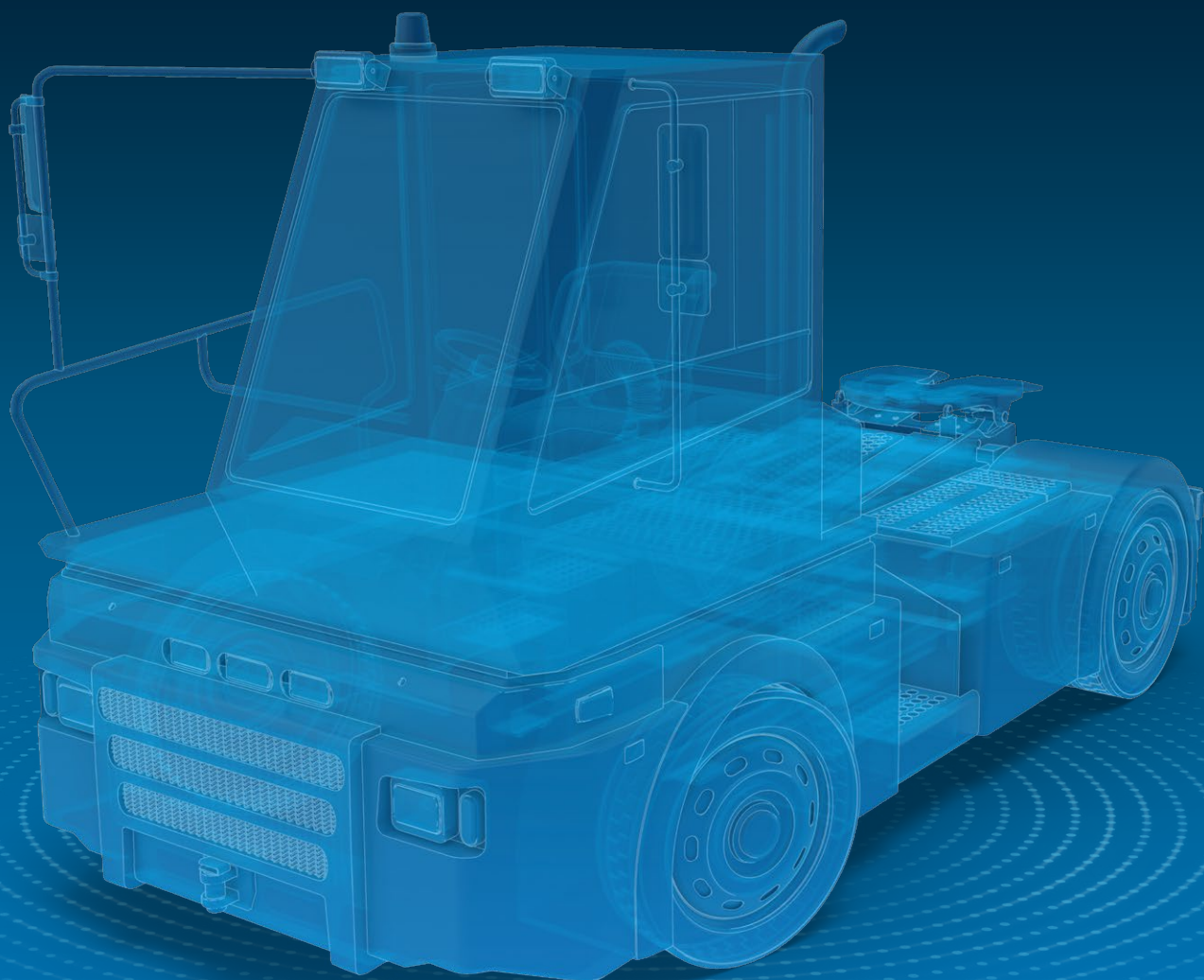


# Next Generation Mobility for Material Handling



# Full Component Supplier

The competition for shipping lines drives terminal operators to improve their profitability and as such their efficiency, productivity, and fuel consumption. ZF offers system-based solutions from a single source.



## Driveline Technology

ZF's PowerLine automatic transmission for conventional vehicles and the CeTrax or CeTrax 2 dual central drive for electric vehicles offer manufacturers the right solution for every need.



## Software and Electronics

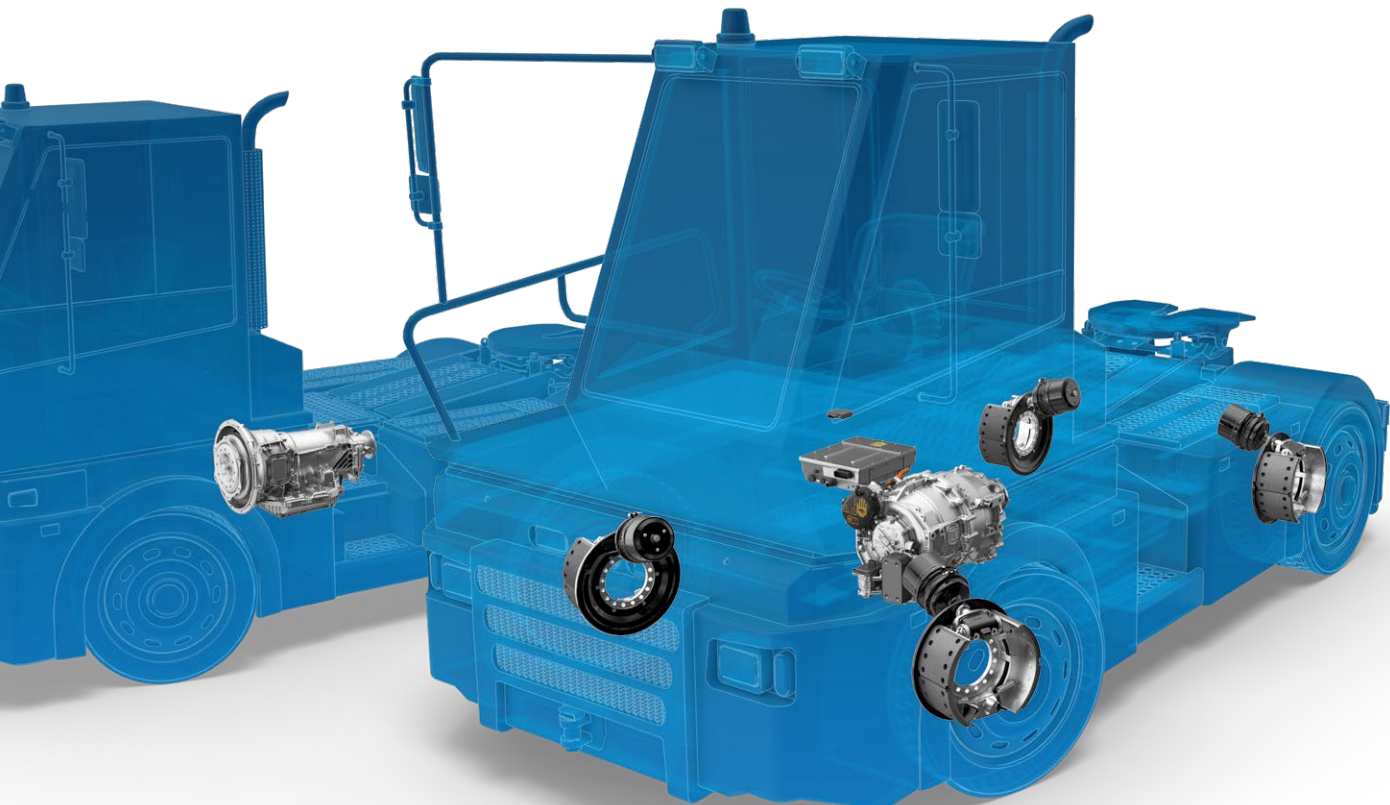
With a broad and unique product portfolio, ZF offers system solutions that enable vehicles to see, think and act. This makes driving safer, more efficient and more comfortable.



## Brake Technology

The full range of advanced brake performance for terminal tractors

- enables shorter stopping distances compared to conventional braking systems
- helps to optimize vehicle uptime

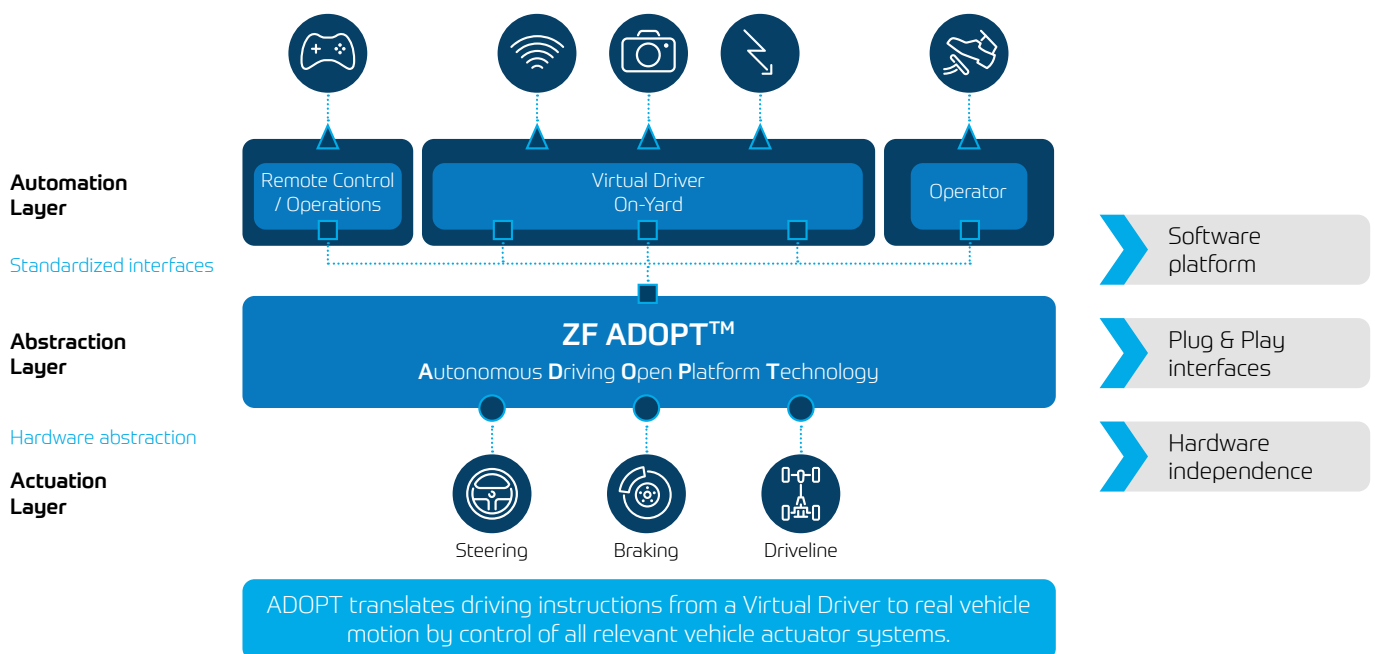


# ZF ADOPT™

## Vehicle Control System Enabling Various Automated Driving Applications with Integrated Safety and Efficiency

ADOPT (Autonomous Driving Open Platform Technology) translates driving instructions from Virtual Driver applications (Autonomous Driving Artificial Intelligence) to real vehicle motion commands by enabling the control of all the relevant vehicle actuation systems. The resulting vehicle motion control is executed under safety and efficiency principles benefiting from ZF's industry leading experience in vehicle dynamics and powertrain control.

### Trajectory interface-based abstraction layer for autonomous vehicles with integrated safety and efficiency



### Your advantages at a glance

- Simplifies the development cycle of autonomous driving applications for a faster time to market and Return on Investment
- Provides the safe and efficient automated vehicle motion management
- Enables a variety of automation solutions from Remote Maneuvering to Highly Automated Driving for various segments and use cases
- Contributes to the industry's autonomous driving ecosystems thanks to data sharing

**ZF Group**

Industrial Technology  
Marine & Special Driveline Technology  
Ehlersstr. 50  
88046 Friedrichshafen / Germany  
Phone +49 7541 77-8316  
special-transmission@zf.com

Get to know more about our  
transmissions for special applications:



[www.zf.com/special-transmission](http://www.zf.com/special-transmission)