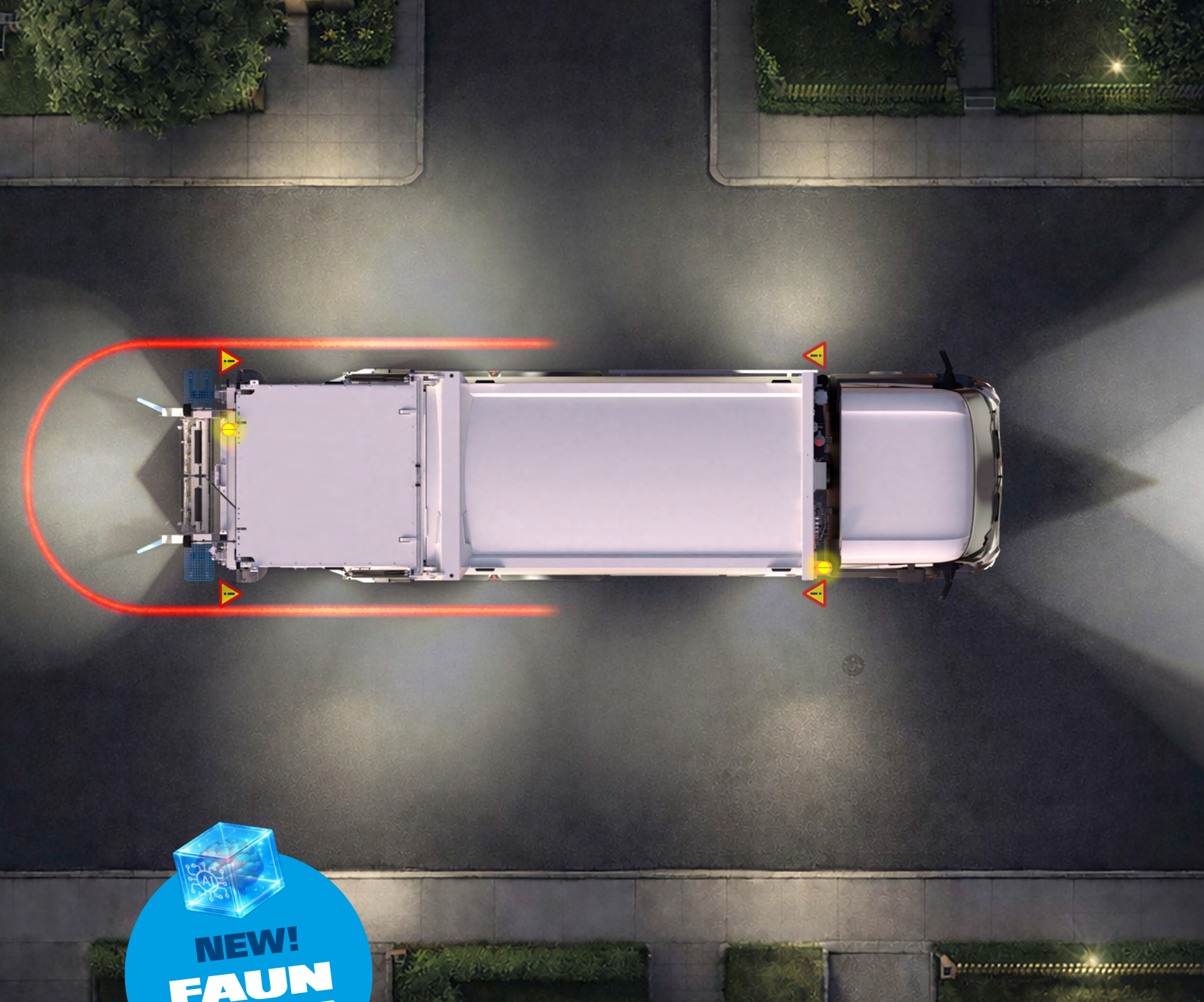




SAFETY AND PERFORMANCE SYSTEM

MORE **POWER** | MORE **SAFETY** | MORE **COMFORT**



THE **FAUN AI-CUBE** – INTELLIGENT ASSISTANCE ON THE REFUSE COLLECTION VEHICLE

One module, virtually unlimited possibilities

The FAUN AI-Cube thinks ahead: it supports the operator, monitors work areas, detects hazards and controls processes. This allows the operator to focus on the task at hand, while the Cube takes care of everything else.

Through direct integration with the control systems of the entire refuse collection vehicle, combined with the use of high-resolution cameras, the FAUN AI-Cube receives all relevant information in real time. On this basis, the system can do more than simply observe – it can actively manage operational processes. This supports operators in safety-critical situations and ensures user-friendly operation.

Unnecessary manual intervention is reduced to a minimum. As a result, operators can remain focused on their actual work, while the FAUN AI-Cube makes intelligent decisions in the background. The wide range of possible applications is essentially limited only by creativity.

The following safety and function packages are currently available:

- ④ Work area monitoring in the close-range area of the lifter and in other hazard zones around the vehicle
- ④ 360° surround view with realistic visualization for comprehensive environment monitoring
- ④ Automatic person detection in camera images
- ④ Object detection for identifying relevant structures and obstacles
- ④ Turn assist in the blind spot area and at the rear
- ④ Situation assessment to derive control commands and demand-based vehicle responses
- ④ Reversing assistance

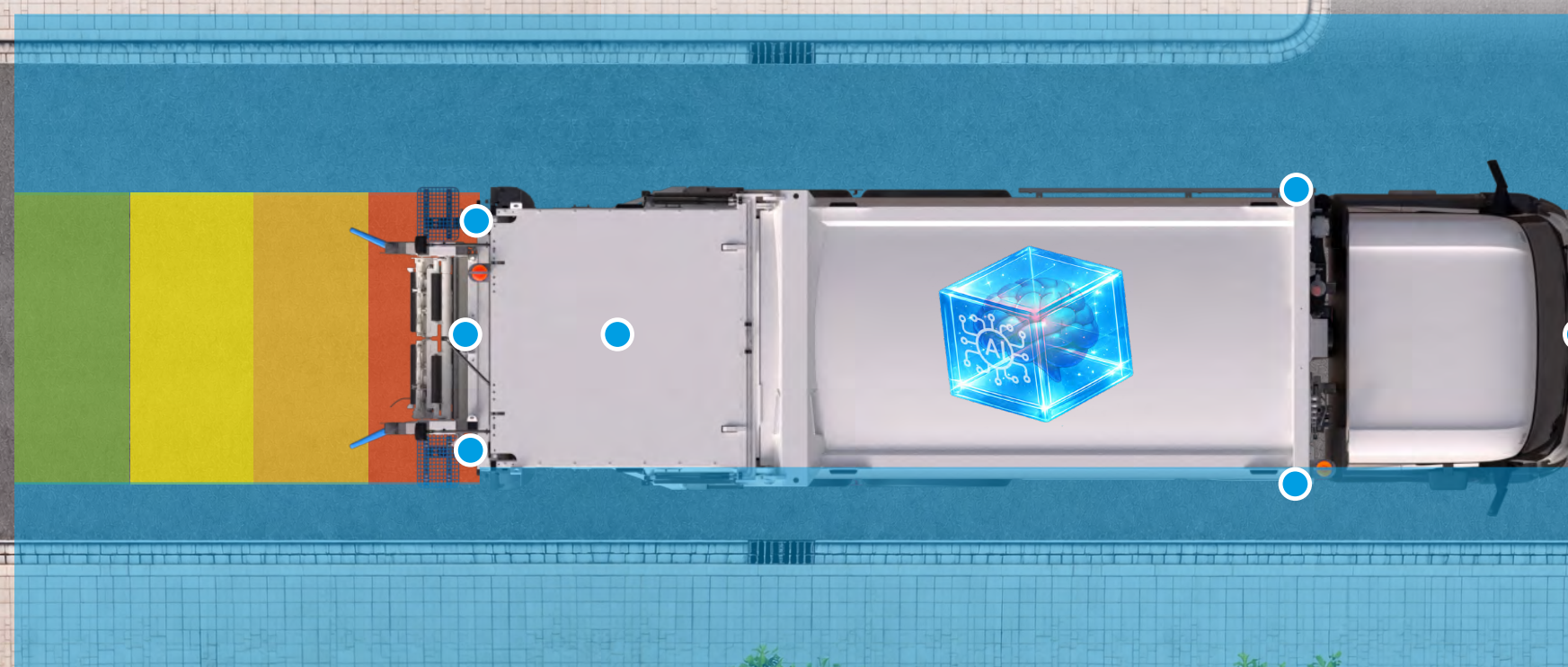
- ✓ Intuitive.
- ✓ Safe.
- ✓ Efficient.



All functions can be used individually or in combination. This keeps the system flexible and scalable, reduces operator workload and sustainably increases safety.



- ✓ Depending on the selected options, 1 to 7 digital cameras provide images that are analyzed by the AI-Cube in real time.
- ✓ In the event of danger, the FAUN AI-Cube reacts faster than any human ever could.
- ✓ An acoustic warning signal sounds in the cab, and a visual alert appears on the FCS display – optionally also on the Safety User Display at the rear.





THE NEW FCS OPERATING CONCEPT – EVERYTHING ON ONE DISPLAY

Fewer monitors – better overview

The new FAUN Shared Screen is the logical answer to the requirement of reducing the number of displays in refuse collection vehicles.

With the new FCS operating concept, FAUN offers a modern and intuitive user experience that brings together all key information centrally on a single 12.3-inch display. The visible screen area provides significantly more space for detailed information and, together with the new design, ensures a clear and user-friendly presentation.

Thanks to touch operation and variable display orientation: horizontal / vertical, the system can be flexibly adapted to different requirements and fields of application. The individual screen layout and customizable quick-access controls enable operation that is precisely tailored to everyday working routines.

A particular advantage is the integration of FAUN BirdView, as well as the integration of displays from various third-party providers. This eliminates the need for additional displays. Not only does this create more space in the cab, it also improves the overview of all relevant functions and information.

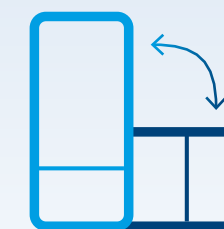
With the new FCS operating concept, we meet the requirements of UN Regulation No. 155 (UNECE R155) in the field of cybersecurity. This means the system stands not only for a modern user experience and clarity, but also for future-proof safety standards.



Situation in the cab: Separate displays from different providers lead to a confusing display and operating environment.



By integrating displays from various third-party providers the number of displays is reduced.



- ⌚ 3-inch touch display with visible screen area
- ⌚ Variable display orientation: horizontal / vertical
- ⌚ New user experience thanks to a new design
- ⌚ Integration of FAUN BirdView
- ⌚ Cybersecurity: certified according to UNECE R155
- ⌚ All key information at a glance
- ⌚ Customizable quick-access controls
- ⌚ Individual arrangement of display elements
- ⌚ Automatic brightness adjustment
- ⌚ More space for detailed information
- ⌚ Intuitive and clearly structured operating concept



Standard equipment: Work area monitoring in accordance with EN 1501-1:2021, displayed as "picture-in-picture" on 7"



Optional: Work area monitoring in accordance with EN 1501-1:2021, displayed as a "digital rear-view mirror" in full-screen format on 12"



FULL-SCREEN WORKSPACE MONITORING

Digital rear-view mirror with a 195° viewing angle at the rear of the truck

The digital rear-view mirror provides a single, full-width view of the area behind the vehicle with a 195-degree viewing angle.

The viewing angle becomes wider - and safer. Workspace Monitoring monitors the entire working area at the rear and ensures that the driver always knows what is happening. With extended functions, enhanced person and object detection is possible. When reversing, the driver receives both visual and acoustic warning signals. The camera image is shown on the FCS display, so no additional display is required.

Workspace monitoring with AI-based person detection

Persons are detected within the displayed area. If a person enters the danger zone while reverse gear is engaged, the driver is warned visually and acoustically. In addition, rearward manoeuvring is made easier and safer by a traffic-light grid.

Lifter monitoring

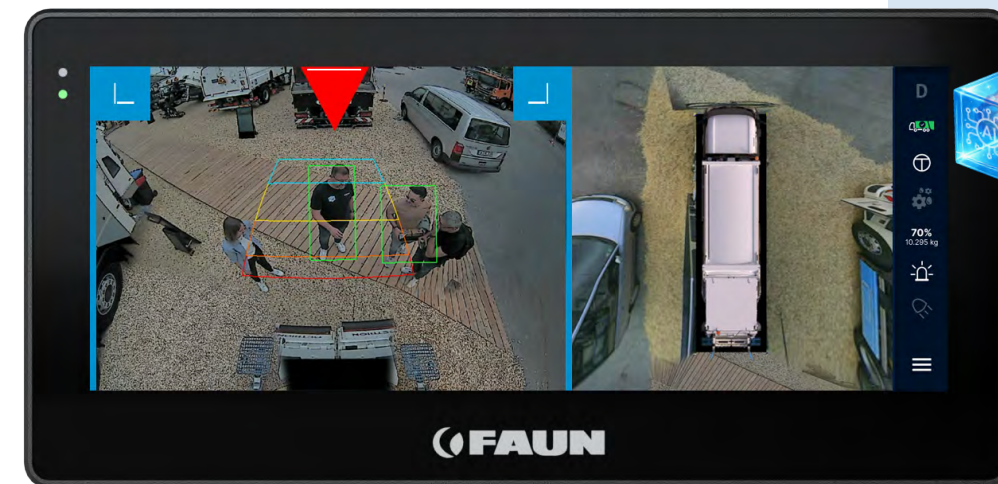
If a person is in the danger zone of the lifter and a hazardous situation occurs, the lifter is stopped immediately by interrupting the energy supply. The necessary approvals are withdrawn via the standardized interface.

3D REVERSING ASSISTANT VISY PRO FULLY INTEGRATED

VISY Pro is the only system certified according to GS-VL 40 RASV2. It is therefore considered equivalent to a banksman.

The system can be fully integrated into the FAUN Shared Screen, so no additional monitor is required.

- ⊙ Time-of-flight technology (PMD)
- ⊙ Eth-HD camera for digital visualization
- ⊙ Emergency brake function when reversing
- ⊙ Acoustic and visual warning
- ⊙ Digital reversing zone register



FAUN ALLROUND VIEW SURROUND MONITORING

FAUN BirdView: 360-degree visibility at a glance – full control all around the vehicle!

This allows the driver to maintain a clear overview at all times, whether manoeuvring or working in the loading area. Safety that pays off. FAUN BirdView monitors the rear area and the hazard zones when turning, and supports the driver when pulling away.

With additional AI-based person detection

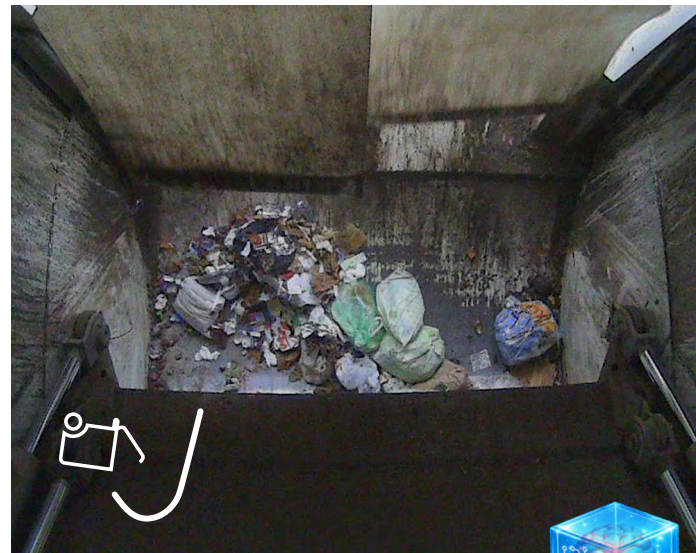
Persons are detected within the displayed area around the vehicle. If a person enters the danger zone, the driver is warned visually and acoustically, depending on the situation.

Turn assist with AI-based person and object detection

Most accidents occur when turning. Cyclists, pedestrians and motorcyclists are particularly at risk. The turn assist system protects the driver, loading crew and other road users by detecting blind spots and warning before it is too late.

SAFETY

PERFORMANCE

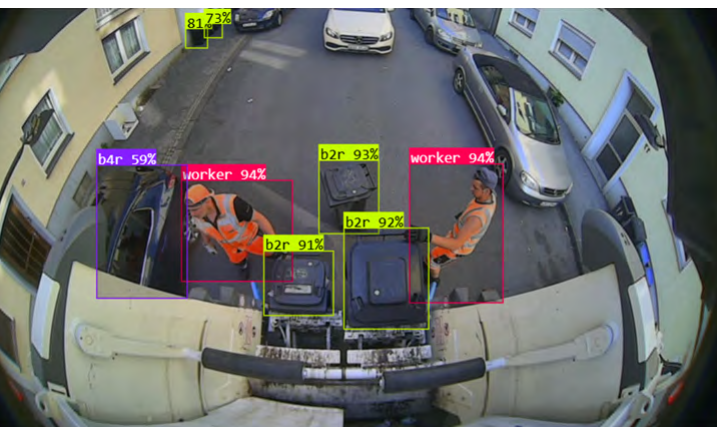


SMART HOPPER CONTROL

Needs-based and efficient management of support functions

Smart Hopper Control enables the body functions to be controlled efficiently and in line with actual requirements. Supported by various AI models, real-world requirements are objectively recorded and translated into a suitable usage profile. This eliminates the need for subjective judgements during operation, thereby simplifying day-to-day tasks for the operating personnel. At the same time, it prevents additional resource consumption caused by operating errors. The result: greater efficiency, optimised processes and more economical vehicle deployment.

- ⌚ Fill level monitoring of the loading hopper
- ⌚ 2-wheel/4-wheel container detection behind the vehicle
- ⌚ Information evaluation for controlling the body functions
- ⌚ Monitoring of a defined danger zone behind the vehicle
- ⌚ Warning when people are in the danger zone while reversing



SAFETY



FIRE PROTECTION CONCEPT

Intelligent fire protection for maximum safety

The multi-stage fire protection concept detects fire events at an early stage, reports them reliably and reduces their spread to a minimum. Fire gas detectors and thermal imaging cameras provide continuous monitoring, even during transfer journeys. Automatic protection functions safeguard the body, maintain operational safety and enable controlled discharge in the event of an emergency. As an option, the system can be supplemented with an extinguishing device.

Our fire protection concept was developed in close coordination with fire services and experts.

- ⌚ Objective and reliable detection even in the early stages
- ⌚ Fire gas detectors detect typical fire gases
- ⌚ Thermal imaging cameras detect hot spots and smouldering fires using infrared measurement technology
- ⌚ Automatic adjustment of body functions in the event of a fire
- ⌚ Targeted positioning of the compaction unit to minimize the spread of fire
- ⌚ Controlled discharge remains possible
- ⌚ Optional integration of an extinguishing device

SAFETY

COMFORT



CAN KEYPADS CONTROL PANELS

Color-illuminated buttons with status information

The updated CAN keypads provide operators with intuitive and convenient control of body functions. Color-illuminated buttons deliver direct status information, ensuring clear and quick orientation at all times.

Feedback via LED color rings makes switching states and functions immediately visible.

Various options can be flexibly integrated and, if required, retrofitted even more easily.

SAFETY

COMFORT



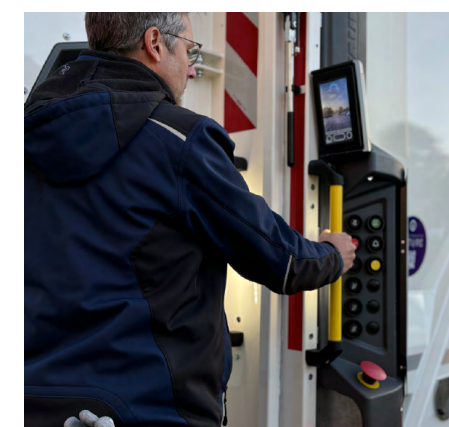
SAFETY USER DISPLAY

Everything in view, everything under control

More overview, more safety: with the Safety User Display, the most important information is always in view - in front of, behind and inside the vehicle. The loader can see the traffic situation while driving, the area behind the vehicle is displayed when stopping, and the display shows the charging status while working. Flashing signals and brake indicators make work even safer. For loading personnel, this means less uncertainty, greater efficiency and a significantly improved safety record.

Digital cameras

- ⌚ Adapted field of view on the right and left
- ⌚ Improved visibility in the loading hopper
- ⌚ Integration of the rear-view camera



SAFETY

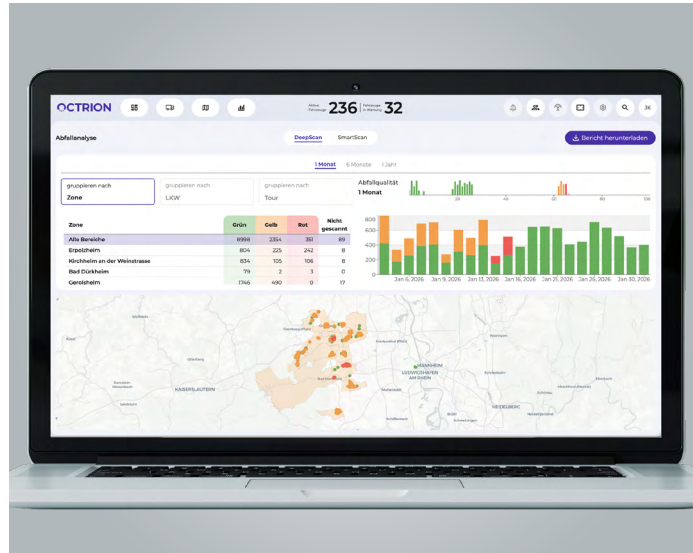
PERFORMANCE

PERFORMANCE

COMFORT

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DEEPCAN CONTAMINANT DETECTION

Detect foreign materials in organic waste
at an early stage

Intelligent detection technology identifies contaminants before they enter the collection process and cause problems. The system analyzes the bin across its full height and depth and provides the result before the contents are tipped into the vehicle.

DeepScan reliably detects electrically conductive materials by measuring magnetic fields. These include, for example, coffee bags, yoghurt lids, beverage cartons and many other types of packaging. Incorrectly filled bins can therefore be identified at an early stage and specifically rejected before the emptying process takes place.

The result is significantly improved waste quality in organic waste collection and a reliable method for sustainably reducing the proportion of foreign materials. In combination with an identification system, the results can also be assigned to individual bins.



SMART COMPACTION SYSTEM

Intelligent compaction control

Clever waste compaction made easy! Our Smart Compaction System automatically recognises which materials are being loaded and optimally adjusts the compaction. This saves energy, reduces wear and ensures that the entire loading volume is utilised effectively. For personnel, this means fewer stops, greater efficiency and careful use of resources. Decision-makers benefit from lower operating costs and a longer service life for vehicle components.

- ⌕ Reduces wear
- ⌕ Saves energy
- ⌕ Optimizes use of the entire loading volume
- ⌕ Increases efficiency
- ⌕ Lowers operating costs
- ⌕ Extends the service life of body components



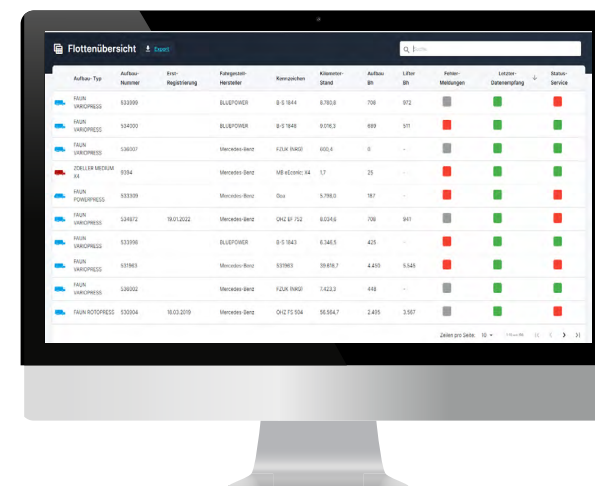
FAUN CONNECT

Telematics System for Recording
Operating Data, Tracking & Monitoring

FAUN Connect is a powerful digital fleet management system that delivers important operating data and vehicle performance indicators in real time. By comprehensively integrating GPS data, vehicle information, and operational values, precise analyses can be carried out to provide a complete overview of the fleet's condition.

The user-friendly dashboard offers a clear overview of either the entire fleet or individual vehicles at any time. This enables rapid response and helps minimise downtime. Thanks to role-based access permissions, users have full control over the information relevant to them.

Both hardware and software are supplied from a single source and are installed directly at our manufacturing facilities. This allows us to respond quickly and efficiently to individual customer requirements without unnecessary detours.



COMFORT



HYGIENE BOARD

Hand Washing Station

Stay clean – right at the workplace! The Hygiene board provides the loader with everything needed: water, soap, disinfectant and paper towels - all conveniently accessible underneath the vehicle body. No more searching – more hygiene, more comfort!

This allows personnel to protect themselves against health hazards caused by biological agents, while employers comply with occupational health and safety regulations (TRBA/German Occupational Safety and Health Act – ArbSchG).



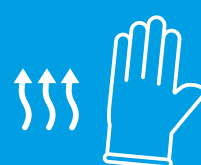
COMFORT



GLOVE DRYER

Glove Dryer

Finally dry gloves – even in miserable weather! The loader can simply place wet gloves into the heated box and let them dry while moving from bin to bin. The switch is integrated into the control panel. No more cold, damp fingers, no more hassle – just get the job done. When the function is not needed, the box is also perfect for storing spare gloves..



SAFETY

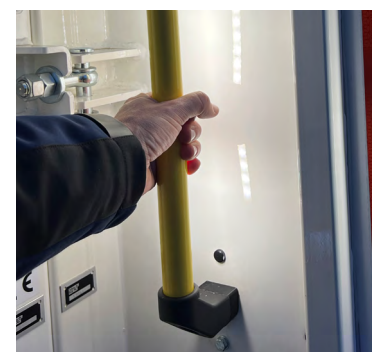
COMFORT



ILLUMINATED & HEATED HAND GRIPS

Illuminated and Heated Hand Grips

No more fumbling around in the dark! Our illuminated handrails show the loader exactly where to grab – without dazzling anyone else. And best of all: thanks to the optional heating function, hands stay warm and ready for action even in winter. Comfort meets safety.



SAFETY

PERFORMANCE



POWERED FOOTBOARD

Powerde Footboard

No more folding up by hand – now it's easy! Our electrically operated footboards make handling effortless and reduce strain on the back. Using a switch on the container control panel, the loader can operate the steps conveniently and precisely – or the driver can control them via the FCS. This ensures compliance with the new DIN 1501 regulations without any extra effort. The crew's energy stays where it belongs – focused on the job!



FUNCTION AND COMPONENT OVERVIEW

	Shared Screen	AI-Cube	Rear camera (3 x)	Front camera (1 x)*	Side camera (2 x)	Loading area camera (1 x)	LED work lights in the loading area	Rear display (2 x)	Laser sensor	OCTRION hardware	
SHARED SCREEN 12,3" HMI Widescreen-Touch-Display	●		○								⌚ Improved overview of the hazard area behind the vehicle ⌚ Reduces the need for additional displays in the drivers cab, by integrating the displays of additional systems.
More performance											
DIGITAL REAR VIEW 195° FAUN AI CUBE	●		●								⌚ Digital rear-view mirror with seamless 195° overview, incl. standing platforms (complies with EN 1501) ⌚ Manoeuvring aid: displays dynamic guidelines depending on the steering angle (chassis-dependent)
More safety											
ALLROUND VIEW 360°	●		●	●	●						⌚ BirdView – 360° bird’s-eye view; camera system available as an app on the Secondary Screen ⌚ SideView – Automatic switch to the right or left camera when the indicator is activated ⌚ FrontView – Start-up warning when manoeuvring below 6 km/h with person detection
VISY PRO (by Octrion) Fully integrated 3D reversing assistant, certified according to GS-VL 40 RASV2)	●		●							●	- Object detection and brake intervention while reversing: ⌚ Integrated into the display image of the digital rear-view mirror – no additional monitor required ⌚ All settings can be adjusted in the ViSy app on the Secondary Screen
SAFETY USER DISPLAY	analog		●	○		○	●	●			⌚ While driving, the loader can see the traffic situation in front of the vehicle; additional information on vehicle behavior is also displayed ⌚ When stopping, the area behind the vehicle is displayed ⌚ During operation, the display shows the loading area
	digital		●	●		●	●	●			⌚ Less additional hardware, higher image resolution
AI SAFETY DETECTION	●		●								⌚ Person and object detection
Z-CAM (by Octrion)	●									●	⌚ AI-supported monitoring in the hazard area of the lifter
More efficiency											
SMART HOPPER CONTROL packing mechanism control	●		●			●	●				⌚ The fill level of the hopper is monitored ⌚ Containers are detected and compaction processes are controlled adaptively
SMART COMPACTION SYSTEM	●								●		⌚ Automatically detects the material composition and optimally adjusts compaction
DEEPCAN (by Octrion)	●									●	⌚ Electromagnetic contaminant detection in organic waste
SMARTSCAN (by Octrion)										●	⌚ Optical analysis and documentation of waste composition
FAUN CONNECT (powered by Octrion)	●									●	⌚ Provides access to the digital vehicle management system Flottenblick

○ analog ● digital * The analog front camera is mounted at the bottom, and the digital one at the top.





This name has been moving the trucks and vehicles world since 1845 and makes hearts beat faster worldwide.

We are 2,000 passionate people with a penchant for technology and craftsmanship.

We think outside the box and dare to break new ground.

We produce sweepers and refuse collection vehicles with total dedication. And with our ENGINIUS brand, we are the first supplier to pioneer hydrogen trucks ready for series production.

MORE ABOUT **SAFETY & PERFORMANCE SYSTEM**

