

**We mobilise
the best solutions
for you.**

1

Developing ideas

You are drawing up plans for flexible production plants for automobiles around the world and have to take account of platform strategies, standardisations and availabilities? We consider your production needs from a holistic point of view, covering everything from the details of small innovatory steps up to the complete overall system. Working with you from your idea, we develop an intelligent, sustainable concept matched exactly to your requirements.

2

Drafting concepts

We regard the tasks you are faced with as welcome challenges. With our extensive expertise, we support you in implementing your factory standards and provide you with valuable stimulus for your innovations. We know the factors that make an automobile production facility successful, and we give you the free space you need in order to concentrate on what matters most: building the best cars!

Lenze makes many things easy for you.

We work with you closely to find the best solution and enthusiastically work towards setting your ideas in motion. Whether you want to optimise an existing production system or to develop a new machine or application for complete systems in the automotive industry, we aspire to make things easy, always seeking perfection at the same time. This is an essential feature of our thinking, our services, and every detail of our products.

3

Implementing solutions

Our formula for satisfied customers is simple: an active partnership with fast decision-making processes and an individually tailored offer. On the basis of this simple principle, we have been satisfying the increasingly specialised needs of customers in the automotive industry for many years.

4

Manufacturing machines

We are one of the few all-round suppliers in the business, and for many tasks in automobile production we can supply the exact products that you actually need - no more, no less. This is what our L-force product portfolio stands for, a consistent, a consistent platform for the implementation of drive and automation functions.

5

Ensuring productivity

Productivity, reliability and new peak levels of performance every day are the are the key success factors that we bring to your automobile production. After delivering the products, we provide you with carefully thought-out service concepts to secure sustained productivity. Our focus here is on competent support from our experienced after-sales specialists with their outstanding level of expertise in applications.

Engineering
made easy.

The innovative power of the automotive industry is continually making new demands on the production processes. Our recipe for success and a real competitive advantage is to be found in our safe, energy-efficient concepts, solutions and products for your plant. We make this possible with our 65 years of experience, with well over 3,000 employees in our worldwide sales and service centres, development sites, logistics centres and production plants, and with a modular system of intelligent drive and automation products.

We always have our eye on the big picture, whether we are working on small innovative steps or a new trend-setting system. So we support your suppliers even before the system starts running on the installation site. We are one of the few suppliers in the market who accompany you throughout the entire process of developing your system: from the planning stage to the SOP and the day-to-day operation. And we supply everything you need, from the control system to the drive shaft, all from one source. This is what we call Motion Centric Automation.

Create with us

in 5 steps

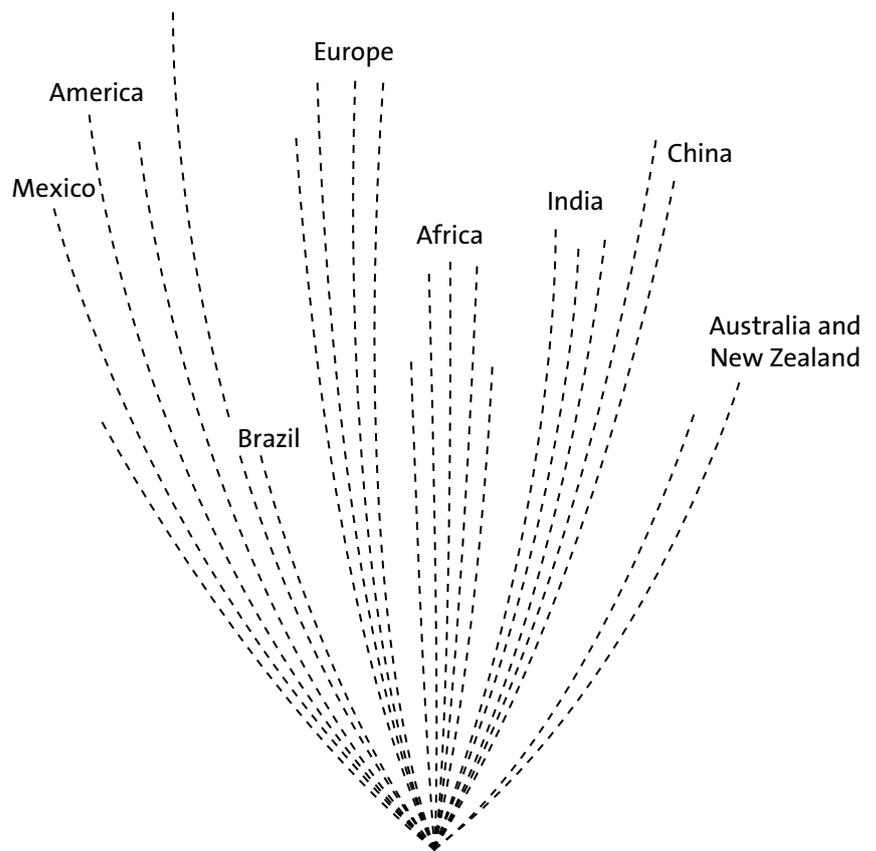
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the space you need for what matters:
your ideas. It's as easy as that.



Always one
idea ahead.

When you make a car, you have to be able to rely on dependable materials-handling equipment, exact positioning systems, fast handling systems and a variety of applications for the robotics.

With our many years of experience and our combined global expertise, we help you to implement standardisation plans and innovations in the easiest way possible in order to considerably enhance and improve the productivity of your plant. Our Automotive Network within the Lenze Group consists of numerous sales and application engineers whose skills contribute to every single solution.

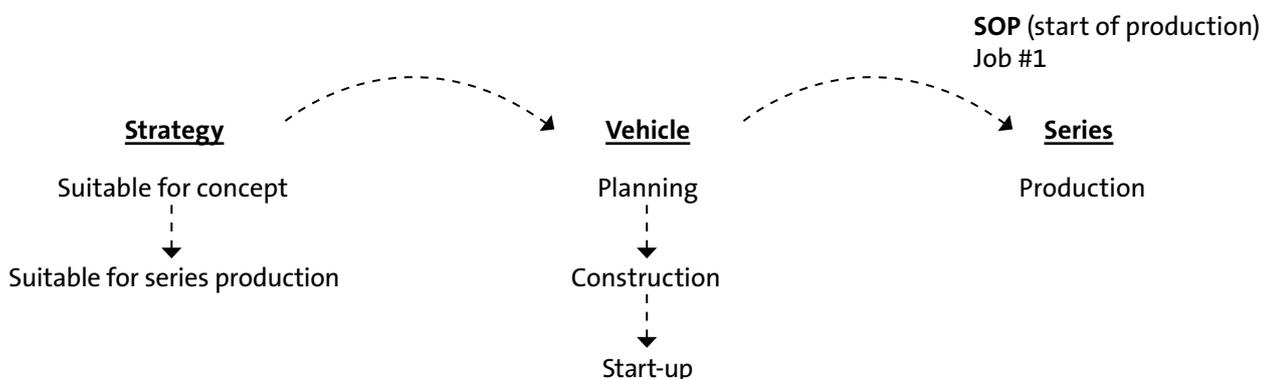


Available for you and your idea

We provide the stimulus for the solutions of tomorrow.

Do you want to plan systems and machines in line with your company's general standards? We will be happy to support you as a partner with our comprehensive knowledge of the automotive industry, which we have acquired in numerous projects. We will

work with you to develop an intelligent, sustainable concept for safe and reliable production, a concept that is precisely designed to fit in with your ideas and your project milestones. In this way, we provide you with important stimulus today for the innovations of tomorrow. We also offer you our Lenze BlueGreen





Solutions, specially designed to meet the increasing challenges facing energy-efficient machines and systems.

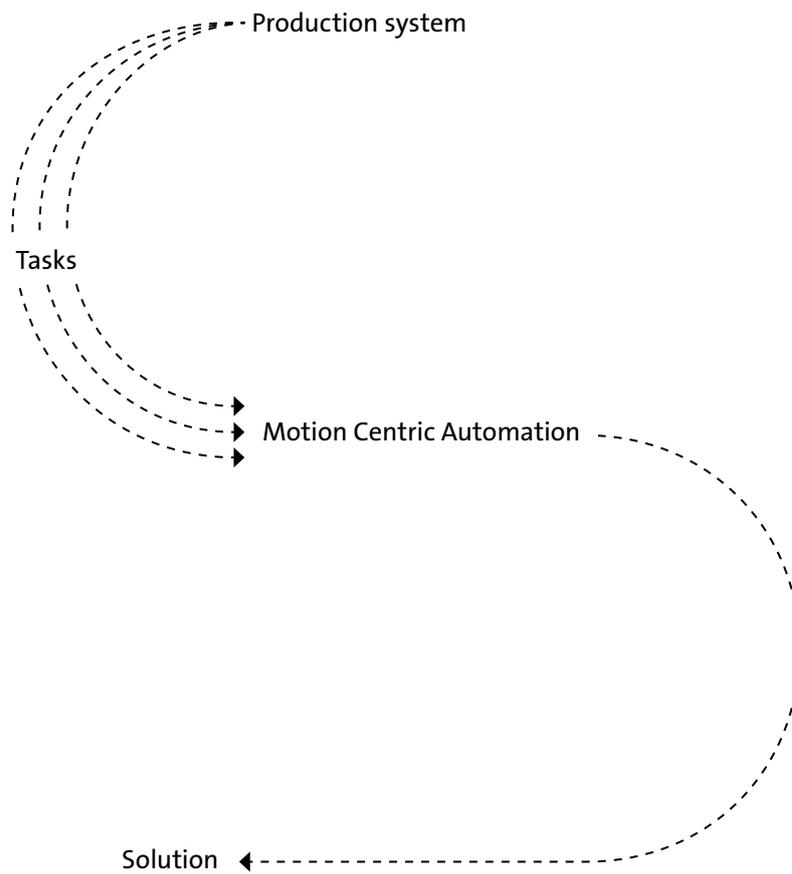
We show you how you can save energy with drive solutions while adhering to important standards and laws.

Profit from our great wealth of experience, which is reflected in our references and can bring you key benefits:

- Energy-efficient solutions
- Reduced life-cycle costs (LCC)
- Low total cost of ownership (TCO)
- Rapid return on investment (ROI)

A photograph of a car assembly line. In the foreground, the front left side of a white car is visible, with its hood and front fender partially open. The car is positioned on a yellow robotic arm. The background shows a complex industrial environment with various yellow robotic arms and structural elements. The floor is grey with yellow and black striped safety markings.

**Straight to
the heart of
innovation.**



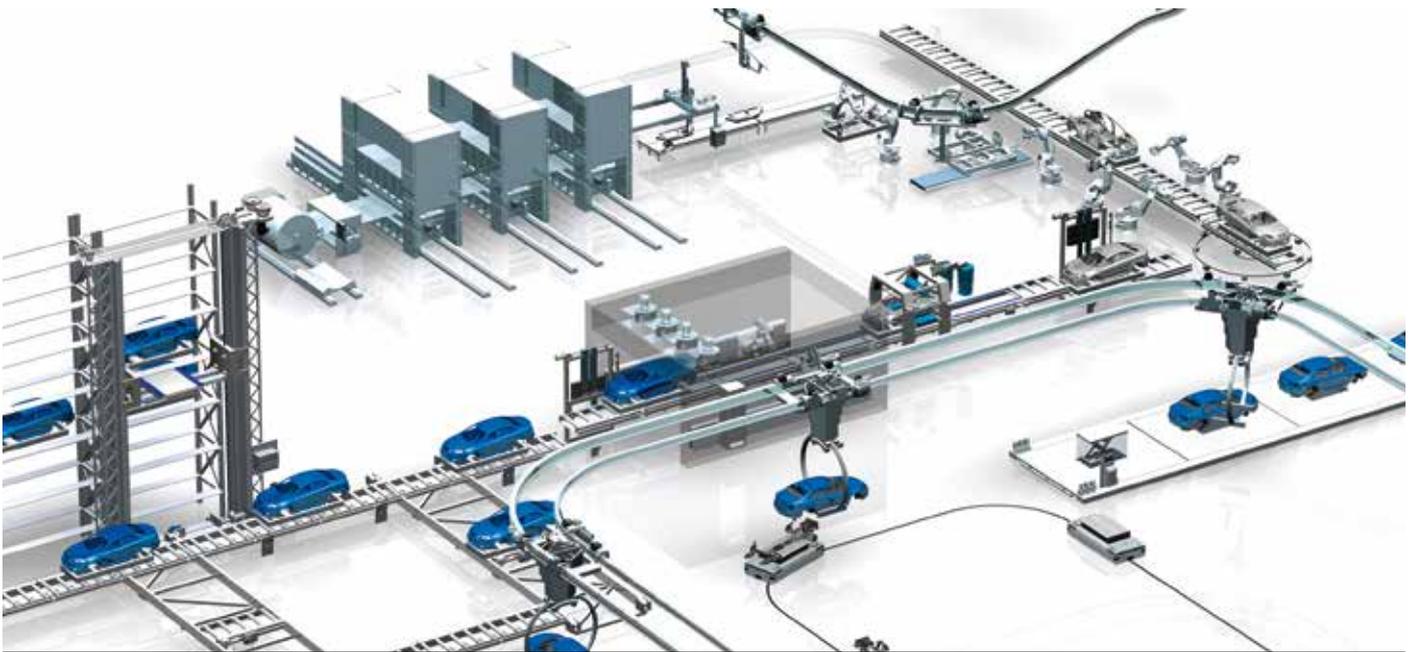
Your production requirements are at the centre of all our considerations. We look at the individual motion and control functions of an automobile factory, keeping an eye on the big

picture and all the assembly sections. Working with you, we then develop an integrated set of drive and automation solutions.

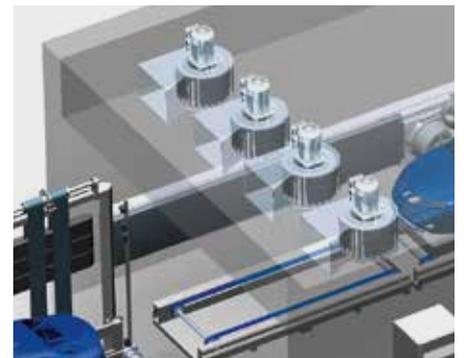
As easy as possible, as comprehensive as necessary.

You already have some specific ideas for your production system and are now looking for an optimal way to implement them within the limits set by the local conditions in your global production plants? We know everything about your network of suppliers and the processes in the automotive industry. Our sales and engineering experts can quickly think their way into the system concepts behind your assembly sections, from the press shop, the body shop and the paint shop to the final assembly station and the powertrain section. Thanks to our worldwide presence, we are also able to support you quickly on site with the best local solution.

We consider individual functions as part of a whole and work with you to decide whether your requirements call for a standard solution or a one-off solution. In accordance with your control concepts and the structure of your machinery, we offer you automation systems for both central and decentralised motion control. To ensure that all this can be done quickly and easily for you, we assign you a direct contact person who can gain access to our entire network of engineers at any time.



One partner for all applications in the automotive industry



Turntable/roller conveyor Hoist Fans



Overhead conveyor

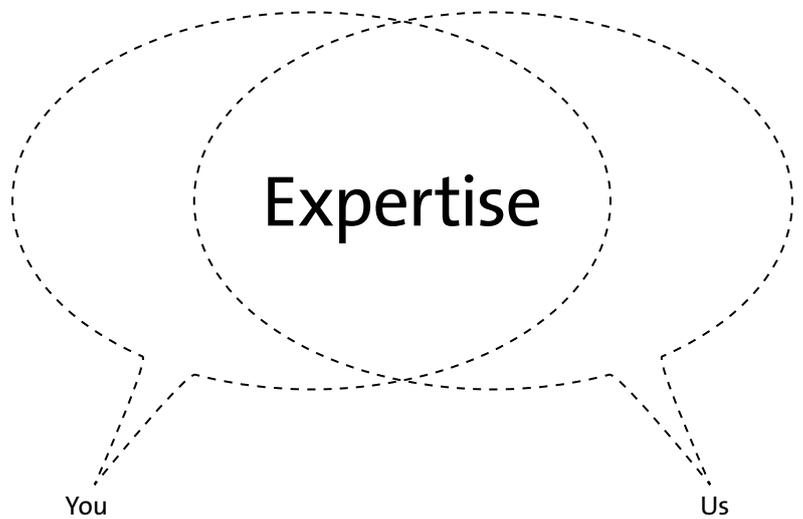
Skillet-line conveyor

Automated guided vehicle system (AGVS)



Together
we develop
solutions.

Our formula for satisfied customers is simple: an active partnership with fast decision-making processes and an individually tailored offer. We have used this formula for many years to meet the increasingly specialised needs of customers in the automotive industry - with success.



Everything from one source.

Together with staff from Development, Sales and Service, our automotive specialists make up your project team - they also work with your plant constructor. We are thus able to give you the very best support - from the bidding phase to production of the vehicles. We also look after your supplier network, supporting you in the description of all your requirements and the call for bids. What is more, with our solutions we also make things very easy for your mechanical engineers.

This is achieved with our engineering software, which handles a large part of the application engineering work and makes it very easy to develop a modular machine control system. This considerably reduces the development time for the basic functions of your system and, at the same time, ensures shorter commissioning and acceleration times. Our Drive Solution Designer software represents a sophisticated level of design knowledge, makes the energy-saving potential visible at a glance and, due to its functions for maximum energy efficiency, is part of our Lenze BlueGreen Solutions.



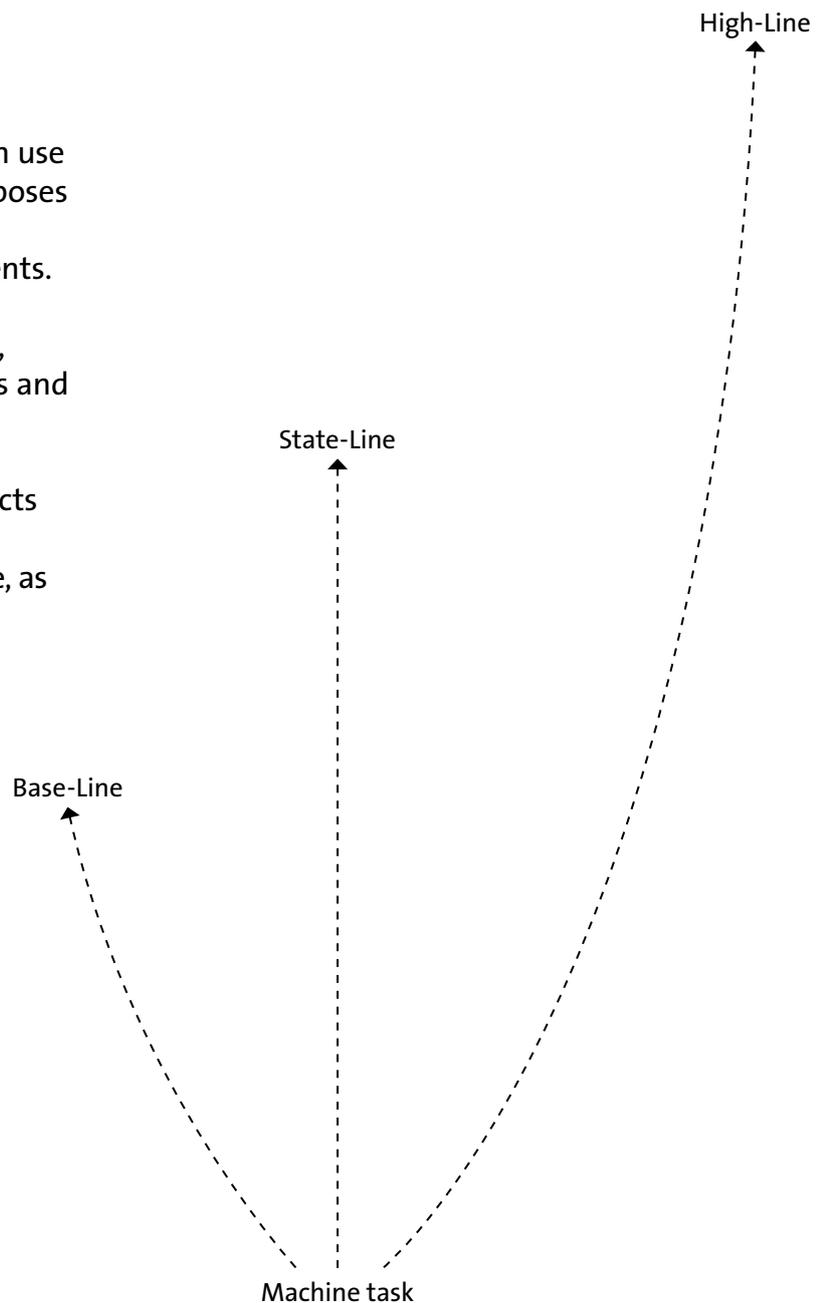


**We produce
satisfaction.**

You and your plant constructor can use our three lines for orientation purposes when choosing the appropriate products to match your requirements.

Base-Line for basic machine tasks,
State-Line for more complex tasks and
High-Line for challenging tasks.

This makes it easier to select products and enable both scalability and standardisation. As easy as possible, as comprehensive as necessary.



Discover a multiplicity of functions in harmony.

As one of the few all-round suppliers, we can supply you with exactly the products you really need for each and every machine task. To this end, we offer our L-force product portfolio, a consistent system of modular products for the implementation of drive and automation tasks. Worldwide order management and global logistics concepts with five centres in the USA, Europe and China guarantee worldwide availability and quick delivery – and, of course, the quality to which you are accustomed.

To ensure that you progress swiftly and surely from planning the machine to implementing it, we also make things very easy for you with our standardised range of products. The appropriate engineering tools and the ease of operating our devices ensure speedy commissioning. And, of course, we are available to support you 24 hours a day in case you encounter problems. Moreover, we support you and your plant constructor with tailor-made training courses, in which you can get to know all the details of our products and software, so that you can apply them smoothly and operate them confidently. Allow us to supplement your experience with our technical expertise to make your everyday work safer, more efficient and, above all, easy.

Controller

We provide you with high-performance automation products – from modern motion controllers for use in control cabinets to a compact distributed I/O system and powerful HMIs for visualisation.



Inverter **Control cabinet**



Servo Drives 9400 HighLine:
extremely versatile for complex tasks



Inverter Drives 8400 Stateline:
ensure movement in extensive applications

Inverter **Decentralised**



Inverter Drives 8400 protec:
boost horizontal and vertical materials-handling systems



Inverter Drives 8400 motec:
the easy way to get conveyor drives moving



CCU 210 B:
specially for overhead conveyors

Motors



MCS synchronous servo motors:
ensure maximum performance in a very small space



MH three-phase motors:
extremely efficient motors

Gearboxes



g500-S shaft-mounted helical gearbox:
space-saving and efficient



g500-B bevel gearbox:
for maximum efficiency



g500-H helical gearbox:
robust high-efficiency design

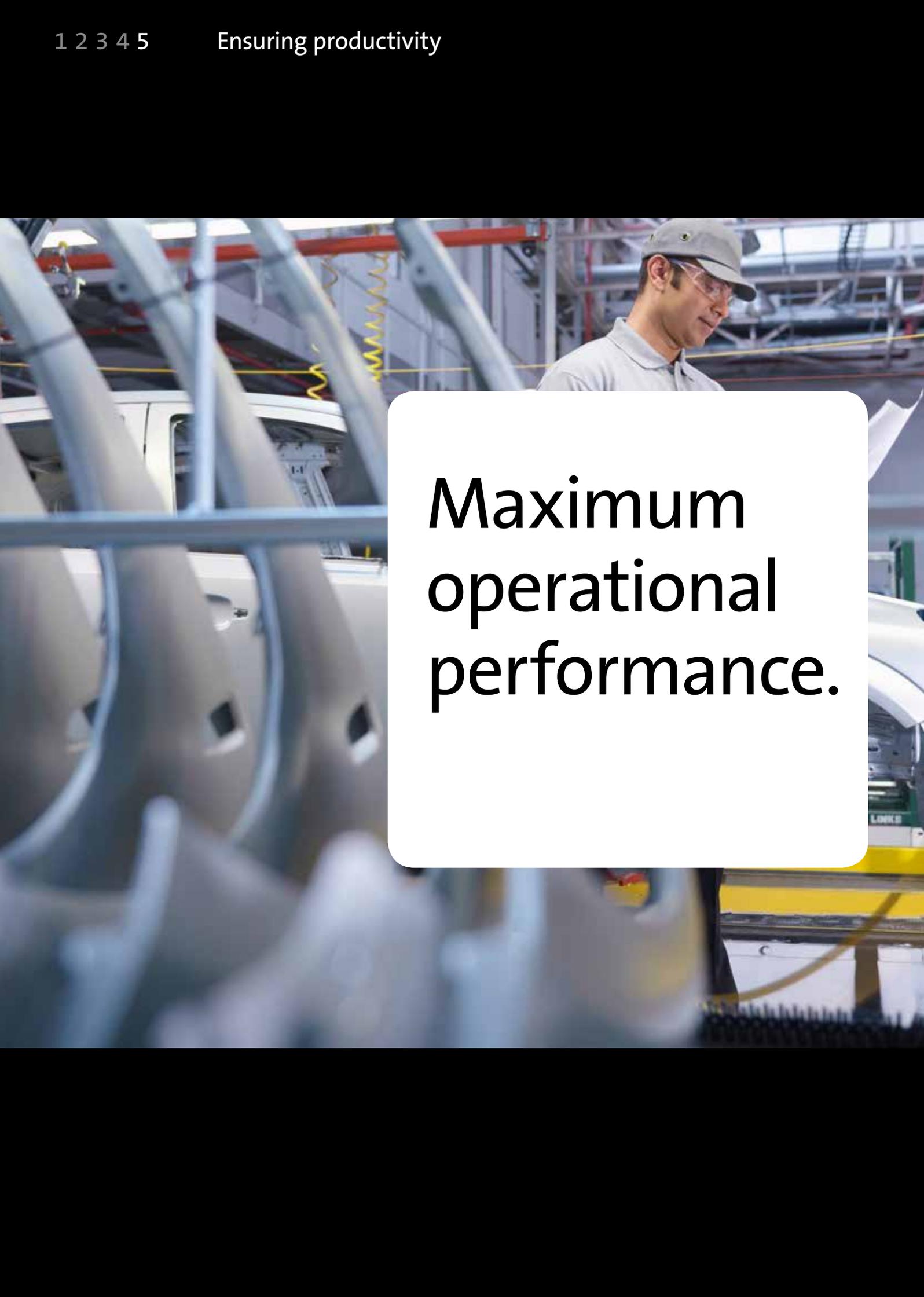


GKK:
robust clutch for overhead conveyors

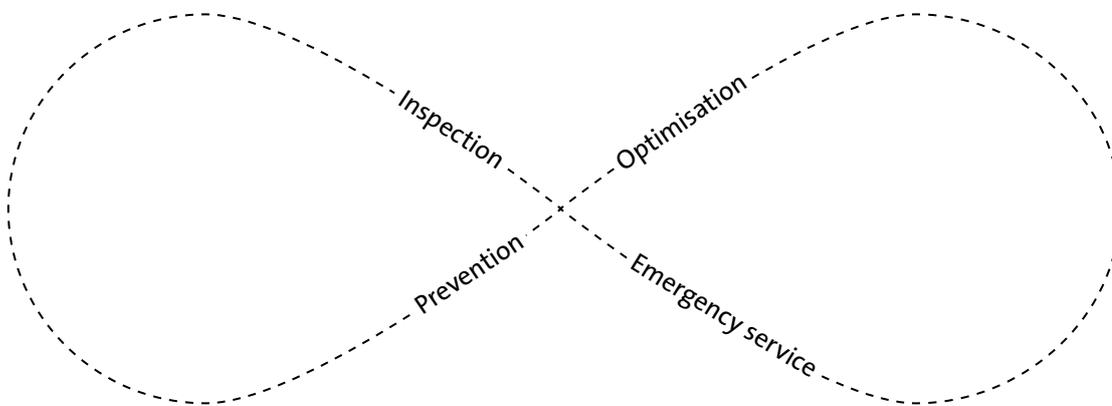
High-Line

State-Line

Base-Line



**Maximum
operational
performance.**



Productivity and reliability - these are the two key success factors we bring to your system. We offer you individually configured service concepts for sustainably safe and reliable operation, taking into account life-cycle costs, spare-part stockage, retrofit concepts

and global availability. You can look forward to competent support provided by our experienced after-sales experts with all the benefits of Lenze inspection, Lenze prevention, Lenze optimisation and the Lenze emergency service.

**Worldwide service.
Where and when
you need it.**

Lenze inspection

On our test bench:

- Inspection of the electronic and electromechanical drive and control elements, with special attention to functionally critical key components
- Checking the drive dimensioning and its energy efficiency
- Inventorising of the existing equipment

Lenze prevention

Forward-looking, also in hindsight:

- Optimisation of spare parts inventories for key components
- Drafting of inspection and maintenance plans
- Development of emergency plans
- Risk analysis on the basis of an FMEA
- Maintenance and preventive replacement of key components



Lenze optimisation

Key services as part of our partnership:

- Improved open and closed loop control parameters
- Optimisation of the power supply
- Trial operation under test and production conditions
- Integration test in connection with other parts of the system
- Needs-oriented training courses for system operators locally

Lenze emergency service

Always glad to be there when you need us:

- 24 hours Expert Helpline worldwide: 00800 24 46877
- Expert team for Germany
- 24 hour delivery service for all Lenze products
- Express installation, express repair, management of logistics and direct courier management
- Incident management and fault analysis on site: 8D cause analysis

We would really like to get your ideas moving forward! Learn more about our approach, our way of thinking, our vision and how we can make many things easier for you in future. Please feel free to contact us directly or visit us at:

**www.
Lenze.
com**

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