

IFAT – PRESS RELEASE

FAUN and the Pfundskerle go future

— Osterholz-Scharmbeck, Germany, 14 May, 2018

The FAUN Group will be focusing on three main topics at IFAT from 14 – 18 May 2018. Digital solutions for waste disposal logistics and road cleaning, alternative drive technologies and the new FAUN lifters for refuse collection vehicles. The Group will be rounding off its offering at the trade show with numerous efficiency-enhancing product improvements.

ZERO-EMISSION MUNICIPAL VEHICLES

Reducing emissions produced by municipal vehicles is an important topic subject to intense debate at the moment. FAUN is showcasing two solutions with alternative drive technologies that can make a valuable contribution to improving the environment in polluted cities and urban areas, ushering in the waste disposal of tomorrow.

FAUN is presenting a series production zero-emission vehicle for the first time in collaboration with VOLVO. The vehicle's FE electric chassis is provided by VOLVO and is the first battery-powered electric chassis. This is combined with FAUN's electric E-ROTOPRESS. The vehicle was unveiled to the world in Hamburg, Germany, on 8 May and will be deployed by Stadtreinigung Hamburg from autumn 2018 on. The vehicle is scheduled to be available for sale from 2019 on. The scalable battery capacity allows the vehicle to be driven quietly without producing any emissions. It is also used to power the superstructure. The waste disposal vehicle is powered by two electric motors

with maximum output of 370 kW (260 kW continuous output) and a two-speed gearbox from Volvo. Lithium-ion batteries are used to store energy.

FAUN is presenting an innovative concept under the name BLUEPOWER: A waste disposal vehicle and road sweeper powered by a fuel cell and battery drive system. BLUEPOWER is an in-house developed, electric drive concept that combines hydrogen fuel cell and battery technology to increase vehicle range. FAUN's BLUEPOWER concept is a direct evolution of the FAUN DUALPOWER technology. The Group has channelled the experience it has gained in this area since 2006 into this innovation and will start testing it in 2019. During household waste collection, refuse vehicles have to stop frequently. This can be every few meters in densely populated areas. With a conventional chassis, a lot of energy is lost in this way and particulate matter is created when braking. The two vehicles showcased by FAUN are electrically powered and also brake electrically. This means that a lot of the braking energy can be stored in the batteries and used to accelerate. As a result, the vehicles use up to 40 percent less energy. They do not emit CO₂ or NO_x and produce less particulate matter. They are also much quieter. Making the noise of conventional waste disposal vehicles a thing of the past.

DIGITALISATION

FAUN has teamed up with KOCO solutions AG to capitalise on the opportunities of digitalisation. The Group aims to increase efficiency levels for customers, which, in turn, will reduce environmental pollution and costs. KOCO connect is a telematics system specifically designed for refuse collection vehicles and road sweepers. One of its key features enables refuse collection vehicles to communicate with waste containers via fill level sensors. This intelligent vehicle communication ensures that vehicles only approach containers that need to be emptied. This reduces distances travelled, increases efficiency and is kinder to the environment. In future, FAUN vehicles will be made compatible with the KOCO connect system ex-works. The solution will be integrated into the vehicle control system. This allows routes

to be more effectively planned and also minimizes downtime for maintenance and repairs.

The FAUN online support portal is another digital highlight. This platform comprises an online shop for spare parts and an online training portal for refuse collection vehicles, which contains a wealth of expertise from the manufacturer. In a bid to provide customers with help fast, the Group has been testing spare parts identification and visual support functions. It will be presenting a tool for identifying spare parts for the first time at IFAT. The system identifies spare parts based on customer photos and displays availability in the online shop. This eliminates the need for time-consuming research and ensures that spare parts are made available fast. With regard to Visual Support, customers wear smart glasses to show FAUN technicians the problems they are experiencing during maintenance and repair work. At the same time, the technicians are given instructions and get help fast, wherever they are.

NEW FAUN lifters for rear loaders: SKYLIFT, SKYLIFT X, and BARLIFT

FAUN is showcasing its own product segment in Germany for the first time – lifters for rear loaders. These products build on the vast amount of experience gained by the Ecotec Group, enabling FAUN to offer tried-and-tested, sophisticated technology. SKYLIFT is the Group's first integrated high-level automatic lifter, weighing in at just 590 kg. SKYLIFT X is an interchangeable, high-level automatic lifter attached via a DIN frame. BARLIFT is a low-level lifter suitable for mixed use with containers and for manual loading. These lifters all feature a modern design with integrated camera systems and lights. This strategy enables the Group to offer superstructures and lifters from a single source. This means that customers can have the superstructure and lifter serviced at the same time, which reduces downtime.

SAFETY SYSTEMS

FAUN is presenting two practical solutions that address the highly topical subject of safety for operators and members of the public. The FAUN Reversing Safety System (RSS) enables the operator to travel on the footboard while the vehicle is reversing without endangering their own safety. By holding on to the pivoting safety bar with integrated handle and a handbrake lever, the operator has a clear view of the rear working zone and can take targeted action to stop the vehicle. The second system from the manufacturer VISY is a surveillance system to the rear that uses 3D cameras to monitor the area surrounding the refuse disposal vehicle. Seamlessly integrated into the superstructure, the system monitors the vehicle's environment in real time and brings it to a halt if a hazardous situation arises. This makes it easier for the driver to avoid dangerous situations. An additional monitor is not required as the system is integrated into the superstructure.

The FAUN Group employs 1,500 people worldwide and generated sales of 350 million euros in 2017. The superstructure manufacturer is one of Europe's leading suppliers of refuse collection vehicles and road sweepers, with six production sites in five countries. FAUN is a part of KIRCHHOFF Ecotec, the environmental division of the global KIRCHHOFF Group. In 2017, the four business units of the KIRCHHOFF Group (automotive, tools, vehicle modifications and municipal technology) generated a turnover of 2.1 billion euros and employed 12,300 people.

**Visit FAUN at stand 712/5 in the open-air,
exhibition area**

New FAUN products at IFAT 2018

In addition to the central topics of alternative drive technologies and digitalisation, FAUN will be showcasing a host of innovations for refuse collection vehicles and road sweepers:

FAUN SIDE LOADERS

NEW: FAUN SIDEPRESS

- New design for body and lifter
- New, improved plunge depth for pendulum compactor
- New, ergonomic external controls available
- New, accurate close-in mounting and improved cover around loading zone
- 500 kg lighter

FAUN TC2200 side loader lifter

- Reduced lateral kick-out of lifter
- Radial lifter with 750 kg lifting force
- Available with twin-comb or double-diamond attachment
- The most universal lifter, suitable for two-wheeled waste and recycling containers with a volume of 60–240 litres, 1.1 m³ four-wheeled waste and recycling containers and 2.2 m³ above-ground and underground depot containers

FAUN D3200 side loader lifter

- Reduced lateral kick-out of lifter
- Vertical lifter with a lifting force of 1,200 kg
- Suitable for above-ground depot containers with a volume of 2.2 – 3.2 m³
- Double-diamond attachment

FAUN FRONT LOADERS

NEW: New FAUN FRONTPRESS

- New vehicle design from the flat FAUN body container range
- Elegant exterior and easier to clean
- 690 kg higher payload

FAUN REAR LOADERS

New FAUN VARIOPRESS *plus*

- New vehicle design
- Higher payload
- Shorter and more manoeuvrable

NEW: The compact FAUN VARIOPRESS

- For the first time with 11 m³ superstructure volume
- Narrow 2.20 m chassis
- New FAUN BARLIFT lifter
- Perfect for use in narrow areas that require a flexible rear loader with a large volume

NEW: The compact ROTOPRESS

- For the first time with 8 m³ superstructure volume
- 2.20 m wide, 3.00 m high and ~4.00 t payload

POWERPRESS *plus*

- Proof of concept for lightweight design
- Tailgate 600 kg lighter

- 10% more clearance volume

CITY series

- Aluminium superstructures with payloads from 450 kg to 3 t
- Impermeable and therefore also suitable for restaurant waste
- Manoeuvrable and suitable for use as a satellite vehicle with raised emptying

FAUN LIFTERS

NEW: SKYLIFT, SKYLIFT X and BARLIFT

- SKYLIFT – Integrated, high-lever automatic lifter weighing just 590 kg
- SKYLIFT X – Interchangeable, high-lever automatic lifter
- BARLIFT – Low-level beam lifter
- Completing the FAUN product range
- Lifter with tried-and-tested, sophisticated technology
- Detailed technical modifications and improvements
- Elegant new design
- Superstructure and lifter – all from the same manufacturer!
- One service appointment for superstructure and lifter – reduced downtime and increased availability

UNDERGROUND SYSTEMS

WORLD FIRST: INNIVO – Underground 4.0

- Floor-sealed and impermeable collection container
- Concrete stays clean, as no liquid or residue is allowed to build up
- Minimal system maintenance and cleaning costs

- Controlled tipping for even emptying of recyclable materials into vehicle tailgate
- Automatic container pick-up with special curtain locking system
- Low overall height (6500 mm) and low lifting system weight (1200 kg)
- Fast cycle times
- Empty containers up to 5 m³ with a single vehicle

SUBWAVE

- Available as underground or above-ground stationary container with a volume of 2.2 m³
- Comb attachment in accordance with EN 840-3
- Modular design (basic body, top, insertion and emptying cover)
- Floor-sealed and impermeable underground system
- Container positioned at 45° angle in concrete bunker, perfect filling
- Can be lined up without gaps to save space

FAUN ROAD SWEEPERS

NEW: VIAJET 6 R engine concept

- New Euro 5 engine concept in accordance with EU Non-Road Directive 97/68/EC
- More environmentally-friendly road cleaning
- Reduced particulate matter and noise
- Deutz engine, 2.9 l with 55 kW and diesel particle filter (DPF)

VIAJET 6 R CLEANAIR

- CLEANAIR and SUPERSILENT package
- Very quiet at just 98 db(A)
- Reduced particulate matter and lower fuel consumption
- Blue Angel certification

NEW: VIAJET 5 R/L H

- Modern single-motor drive concept – designed especially for municipal use
- Unique combination of TipMatic gearbox and HYDRODRIVE for effective yet gentle sweeping

VIAJET 4

- City road sweeper on a 7.5 t chassis

VIAJET 12

- Construction site model
- Larger water supply and strong fan

VIAJET AQUATHERM

- Road sweeper and thermal area surface cleaner for accidents in a single vehicle

PROOF OF CONCEPT: Autonomous road sweeper

- Concept for autonomous driving
- The future of road cleaning

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