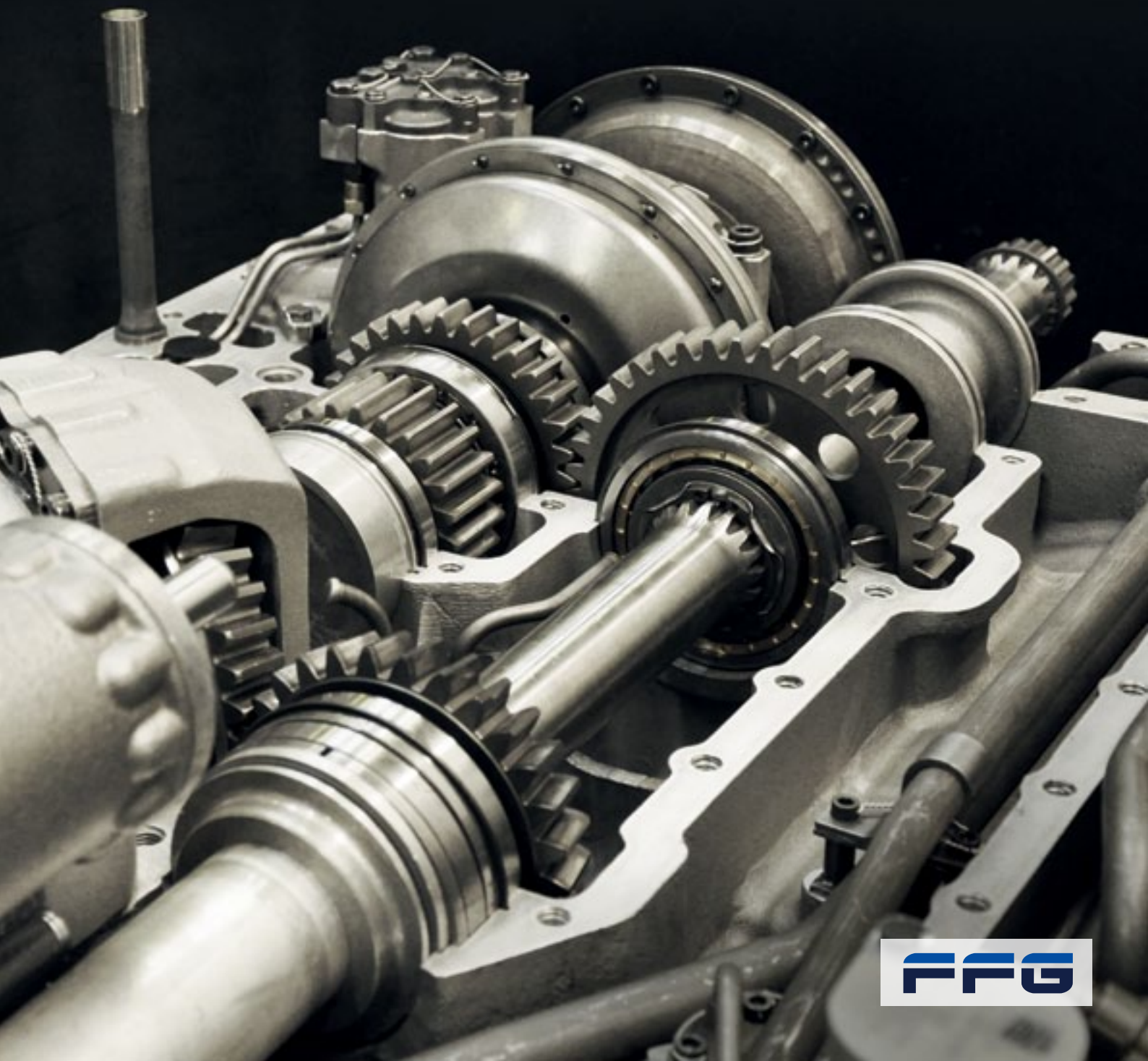


INNOVATIVE SOLUTIONS OF THE HIGHEST QUALITY

FFG DRIVE TECHNOLOGY



FFG



FLENSBURGER FAHRZEUGBAU GESELLSCHAFT MBH

High-tech and steeped in tradition



Flensburger Fahrzeugbau Gesellschaft has its origins in a shipyard in which sailing ships and then steamships have been built since 1872. Over the years, the fitting-outyard has developed into a modern and internationally-operating mechanical engineering company. An important factor of FFG's success is its experience in the repair and manufacture of large components.

As the German Armed Forces looked for a partner for the repair of vehicles and equipment in the 1960s, the company were able to impress due to their extensive experience and expert knowledge. This collaboration laid the foundation for the core skills FFG boasts today: development, manufacture, setup and maintenance of heavy vehicles and their modules.

In the area of military technology, FFG is a globally recognised company and ranks among the leading providers for the redevelopment, further development, retrofitting and optimisation of armoured vehicle systems. Moreover, with regard to the construction of civilian vehicles, innovative solutions are provided for all areas of suction and high-pressure rinsing technology. The aluminium structure "Flensburger Koffer" sets new standards in the courier service, express service and parcel service industries.

FFG DRIVE TECHNOLOGY

Perfection is our driving force

Since the company's establishment, the drive technology department has been an integral part of Flensburger Fahrzeugbau Gesellschaft. Its extensive experience with components of extraordinary dimensions and use of high-performance lifting equipment in all areas makes FFG drive technology your perfect partner for components used for the smallest applications, as well as large applications.

Whether they are used for mobile or stationary applications in the onshore or offshore sector – the experienced staff and engineers at FFG will find a suitable solution for your every need in the area of drive technology. In this way, we are continually reaching new heights providing innovations, the best quality products and a comprehensive service.

The range of services offered by FFG driving technology includes the redevelopment and further development of a complete selection of drive solutions, as well as the thorough maintenance of different engine and transmission types to varying degrees.

These fields of expertise are supported by modern mechanical engineering with a high vertical range of manufacture. This range of services in the steel and aluminium processing sector extends from piece production to the design of whole modules. These processes are aided by high-performance CNC machines in conjunction with the most modern



cutting and welding technology. FFG also supplies top-quality systems from a single source in the fields of hydraulics, electrics and surface engineering. We are committed to the highest quality standards. These exceptional quality standards are guaranteed by our constant innovative improvements, the ongoing training of our highly-qualified staff members, as well as the use of the latest testing and diagnostic methods, which are documented by the certifications DIN EN ISO 9001 and NATO AQAP.

Our experts in global field service, comprehensive spare parts logistics and special additional services make FFG the ideal partner throughout the entire product life cycle. In this way, we are able to maintain many long-term business relationships with satisfied customers across the globe.

REPAIR WORK

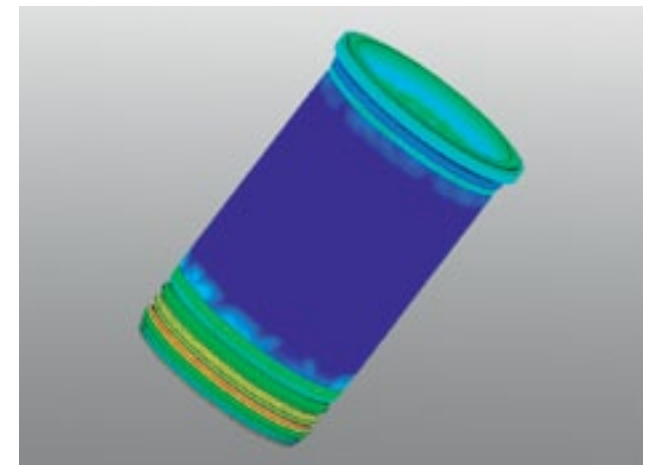
FFG has extensive experience and comprehensive know-how when it comes to conducting repair work on large or special civilian and military vehicles. Their substantial knowledge and necessary certifications enable FFG to repair undercarriages, engines, transmissions and both hydraulic and electric vehicle components. With this in mind, in the 1960s, a framework agreement – which still applies today – emerged between the German Armed Forces and

FFG for the setup and repair of armoured wheeled and track vehicles, the associated drive units and their individual parts. Over the years, FFG has also become established internationally and has partners today in over 20 countries worldwide.

Whether you're looking for the smallest modules or complete engines, FFG drive technology stands for the highest quality standards and reliability.

DEVELOPMENT AND DESIGN

From the drawing stage to the inspected, approved and certified system solution, individual components or complex modules are made flexibly in small-scale series or in series production according to customer requirements. It is in this way that braking systems, cylinder liners and transmission components, to list a few, have already been designed and manufactured. The use of selected test bench and diagnostic technology, as well as a company-owned testing ground, guarantee the highest quality standards for all finished components.



The latest test bench and diagnostic technology

EXTENSIVE CHECKS TO GUARANTEE THE BEST QUALITY

| »» EXTRACT FROM TEST BENCH IN THE AREA OF DRIVE TECHNOLOGY | | | |
|--|--|---|--|
| Engine test bench | | Transmission test bench | |
| Number 4 | | Number 2 | |
| Maximum braking power 1900 kW | | Drive output 1100 kW | |
| Maximum speed 3000 min-1 | | Speed 2600 min-1 | |
| Fuel injection pump test bench | | Hydraulics test bench | |
| Number 2 | | Number 2 | |
| Drive output 17.5 kW | | Capable of withstanding high temperatures | |
| Number of test points 12 | | Volume flow 350 l/min, max. 350 bar | |



FFG drive technology has modern production centres in the areas of machining technology, hydraulics, electrics and surface treatment at its

disposal, in addition to a design and project department. These centres specialise in the testing and processing of drive technology modules.



Fast replacement worldwide – even for the smallest parts

SPARE PARTS LOGISTICS

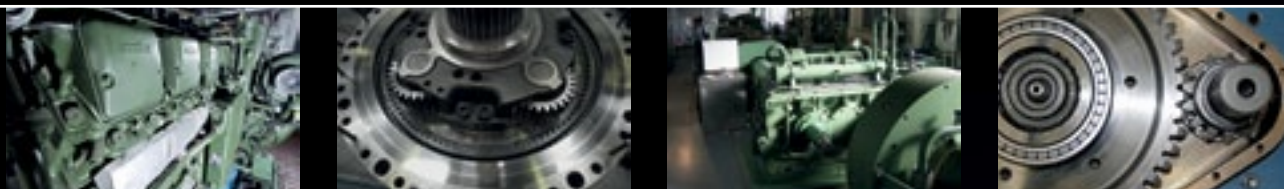
In order to ensure long-term, trouble-free use of the drive units, FFG's extensive spare part depot does not only always have all wear and replacement parts in stock for maintenance work, but they can also supply complete drive units as an appropriate exchange unit. These are made available quickly and cost-effectively via FFG's global logistics network.

On site, our competent field service staff at FFG will look after you to ensure that you receive around-the-clock support in a reliable and flexible manner. This range of services provided over the entire product lifetime makes FFG drive technology a strong partner for military and civilian applications.

»» OUR RANGE OF SERVICES

| | | | | | | | |
|---|--|---|---|--|--|---|---|
| Mechanical production Processing of aluminium and steel components with a max. length of 6 metres: <ul style="list-style-type: none">• execution of a repair process• thermal spraying• engine block machining• armoured hull processing | | Extract from the machine program: <ul style="list-style-type: none">• 7 CNC milling machines• 1 CNC lathe• 3 boring machines• laser cutters• sheet metal bender/bending bench• spraying system• saw, grinding machine | Surface treatment <ul style="list-style-type: none">• all types of cleaning and sand blasting with corundum/cast steel• 4 spray booths, including a hollow• industrial parts cleaning in an automatically operating washing machine• immersion bath system with five independent baths for stripping coatings, for example• powder coatings and vehicle paints | | Hydraulics <ul style="list-style-type: none">• hydraulic motors and pumps• hydraulic cylinders• proportional valve technology• control and regulator valves• multi-valve blocks• side servo blocks | Electrics <ul style="list-style-type: none">• cable assembly• switch cabinet construction, wiring, testing• measuring and testing equipment• module and cable repair• component installation in vehicles | Welding technology <ul style="list-style-type: none">• welding using MIG, MAG and WIG machines• machines for plasma cutting technology• soldering, wire spraying and powder flame spraying• build-up welding and joint welding using low and high-alloy filler material |
|---|--|---|---|--|--|---|---|

A RAPID SOLUTION FOR EVERY PROBLEM



SERVICE AND CUSTOMER SERVICE

To ensure you get the best service, we have set up an extensive and efficient service network with our competent, authorised partners.

This means that in addition to our factory at Flensburg and the mobile service we offer, our partners are located close by and are dotted across the country to guarantee that you get the help you need quickly. Moreover, you can count on us for fast availability of spare parts – we have just the right parts for you in stock.



For further information, simply scan in the QR code and find out more on our FFG website.

www.ffg-flensburg.de

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