



AFTERMARKET

READY FOR WORK WITH ZF AFTERMARKET

AFTER-SALES SERVICES FOR OFF-HIGHWAY SYSTEMS



CONTENTS

- Global reach, worldwide solutions..... 03
- Performance in every part 04
- ZF Aftermarket – the one-stop-shop 05
- Introduction to construction, agriculture and material handling 06
- Global construction – the ZF Way 07
- Agricultural parts excellence 10
- Experts in material handling 12
- Think globally, act locally 14
- Servicing and repair you can count on: ZF test benches, ZF Testman, and oil filters 15
- ZF Aftermarket portal: Service Data Management and technical training 17
- Next generation industry 18
- For today, for tomorrow 19



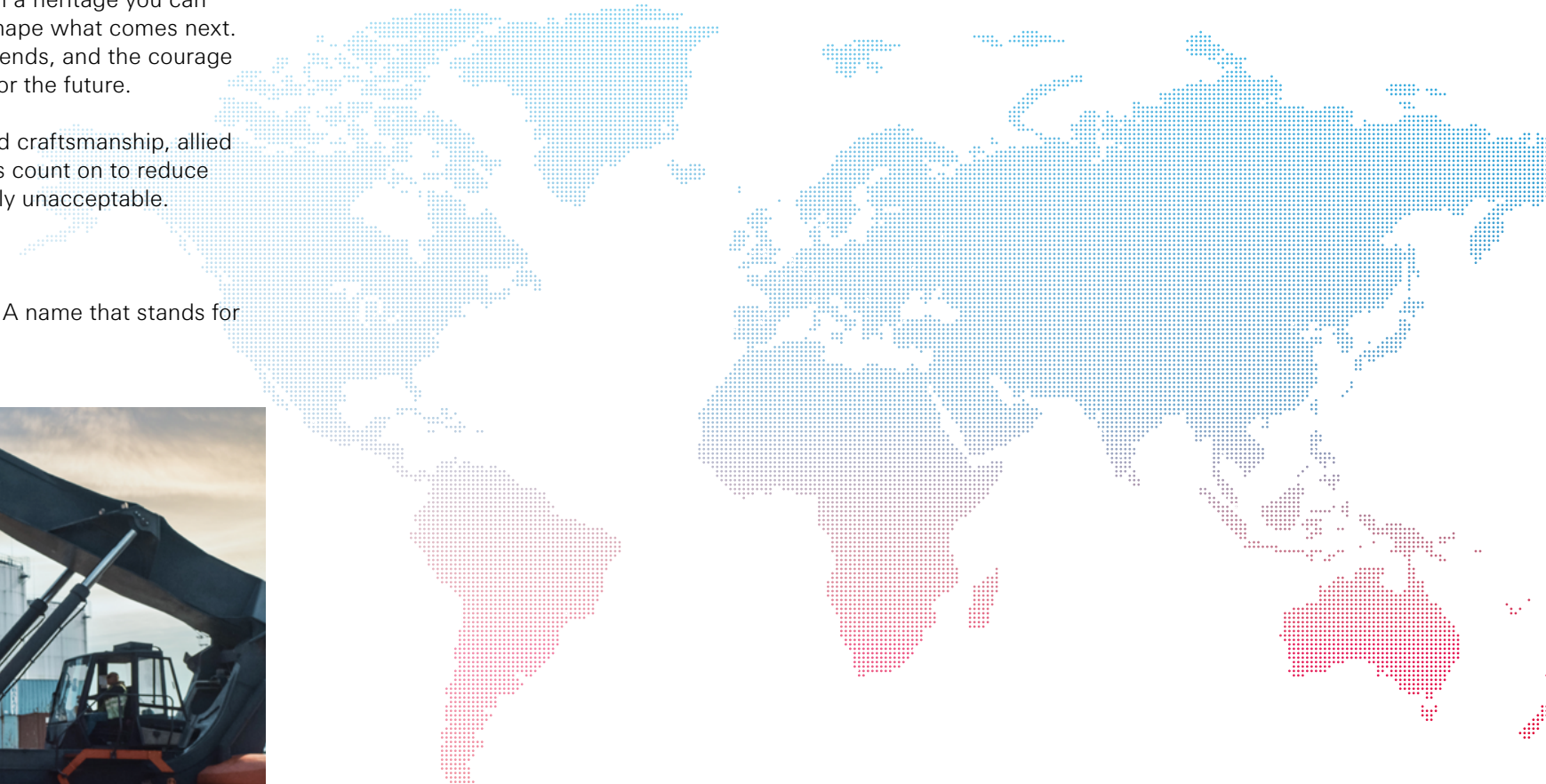
GLOBAL REACH, WORLDWIDE SOLUTIONS

When it comes to choosing the best parts, you need to find the right partner. A reliable partner who can provide support across the lifetime of your vehicle, wherever you are in the world. Someone with a heritage you can trust, combined with the forward-thinking vision to shape what comes next. Someone with the capability of adapting to current trends, and the courage and tenacity to follow and prepare at an early stage for the future.

But above all, you need the reassurance of quality and craftsmanship, allied with a commitment to excellence that you can always count on to reduce vehicle downtime, which is expensive and increasingly unacceptable.

That partner is ZF Aftermarket.

A name recognized and respected around the world. A name that stands for integrity, performance, and engineering excellence.



PERFORMANCE IN EVERY PART

ZF Aftermarket marries powerful top-quality products with excellent services, providing a unique, premium offer. Available to a mixed customer base: from OES customers and workshop partners, through to fleet operators and private customers, and across the whole global transport network: from passenger cars and moto, to trucks, buses, and coaches through to rail and marine and across to construction, agriculture, and material handling.

Only ZF Aftermarket has the products to put you ahead and keep you there. With an unparalleled range of OE quality parts, we have the experience to deliver what your business needs when it needs it.

And it's all backed up by the knowledge and scale of the ZF Group – a true powerhouse of innovation and expertise in mechanical and digital technology that has been at the forefront of technological leadership for more than 100 years.



ZF AFTERMARKET — THE ONE-STOP-SHOP

With a name that stands for quality across the board, we go above and beyond to extensively test our products both in real-life situations and in the laboratory. Provided as standard with a comprehensive warranty, we transport these parts to you wherever you are in the world, and then support you for the lifetime of the component with technical information and training.



Involved from the system concept stage through to vehicle part after-sales care and training, ZF is with you for the whole journey. We make it easy to contact us whatever your preferred method. You can talk to us on the phone, visit us, or one of our partners if you prefer face-to-face contact.

We live and work in a digital, transparent world where geographical borders no longer exist. In line with that, everything you need to know about our products and services, and how to order them can be found on our dedicated ZF Aftermarket portal. Sign up for our password-protected business portal and all the technical information you need to keep your business moving is provided in several languages, catering for a global customer base.

So, whether you need an OE quality part dispatched quickly, a replacement unit fitted or sent away for repair, or details of how to fit your part, the ZF team is here to help.

INTRODUCTION TO CONSTRUCTION, AGRICULTURE AND MATERIAL HANDLING



Historically, vehicles across the construction, agriculture, and material handling industries were known collectively as off-highway. We think it makes sense to identify these areas by name in a complex, fast-paced world where technology moves very quickly, and vehicle use often crosses over from one field to another.

ZF manufactures and supplies original equipment (OE) quality products for applications across these industries at its headquarters in Passau, Germany, and at dedicated global facilities.



GLOBAL CONSTRUCTION. THE ZF WAY



The global population is growing – and with it the need to provide new homes, buildings, and infrastructure. This calls for robust machinery which can deal with high workloads on a daily basis and operate in all weather conditions across the toughest of environments. Then of course you need the parts and heavy-duty service and repair solutions to match and keep pace with the market's increasing demands.

To meet these demands, ZF has been developing and producing parts for these types of vehicles for over 70 years.

With an emphasis on strength, durability, and performance, and a reliance on the profound know-how and ongoing research in the driveline, chassis system, and active safety technology which ZF provides, all our products are designed with the needs of our customers and the environments in which they operate in mind.

Whether you need a spare part for your dump truck expertly fitted, or a repair carried out on your mobile crane, we have the parts you need and the knowledge to keep your machines operating efficiently and for longer – on a building site, in a quarry, or in a forest.



Ready for work with ZF Aftermarket.
After-sales services for off-highway systems.



Below is a sample of our product catalog. For a comprehensive and updated list, see our product portfolio online.



eTRAC



cPOWER



ERGOPOWER



BASICPOWER



MULTITRAC



AVG-Series



HL-Series



MULTISTEER



DR

Wheel Loaders

eCD110
eCD130
eCD160
eCD190
eCD210

CP 190
CP 210
CP 230
CP 260
CP 290
CP 310
CP 330

WG 115
WG 130
WG 160
WG 190
WG 210
WG 260
WG 310

BP190
BP210
BP230

MT-L 3065 II
MT-L 3075 II
MT-L 3085 II
MT-L 3095 II
MT-L 3105 II
MT-L 3115 II
MT-L 3125 II

Compact Vehicles

eCD20
eCD30
eCD40
eCD60

MT-L 3010 II
MT-L 3015 II
MT-L 3020 II
MT-L 3025 II
MT-L 3045
MT-L 3055

1AVG150
1AVG185

Mobile Excavators

eCD50
eCD70
eCD90

MT-E 3050 II
MT-E 3060 II
MT-E 3070 II

2 HL 250
2 HL 270
2 HL 290

MS-E 3050 II
MS-E 3060 II
MS-E 3070 II

DR 140
DR 250
DR 350

Telescopic Handlers

eCD50
eCD70
eCD90

WG 94
WG 98 TC/TSC

MS-T 3045 II
MS-T 3055 II
MS-T 3060 II

Graders

CP 190
CP 210
CP 230
CP 260
CP 290
CP 310
CP 330

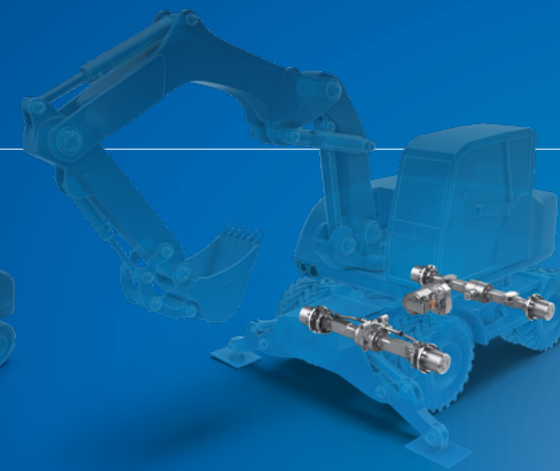
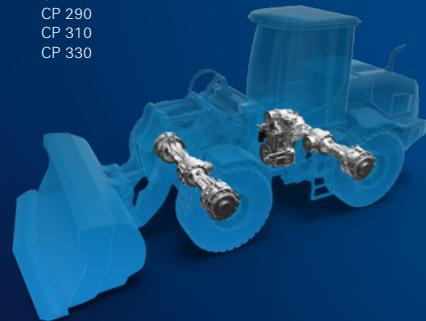
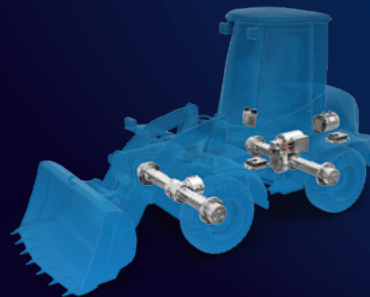
WG 115
WG 160
WG 190
WG 210

BP190
BP210
BP230

Forest Applications

eCD50
eCD70
eCD90

CP 190
CP 210
CP 230
CP 260
CP 290
CP 310
CP 330



Ready for work with ZF Aftermarket.
After-sales services for off-highway systems.



Below is a sample of our product catalog. For a comprehensive and updated list, see our product portfolio online.



eTRAC



ERGOPOWER



MULTITRAC



MULTISTEER



ECOMIX CMe



ECOMIX II



ECOMIX I

Rail Maintenance and Construction Vehicles

EP520R
WG 190
WG 210
WG 260
WG 310

Backhoe Loaders

eCD50
eCD70
eCD90

WG 90
WG 94
WG 98

MT-B 3065
MT-B 3070

MS-B 3025

Dump Trucks

EP 320
EP 370
EP 420
EP 470
WG 115
WG 160
WG 210

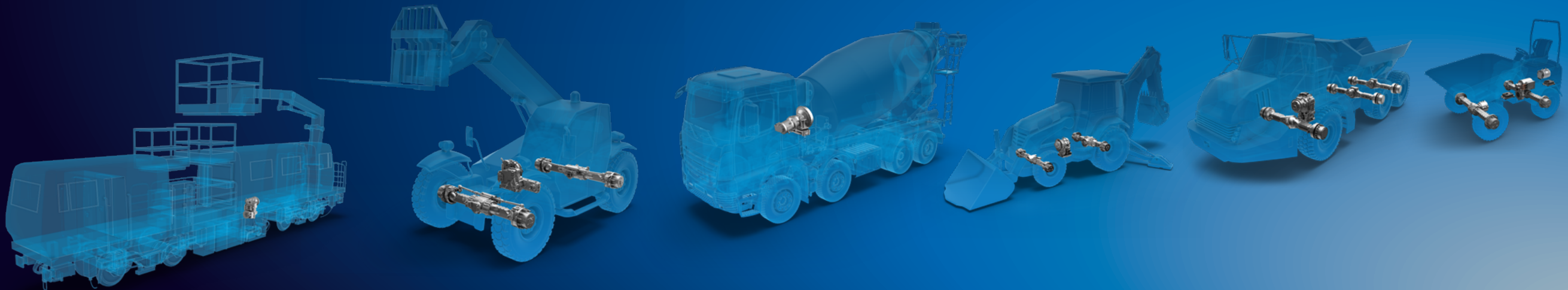
MT-D 3075 II
MT-D 3085 II
MT-D 3095 II
MT-D 3110 II

Concrete Mixers

CMe 12

CML 10
CML 12
CML 16

P 3301
P 4300
P 5300
P 7300



EXCELLENCE IN AGRICULTURAL PARTS



A growing population that needs feeding means powerful tractors and efficient drive systems, have never been more important for the agricultural sector, with maximum performance always required.

Choose ZF Aftermarket and you choose parts that contribute to higher productivity in daily use – no matter how hard the job. Providing the ideal solution for any challenge, our technology for tractors is used by almost all renowned tractor manufacturers.

With decades of expertise and know-how behind us, no one is better equipped to help you conquer the challenges of the agricultural industry than ZF Aftermarket. A leading specialist for agricultural machinery transmissions, axles, and driveline solutions, our products help you achieve greater productivity – whether it's on farmland, grassland, or the road.

With tailor-made installation solutions – from synchromesh, powershift, and continuously variable transmissions as well as rigid and steering axles for tractors through to traction drives for self-propelled harvesters, you'll always find the solution you're looking for at ZF.

Choose ZF Aftermarket and your business chooses durability, reliability, economic efficiency, environmental compatibility, and easy handling. Along with the kind of long service life that puts our parts in a class of their own.



Ready for work with ZF Aftermarket.
After-sales services for off-highway systems.



Below is a sample of our product catalog. For a comprehensive and updated list, see our product portfolio online.



TERRAMATIC



ECCOM



TERRAPOWER



TERRASHIFT



TERRASTEER



CERAMATIC



CERAMATIC

Tractors

TMT 09
TMT 11
TMT 16
TMT 20
TMT 25
TMT 27
TMT 32
TMG 45

ECCOM 5.0
ECCOM 6.0
ECCOM 1.5 - 2.9

TPT 09
TPT 11
TPT 16
TPT 20
T-7334
T-7338

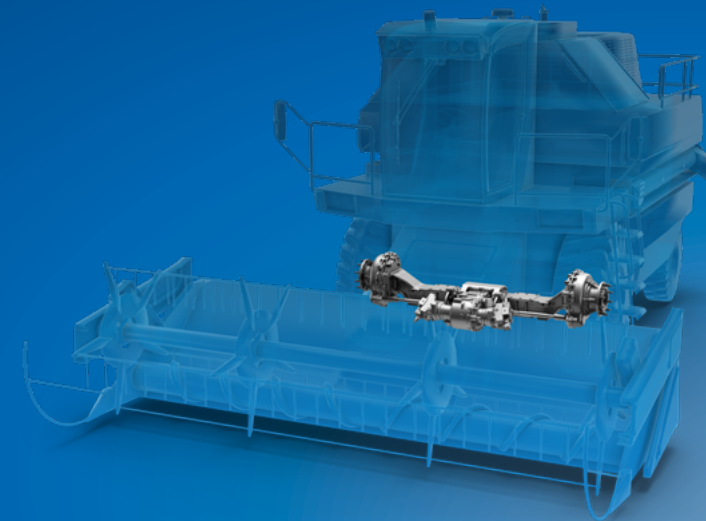
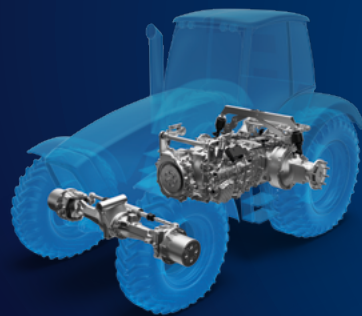
T-537
T-557

TSA 09
TSA 11
TSA 14
TSA 16
TSA 20
TSA 23
TSA 26
TSA 33

Combine Harvester

3 MD-40

CTA 35
S-800
S-1050



EXPERTS IN MATERIAL HANDLING



In our fast-paced world where everyone needs everything quickly, material handling plays an increasingly important role. Almost everything needs to be moved from one place to another: in and out of manufacturing plants, on building sites, into warehouses and retail stores, and on and off transport vessels such as trains and ships.

These machines all require robust parts which need to be carefully balanced to deal with extremes of weight and tolerance. With its parent company's experience as a technology leader, it pays to fit parts supplied by ZF Aftermarket.

Whether you need new parts for your container handling vehicle, your aircraft tractor or straddle carrier expertly serviced, or an axle or transmission for your diesel or electric forklift truck – ZF Aftermarket can help.



Ready for work with ZF Aftermarket.
After-sales services for off-highway systems.



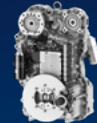
Below is a sample of our product catalog. For a comprehensive and updated list, see our product portfolio online.



ERGOPOWER



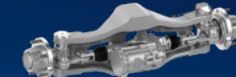
ERGOPOWER



cPOWER



eTRAC



eSTEER

Diesel/Gas Lift-Trucks

WG 40
WG 50
WG 94
WG 131-171
WG 191-211

EP 320-470
WG 190
WG 210
WG 260
WG 310

Reachstackers

WG 161
WG 171
WG 191

CP 190
CP 210
CP 230
CP 260
CP 290
CP 310
CP 330

Ground Support and Harbor Equipment

WG 40
WG 50
WG 94
WG 131-171
WG 191-211

EP 320
EP 370
EP 420
EP 470
WG 130
WG 160
WG 190
WG 210
WG 260
WG 310

AS18
AS25
AS35
eCD20
eCD30
eCD40
eCD60
GP25
GP27
GP35
GP50

Electric Counterbalance Lift Trucks

AS18
AS25
AS35
GP25
GP27
GP35
GPA35

EPS3
EPS4

Warehouse Lift Trucks



GK10
GK10 LD
GK25
GK30
GK40
GK26LD

THINK GLOBALLY, ACT LOCALLY

ZF 'Thinks Globally and Acts Locally' to ensure mobility anywhere, at any time. Our technological know-how and systems expertise, combined with an innate knowledge of your individual market allows us to support all our customers across the world – from the smallest one-man operation to the largest enterprise with numerous machines.



Proximity to the customer is at the heart of our offer, so we have 120 regional competence centers dedicated to the construction, agriculture, and material handling parts of our business.

These competence centers are backed up by hundreds of carefully vetted, constantly monitored and fully supported global service partners. We've developed our service network by working closely with the major vehicle manufacturers because by understanding their strategic objectives and service needs, we can help minimize downtime and provide fast service coverage.

Our name means the world to us. So, when we put the ZF name to something you can be sure we'll do everything in our power to protect it. We insist on rigid compliance from both our internal colleagues and external service partners as we strive for excellence in customer care.

Furthermore, our service centers are supported by a technical telephone hotline, so if you want to speak to a ZF expert, simply pick up the phone and get in touch.

SERVICING AND REPAIR YOU CAN COUNT ON

Whatever kind of industrial business you're in, we know just how crucial your machinery is to you, day in, day out. With vehicle downtime expensive, inconvenient, and increasingly unacceptable when it affects the forward supply chain, it's good to know that you can always trust ZF Aftermarket to keep you moving.

Our dedicated repair offering gives you the reliability you need to be able to plan vehicle maintenance servicing precisely – enabling you to stay as productive as you need to be. If you have a part that needs repairing or servicing, we can accept that component and replace or repair it using genuine ZF parts at our competence centers or via one of our trusted service partners.



ZF Testman.

At ZF we make sure your business runs as smoothly as possible; always going the extra mile to add value to your world.

One innovation that will help futureproof your business and aid your daily work is ZF Testman. This is our advanced diagnostic tool that offers effective, targeted vehicle troubleshooting by testing the functions of all electronically controlled ZF products via telemetry or laptop, whether the vehicle is moving or stationary.

With ZF Testman, you can diagnose construction and agricultural products on any test bench with the corresponding Testman application.

An intuitive free tutorial offers a step-by-step guide: on how to install and register the diagnostic software, an overview of the hardware tool (DPA06), and a comprehensive easy-to-follow explanation of its functions.

Transmission test benches.

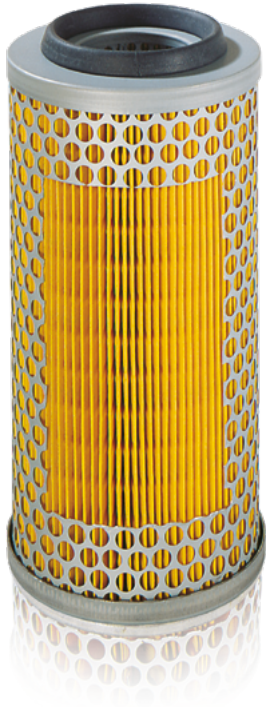
These are an indispensable element in our business. We not only check the integrity of our own repairs on them, but, our transmission test benches ensure services that are both demand-oriented as well as cost-efficient. We offer the following service availability:

- Demand-oriented development and marketing of turnkey solutions for test benches with the CE mark
- In-house developed special tools
- Powerful complete solutions for transmission test benches in various performance classes, including adaptations.

Result-oriented. Innovative. Customer-focused.

Ready for work with ZF Aftermarket.

After-sales services for off-highway systems.

**Oil Filters from ZF – performance guaranteed.**

The transmissions installed in construction and agricultural machinery are subject to very high loads. Therefore, for optimum performance and low wear, clean oil is a basic prerequisite.

And it therefore follows that using a genuine OE quality oil filter is the sensible next step.

When used with the specially adapted ZF-POWERFLUID PLUS transmission oil, oil filters from ZF are the safest way to avoid time-consuming and costly downtimes and secure the best performance of your construction and agricultural machinery.

- Optimum performance thanks to special adaptation to transmission and oil
- Low maintenance and operating costs due to long filter service life
- Continuous optimization and further development
- High-quality individual components and processing
- Highest safety due to pressure-resistant and corrosion-protected housings
- Optimum fold geometry guarantees the best possible filter surface
- Low flow resistance and highest filtration efficiency.

Long lifetime of filters. Reduced exchange rates. Minimize costs and downtime.

Want to know more about our oil filters?

Please read through our [catalog](#).

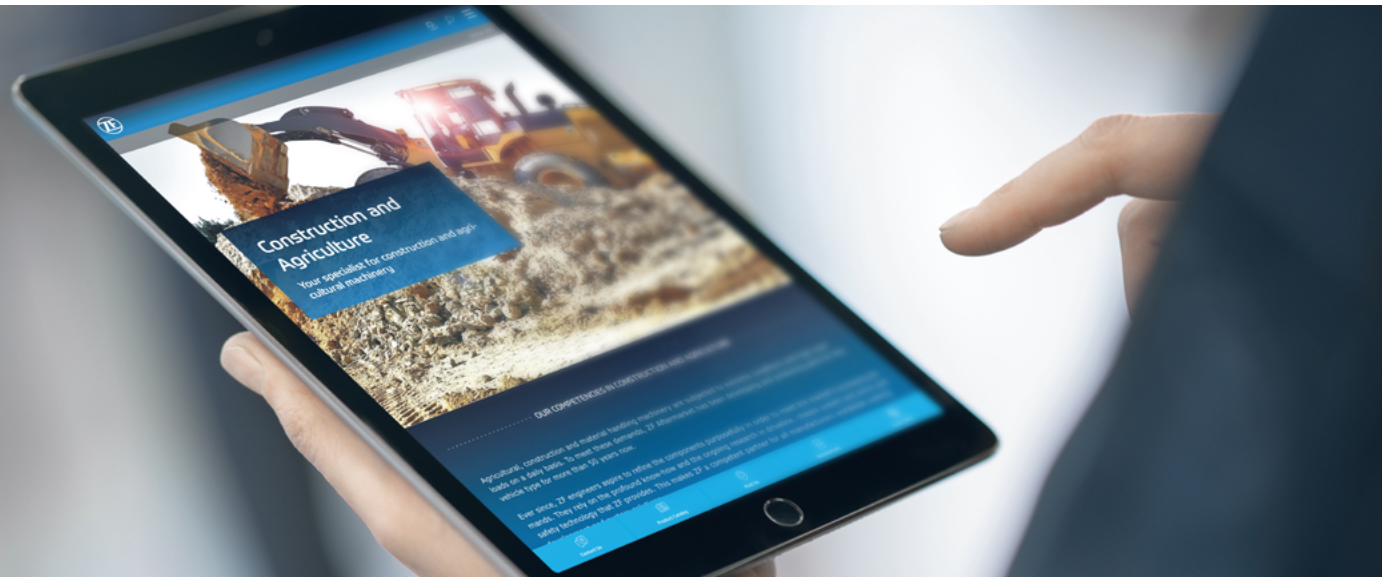
Delivered to your door.

The role of Logistics plays an increasingly important role in the supply chain of a digital world where everyone needs parts quickly. It's especially important in an industry where vehicle downtime is expensive and can have serious consequences. At ZF Aftermarket we take our logistics responsibilities very seriously. To deliver the parts our customers need when they need them – from one-off consignments to massive fleet deliveries - we operate five central warehouses in Germany and regional warehouses in central locations throughout the world.



ZF AFTERMARKET PORTAL

ZF Aftermarket sees changes as opportunities. We're ready and preparing for them right now and everything you need is available on the ZF Aftermarket portal. Our customers can have confidence in our ability to prepare and action the next-generation aftermarket trends that will influence the industry in the short, medium, and long term.



Long before ZF products reach the market, we make sure we can service, repair, and maintain them by ensuring the correct workshop facilities are in place, and by preparing the necessary documentation and training. This ensures everything functions correctly from the start – and then continues to do so for the lifetime of the component.

Our dedicated online portal allows you to access various digital services, making it even easier and quicker to source and purchase what you are looking for. Inside the portal are two platforms:

Service Data Management (SDM)*

This easy-to-use tool is essentially our spare parts catalog. Simply enter the transmission part number and follow the questions in the step-by-step guide to lead you to the part you need.

Technical training.

Instant access to expert technical information is vital in this digital world. By sharing our wealth of knowledge and expertise with you and offering a whole host of training courses, we make it our business to keep your business moving. At all times.

Each new vehicle and product generation brings with it increased requirements at every level. And ZF Aftermarket is there to support the market with its extensive engineering and service knowledge. With its wide-ranging intensive technical training program, comprising a hybrid model of face-to-face and online tutorials, ZF Aftermarket enables those using its products to keep pace with the technological, market, and mobility advancements.

By investing heavily in its technical knowledge and then sharing it, every member of the supply chain benefits. ZF Aftermarket finds that its own products are correctly disassembled, repaired and reassembled, the workshops avoid cost-intensive rework and the end user receives top quality products which perform as the vehicle manufacturers intended – for their lifetime. This completes the circle of quality service and helps avoid costly downtime.

*Subject to approval.

NEXT GENERATION INDUSTRY

Disruptive technology-driven trends such as electrification and autonomous driving are changing the way the world moves – on as well as off-road. And we offer state-of-the-art solutions to get your business ahead – and keep you there.

Our vision for the future.

At ZF, we know what the future of the construction and agricultural industry looks like – because we were instrumental in shaping the past.

We understand how electrification, connectivity, and safety and assistance systems will change the way machinery and site vehicles will operate. We know these sites are clean, safe and connected – because we already provide the corresponding technology today.

Electromobility – it's in our genes.

The trend towards electromobility is not confined to passenger cars. Thanks to ZF technology, work on urban construction sites and in rural agricultural facilities will not just be possible – but will thrive and prosper sustainably in the future, despite strict standards concerning emissions. And all because ZF takes care of climate-friendly operation, neutral in terms of CO₂ emissions and offers E-Mobility solutions for various applications.

Vehicle intelligence.

Ideally, the future of construction and agriculture should be climate neutral. But as a benchmark standard, it should fundamentally operate safely and efficiently. To ensure this, ZF is already developing future-oriented system solutions. Based on all the activities in the passenger car and commercial vehicle segment, a broad portfolio of Know-How and products can be re-used for construction and agricultural vehicle applications. Radar-based environment perception, being just one example to ensure safe vehicle operation.

New Technical Information app.

Instant access to expert technical information is vital in this digital world. And this is easily and instantly available via our new Technical Information app. With user-specific access, intuitive search filters and continuously updated content, simply click on the applicable icon and scroll through to find the support you need anytime, anywhere.

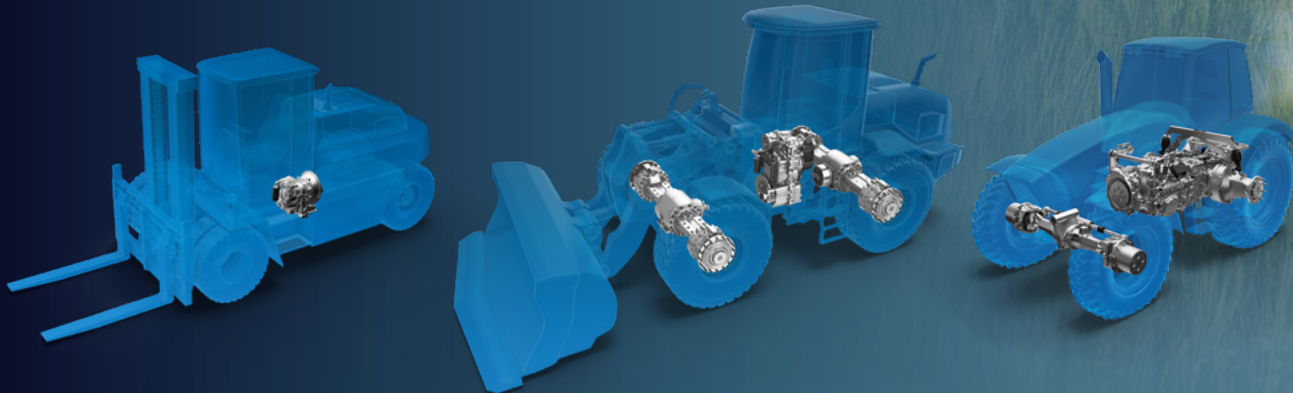
Efficiency – the ZF way.

Despite the development of emission-free construction and agricultural machinery, diesel vehicles will continue to dominate the global market for a long time to come. But they too must meet requirements for lower fuel consumption and CO₂ emissions.

This is where ZF comes in with its efficiency solutions for reducing emissions and saving energy that also work to increase efficiency and productivity. We do this by perfectly matching the various components of a vehicle to one another. Transmissions, axle systems, and vehicle electronics are exactly tailored to the relevant requirements of the machine to provide increased productivity and enhanced operating and riding comfort for the driver associated with a reduction of the operating and maintenance costs for the vehicle owner.

FOR TODAY, FOR TOMORROW

At ZF Aftermarket, we've long been shaping the future, driving technology forward, through trusted brands, digital innovations, and customized solutions. Now we look forward to what's coming next, with next-generation upgrades and repairs that restore machinery to original equipment quality. Empowering the industrial businesses of today and inspiring the generations of tomorrow.



ZF Friedrichshafen AG

ZF Aftermarket

Obere Weiden 12

97424 Schweinfurt

Germany