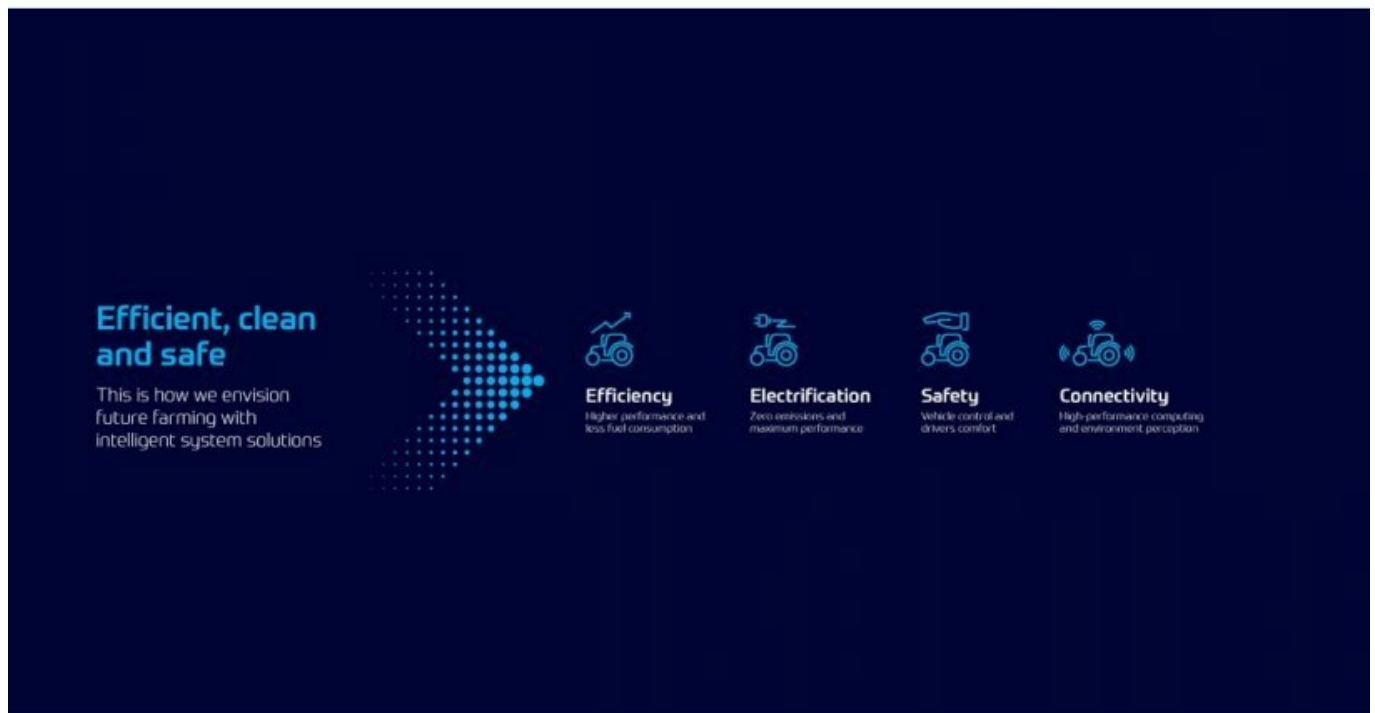




The Future of Farming

IMAGE SOURCE: ZF Friedrichshafen AG

The Future of Farming: Intelligent and innovative system solutions from ZF at Agritechnica 2025

25 November 2025 by ZF Friedrichshafen AG

- ZF presents a broad range of agricultural driveline solutions at Agritechnica 2025, including powershift transmissions, CVTs, and electric drives like the new eTERRADRIVE transaxle.
- The company emphasizes safety with advanced brake-by-wire systems designed for remote and autonomous vehicle control.
- ZF showcases cutting-edge digital technologies such as the ProAI high-performance computing platform and ProWave 77 GHz radar for smart, autonomous farming vehicles.

- Smart chassis systems are highlighted to improve ride quality, reduce operator fatigue, and enhance vehicle handling in diverse farming conditions.
- From Powershift to Electric: **ZF** drives every mission
- Advanced brake systems for maximum safety
- High-Performance computing and radar technology for smart vehicle operation
- Smooth rides start with smart chassis

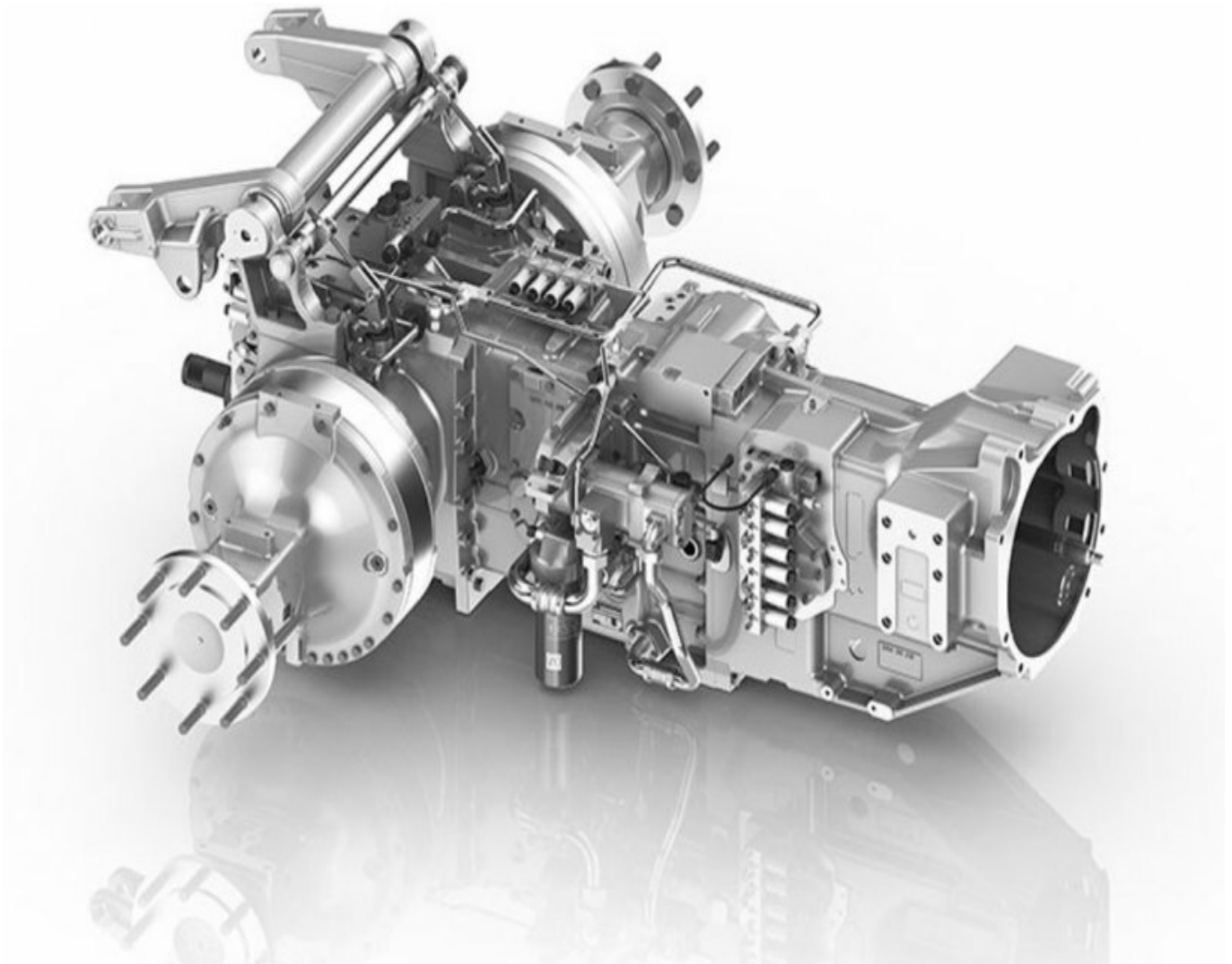
Efficient, clean, safe and connected: This is how ZF defines its vision “The Future of Farming.” At Agritechnica, Booth C06, Hall 15, the company shows forward-looking solutions for farming, offers tailor-made and efficient drive solutions for all vehicle classes and technology levels and provides the right solution according to the respective customer and market requirements.

With a comprehensive product portfolio for agricultural machinery, ZF underscores its position as an innovation driver for modern farming. At this year's Agritechnica, the world's leading trade fair for agriculture, the company is showcasing its technological highlights.

From Powershift to Electric: ZF drives every mission

ZF presents a comprehensive range of driveline solutions, from robust powershift transmissions to cutting-edge electric drives. These systems are designed to optimize performance, reduce emissions, and support diverse agricultural applications — from fieldwork to transport.

At the heart of its mechanical portfolio is the **TERRAPOWER** powershift transmission series, which combines the durability of synchromesh systems with the convenience of automatic gear shifting under full load.



ZF TERRAPOWER powershift technology

IMAGE SOURCE: ZF Friedrichshafen AG

ZF's continuously variable transmissions (CVTs) for tractors enhance productivity by allowing operators to focus more on the task at hand. Their seamless power delivery reduces working time and contributes to lower fuel consumption.

With its modular **TERRAMATIC** and **ECCOM** transmission series, ZF sets the benchmark in CVT technology, covering the full range of standard tractors from 70 to 450 hp.



ZF TERRAMATIC CVT technology

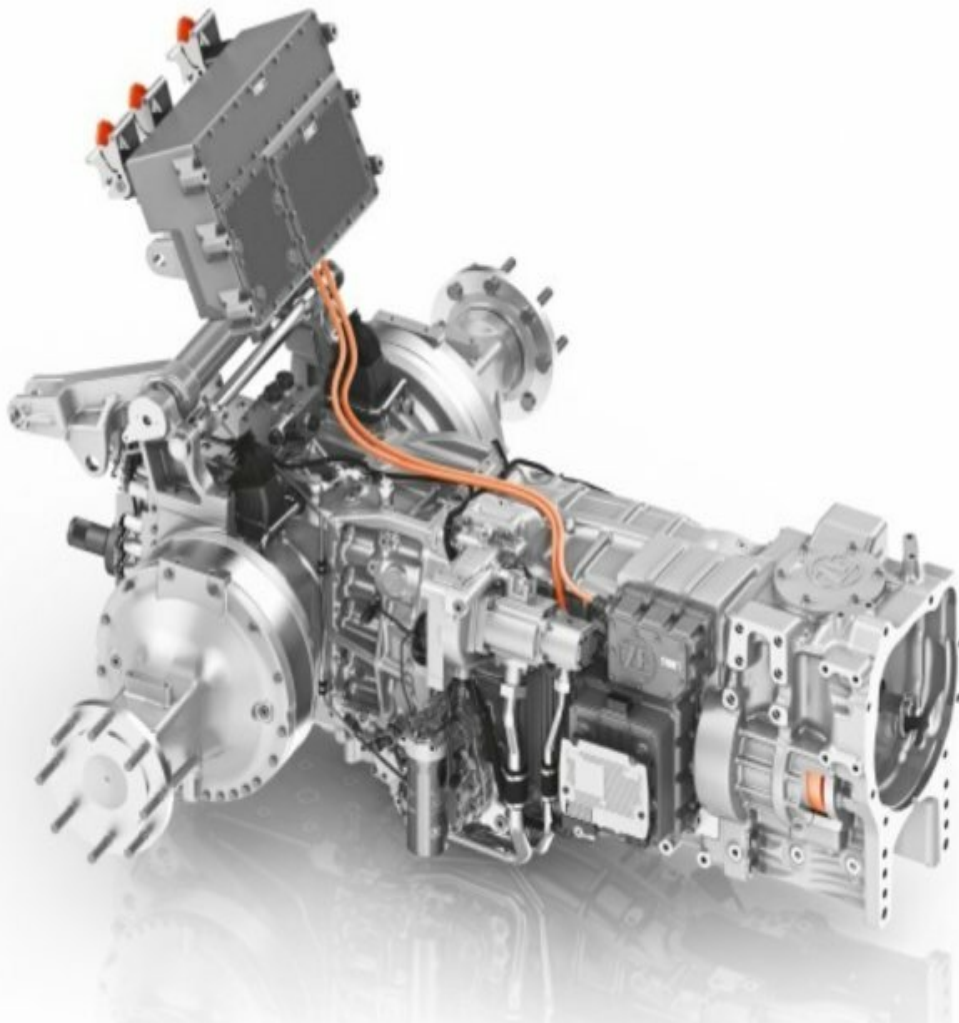
IMAGE SOURCE: ZF Friedrichshafen AG

A power-split CVT transmission currently forms the technological foundation for electrified drivetrains. For applications in lower power classes, ZF provides the **eTERRAMATIC** – a fully electric platform for BEV and HEV vehicle architectures, based on the proven TERRAMATIC CVT transmission series. For conventional ICE vehicle architectures in higher power classes, ZF presents a power-split CVT with integrated generator functionality.



ZF eTERRAMATIC fully electric platform for BEV and HEV vehicle architectures

IMAGE SOURCE: ZF Friedrichshafen AG



ZF eTERRAMATIC power-split CVT with integrated generator functionality for ICE vehicle architectures

IMAGE SOURCE: ZF Friedrichshafen AG

As this year's show highlight, ZF is showcasing the fully electric transaxle **eTERRADRIVE**, marking a significant step towards zero-emission agricultural machinery.



ZF eTERRADRIVE system

IMAGE SOURCE: ZF Friedrichshafen AG



ZF eTERRADRIVE transaxle for fully electric vehicles

IMAGE SOURCE: ZF Friedrichshafen AG

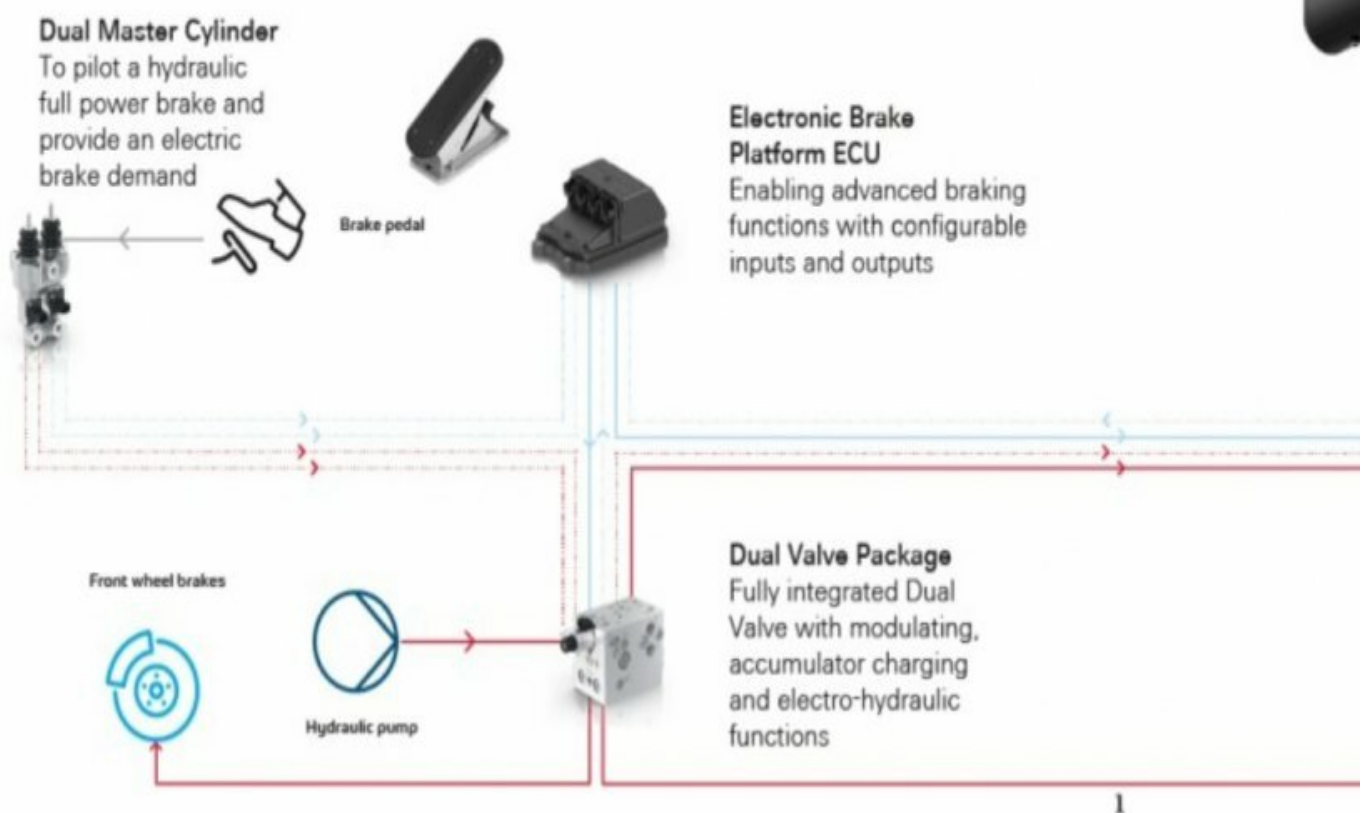
The modular and highly integrated transaxle system for agricultural tractors up to 100 kW combines traction, power take-offs (mechanical PTO and working hydraulics), and rear lift in one compact unit. During the development process, particular emphasis was placed on a compact design that can be implemented within the available installation space of the rear axle – without affecting the interfaces to the implement. In addition to that, the newly developed system enables recuperation equal to driveline power. Its optimized design ensures maximum installation flexibility across various vehicle platforms.

With this solution, ZF addresses the growing demands for sustainable and efficient agricultural technology.

Advanced Brake Systems for maximum safety

Safety remains a top priority in modern farming, and ZF's advanced brake technologies deliver reliable stopping power and vehicle stability—even under demanding conditions. The latest **brake-by-wire system** marks a significant step forward, enabling electronic control of deceleration without hydraulic lines in the cab. It supports remote and autonomous operation, while simplifying vehicle architecture for manufacturers.

Braking Systems



Brake-by-wire system

IMAGE SOURCE: ZF Friedrichshafen AG

High-Performance computing and radar technology for smart vehicle operation

ZF is driving the digital transformation of agriculture with intelligent systems that support both safe and efficient operations. At the heart of this transformation is the ZF **ProAI**, the most flexible and scalable high-performance computer in the automotive industry. Powered by NVIDIA DRIVE AGX Orin, ProAI serves as the central integration platform for assistance and automation functions, meeting the highest standards in

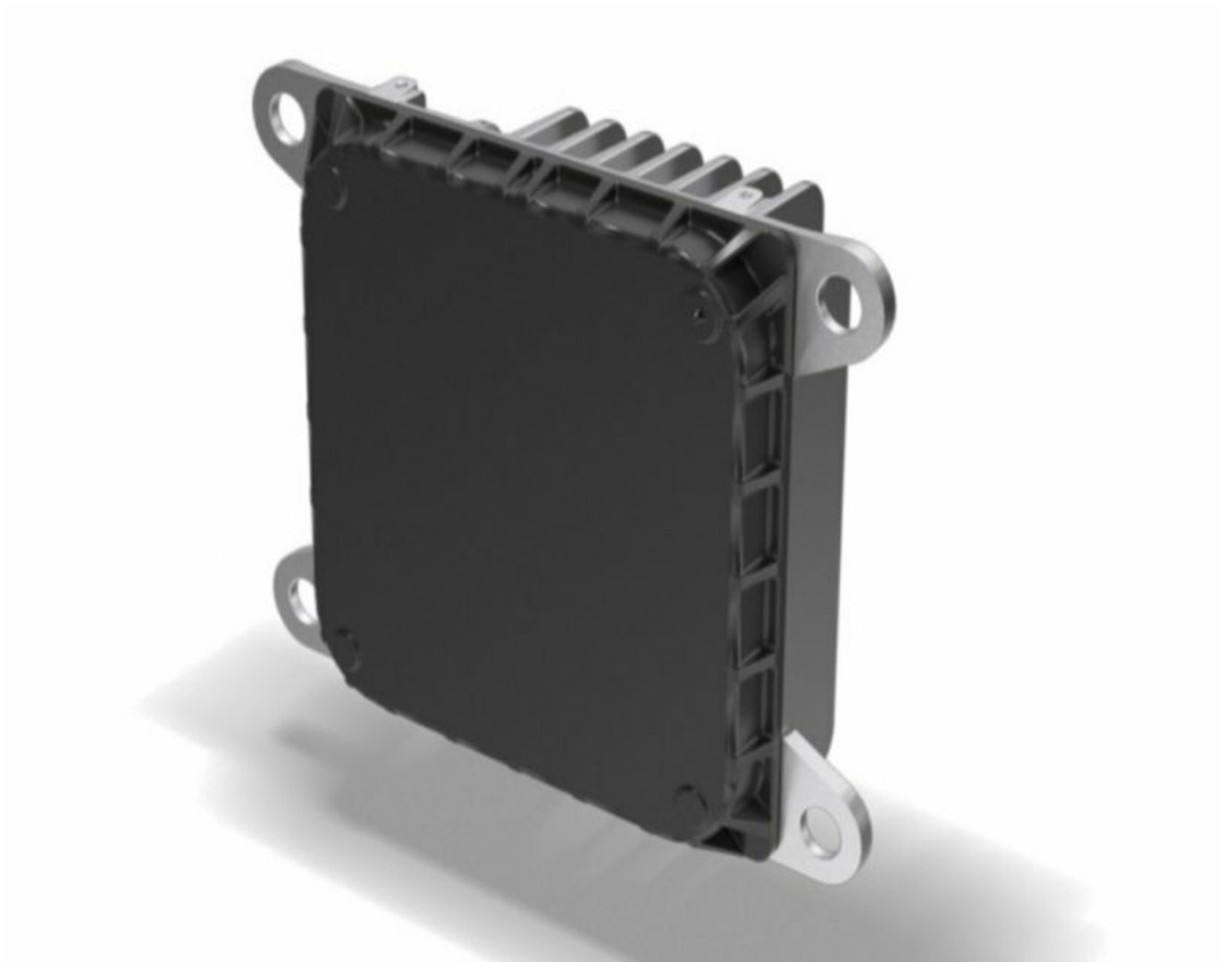
functional safety and cybersecurity. Its robust and highly integrated design provides a future-proof level of performance for today's and upcoming automation functions. An additional key factor for the success of ProAI is the multi-year collaboration with NVIDIA, combining the strength of both partners.



ZF ProAI High-Performance Computer
IMAGE SOURCE: ZF Friedrichshafen AG

Complementing this computing power is ZF **ProWave**, a high-resolution full-range radar operating exclusively in the 77 GHz band. It enables accurate 4D target detection – including range, speed, azimuth, and elevation – and is designed for autonomous agricultural vehicles such as field robots. Thus, ProWave ensures reliable perception and secure operation in demanding field environments.

In contrast to conventional radar systems, ProWave outputs a point cloud as basis for further processing, which in turn enables flexible sensor placement.



ZF ProWave radar technology

IMAGE SOURCE: ZF Friedrichshafen AG

Smooth rides start with smart chassis

Comfort and control go hand in hand. ZF's smart chassis solutions enhance ride quality, reduce operator fatigue, and improve vehicle handling — whether on the field or the road.



ZF OptiDamp torsional damper
IMAGE SOURCE: ZF Friedrichshafen AG

Source: ZF Friedrichshafen AG