g ‡ 12.0 g	HH017	Reach truck	Müller, Adrian			
07:00		423434533553	EFG 120	436245645			
01.01.2020	3 ↔ 10.9 g ‡ 1.0 g	HH014	Pallet truck	Meyer, Sebastian			
07:00		637289564738	EKM 202	827645390			
01.01.2020	<mark>2</mark> ↔ 13,.0 g ‡ 3.0 g	HH124	Reach truck	Schmidt, Johannes			
07:00		874672947812	EFG 120	216783996			
01.01.2020	<mark>2</mark> ↔ 9.1g ‡ 1.1g	HH4711	Pallet truck	Müller, Adrian			
07:00		720398761023	EKM 202	436245645			
01.01.2020	<mark>2</mark> ↔ 8.1g ‡ 1.1g	HH01	Reach truck	Meyer, Sebastian			
07:00		782906673899	EFG 120	827645390			
01.01.2020	<mark>2</mark> ↔ 7.5 g ‡ 1.1 g	HH9854	Pallet truck	Schmidt, Johannes			
07:00		228993776567	EKM 202	216783996			
01.01.2020	<mark>2</mark> ↔ 7.8 g ‡ 1.1 g	HH123	Reach truck	Müller, Adrian			
07:00		991115567826	EFG 120	436245645			

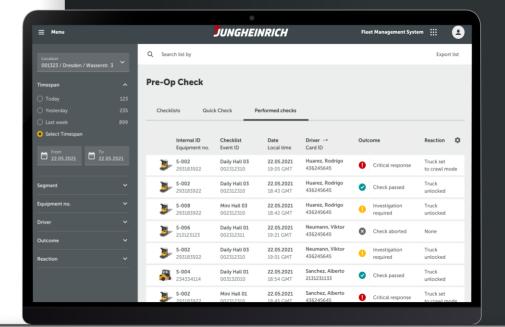
Optimize maintenance and increase safety Safety Bundle: Pre-Op Check

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

ĴUNGHEINRICH



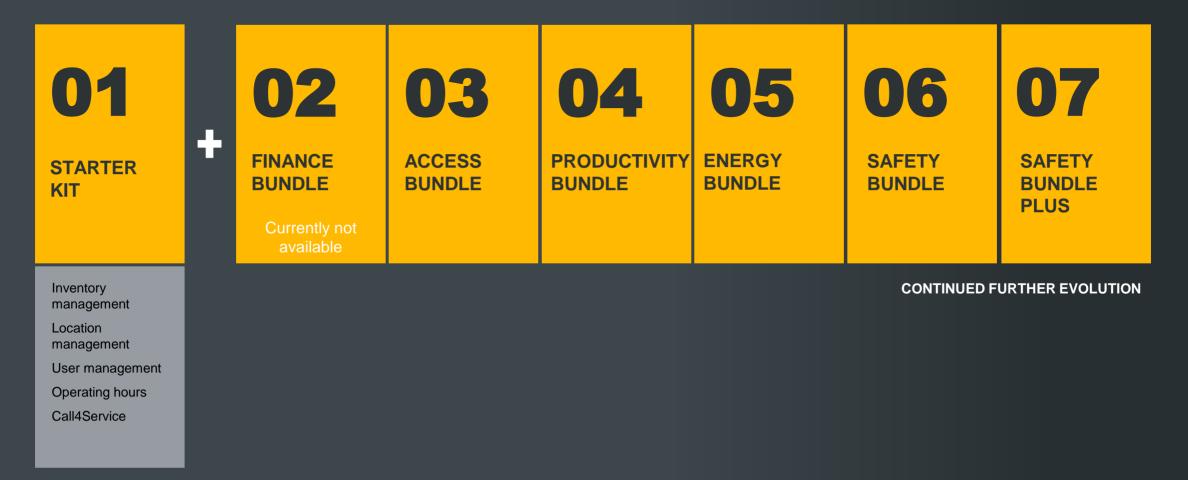


Hardware requirements

 $\left(\mathbf{H}\right)$

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

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

Software requirement

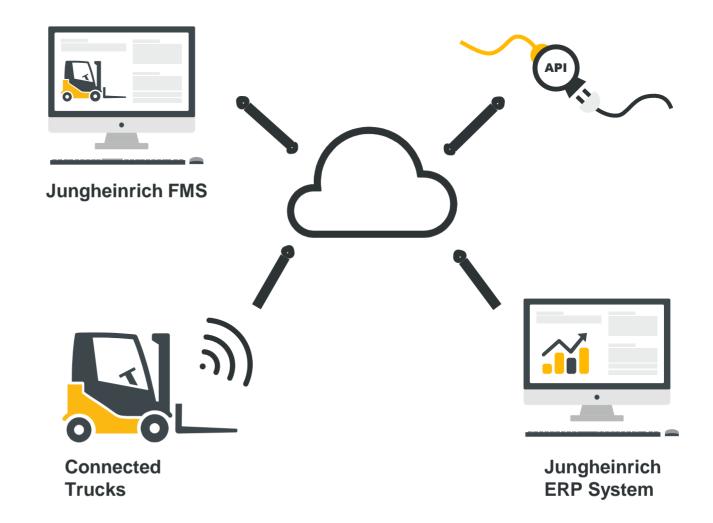
In order to provide data via the FMS API, the respective bundle of the Jungheinrich FMS is required.

ΔΡΙ

Jungheinrich FMS product presentation

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 Telematics & Service Platform



Jungheinrich FMS product presentation

Jungheinrich FMS

The right choice also from a technology perspective



HIGHEST DATA & IT SECURITY



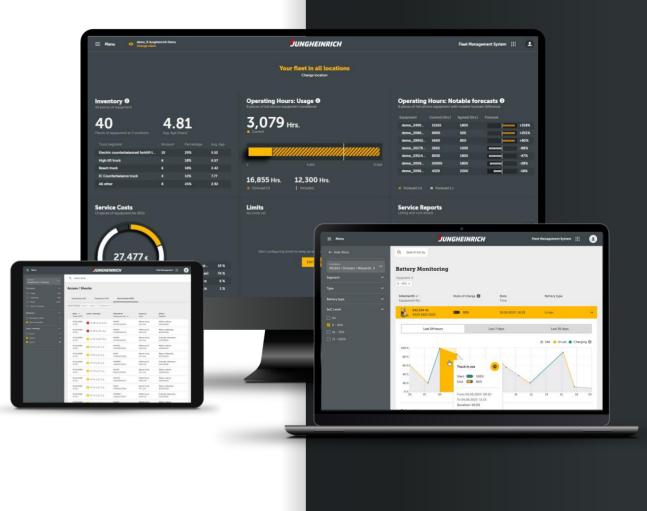
INDIVIDUALLY CUSTOMISABLE FLEET MANAGEMENT SYSTEM



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!

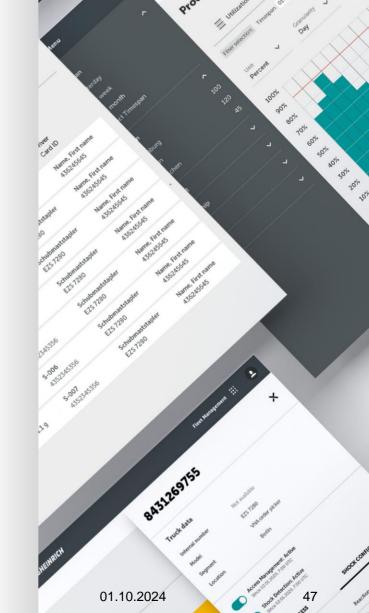


Individually customisable Fleet Management System

- 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!

