



## ZF is Efficiency

### **ZF Best Choice – The best technology for your business**

- **Powershift Technology – ZF TERRAPOWER**
- **CVT-Technology – ZF TERRAMATIC**
- **Steering Axle – ZF TERRASTEER**

**For a global product strategy, especially for the off-highway markets, it is essential to synchronize market-specific technologies, local production, as well as local engineering and service. With the "Best Choice" strategy, ZF offers solutions in three technology levels (Basic, High, and Premium Line) in order to best meet customer-specific requirements as well as the different challenges of global markets (fig. 3).**

### **Powershift Technology – ZF TERRAPOWER**

The new TERRAPOWER generation provides a choice between the favorably priced standard version with manually actuated Powershift or the completely Automatic Powershift APS (Automatic Power Shift). Furthermore the automated transmission functions can be integrated into a driveline management system via CAN bus. The transmission control offers full diagnostic capabilities. Automatic reverse shifting (Power Shuttle) and a great variety of options make the TERRAPOWER series widely adaptable transaxles in the medium and upper power class (fig. 4).

- Tractor power range between 65 and 280 hp
- Quick-response 4-speed/6-speed Powershift
- Range gearbox with optional automatization (IRS)
- Smoothly acting forward/reverse powershuttle shifting
- Smooth PTO-clutch engagement
- Four PTO-speeds
- High transport speeds with reduced engine speed



### **CVT-Technology – ZF TERRAMATIC**

Continuously variable ZF transmissions for tractors increase the productivity and enable the driver to pay more attention to the actual work process. ZF CVT Technology can lower the amount of tractor work by more than 10%.

Together with reduced fuel consumption, this creates unbeatable advantages in productivity. Stepless driving and working at the same time is therefore a large step towards the technological as well as commercial future of agriculture.

The ZF CVT transmissions cover the power range between 70 and 450 HP with several types (fig. 5).

- Continuously variable gear ratio
- Highly adaptable electronic control
- Modular design, less components
- Infinite number of "gears"
- Active standstill control
- Increased productivity
- Various driving strategies (e.g. automatic mode)

### **Steering Axle – ZF TERRASTEER**

The steering axle series TERRASTEER covers nearly all 4x4 applications. The TSA series has been developed over the last few years and the first axles are already in production since 2013. The TSA series benefits on the long years of ZF's experience in the field of tractor axles.

A high ratio in the planetary drive ensures optimum efficiency, lean axle design and high ground clearance with high admissible loads. Steering angles of up to 55° provide high levels of maneuverability, combined with lowest soil stress due to precise steering geometry.

The results of this innovation are long service life, high tractive effort and extreme versatility of the TSA series.

The steering axle TERRASTEER is characterized by its flexible, modular construction; optionally available with brakes, differential lock and steering angle sensor. The steering axle series TSA currently covers models with a performance range from 60 HP to 300 HP (fig. 6).



**PRESSE-INFORMATION**  
**PRESS RELEASE**

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Captions:

- 3) ZF Best Choice Strategy
- 4) Powershift Technology – TERRAPOWER
- 5) CVT-Technology – TERRAMATIC
- 6) Steering Axle – TERRASTEER

Images: ZF

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**ZF Friedrichshafen AG**

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. With its comprehensive technology portfolio, the company offers integrated solutions for established vehicle manufacturers, mobility providers and start-up companies in the fields of transportation and mobility. ZF continually enhances its systems in the areas of digital connectivity and automation in order to allow vehicles to see, think and act.

In 2018, ZF achieved sales of €36.9 billion. The company has a global workforce of 149,000 with approximately 230 locations in 40 countries. ZF invests over six percent of its sales in research and development annually.

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