

We mobilize the
best solutions for
you.

1

Developing ideas

Are you drawing up plans for flexible production plants for automobiles around the world and have to take into account platform strategies, standardizations and availabilities? We consider your production needs from a holistic point of view, covering everything from the details of small innovative 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 optimize an existing production system or develop a new machine or application for complete automotive systems, we aspire to make things easy and always seeking perfection. 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 solution. On the basis of this simple principle, we have been satisfying the increasingly specialized needs of customers in the automotive industry for many years.

4

Manufacturing machines

We are one of the few all-round suppliers in the industry, and for many tasks in automobile production we can supply the exact products that you need - no more, no less. This is what our L-force product portfolio stands for, 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 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 production processes. Our recipe for success and a real competitive advantage is 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 centers, development sites, logistics centers and production plants, and with a modular system of intelligent drive and automation products.

We always looking at 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. 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

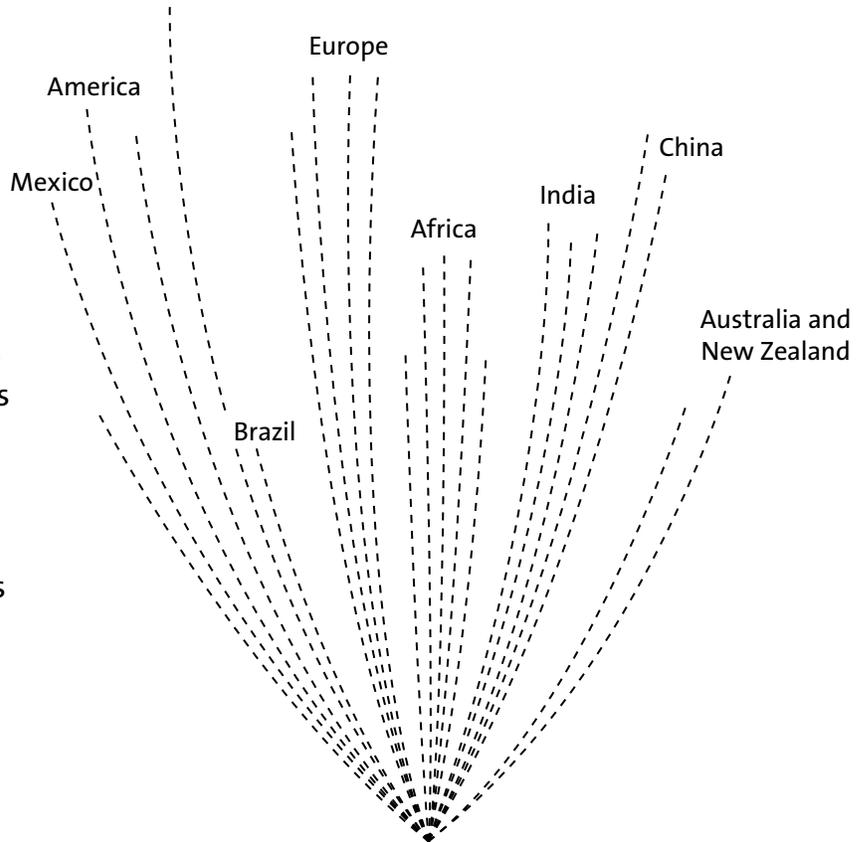
----->
the space you need for what matters:
your ideas. It's as easy as that.



Always one
idea ahead.

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

With our many years of experience and our combined global expertise, we help you to implement standardization plans and innovations in the easiest way possible in order to 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.

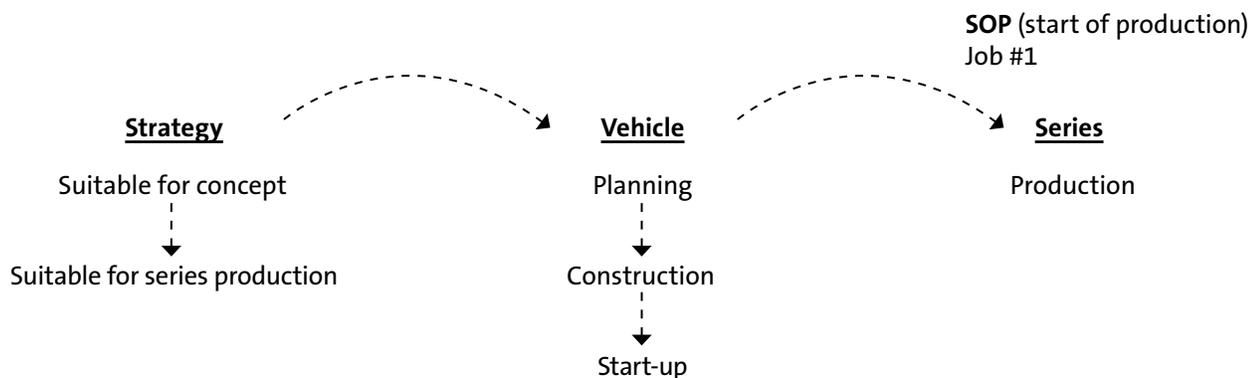


Available for you and your idea

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 for today and the innovations of tomorrow.





We also offer our Lenze BlueGreen Solutions, specially designed to meet the increasing challenges facing energy-efficient machines and systems.

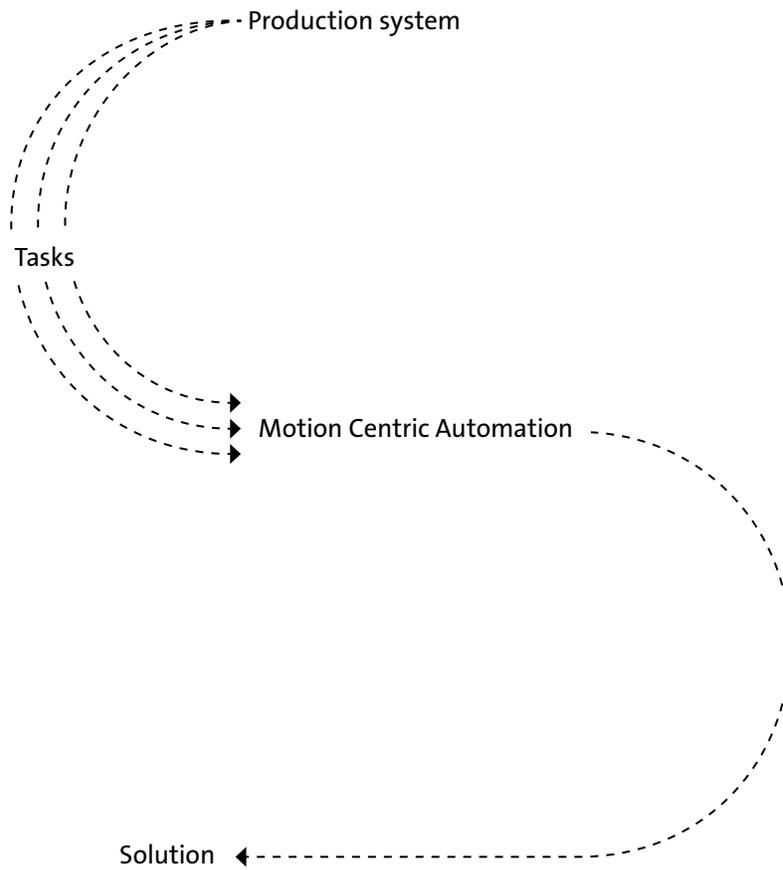
We show you how you can save energy with drive solutions while adhering to important standards and regulations.

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 body on an assembly line. The car is white and has its front door open. It is surrounded by large yellow robotic arms and machinery. The background shows a factory setting with various pipes and structures.

**Straight to
the heart of
innovation.**



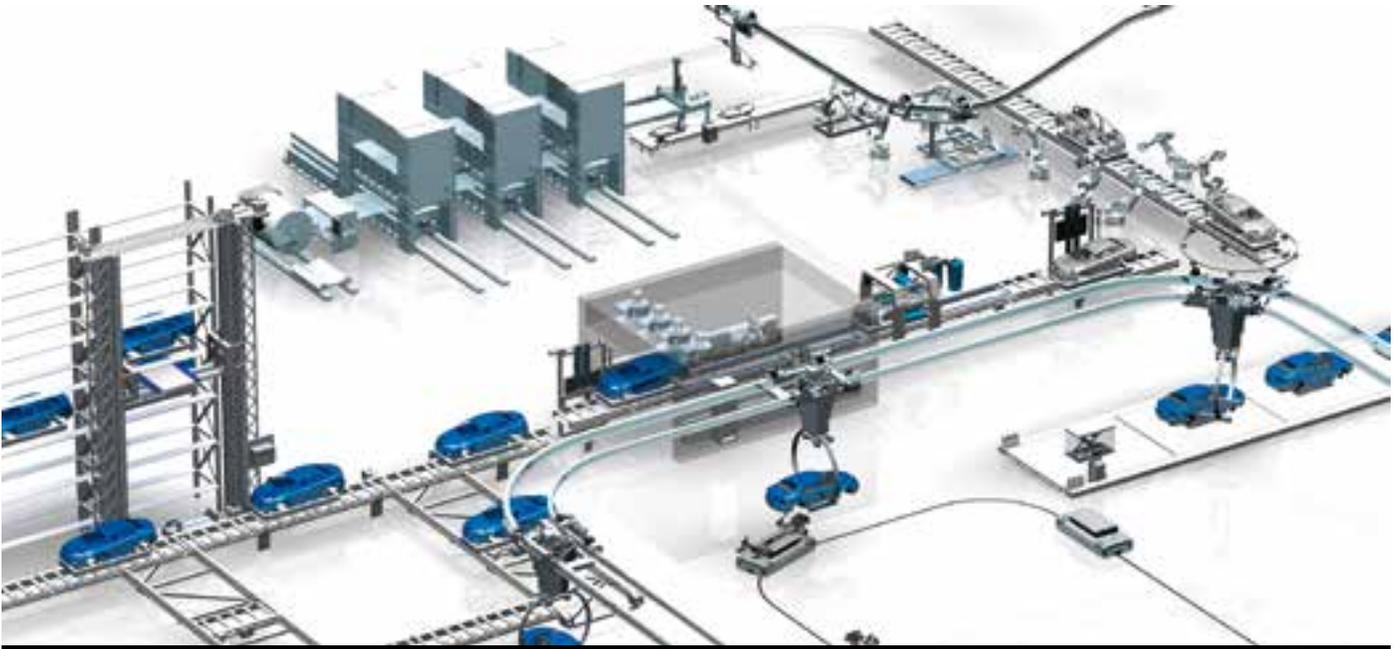
Your production requirements are at the center of all our considerations. We look at the individual motion and control functions of an automobile factory, keeping an eye on the big

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 evaluate the system concepts behind your assembly sections, from the press shop, to the body shop, to the paint shop, to the final assembly station and the powertrain section. Thanks to our worldwide presence, we can support you quickly, on site, and 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 unique one. In accordance with your control concepts and the structure of your machinery, we offer you automation systems for both central and decentralized 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.



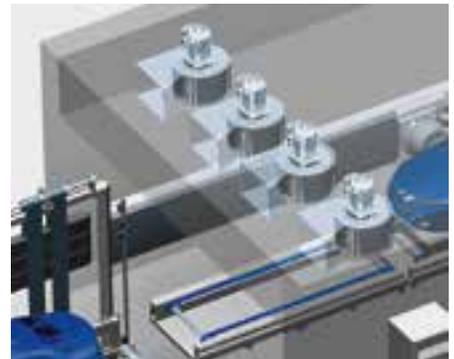
One partner for all applications in the automotive industry



Turntable/roller conveyor



Hoist



Fans



Overhead conveyor



Skid-line conveyor

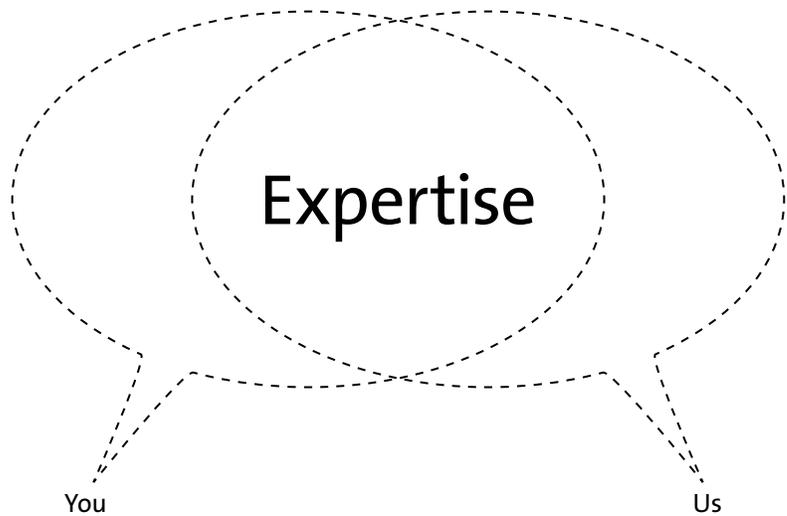


Automated guided vehicle system (AGVS)



Together
we develop
solutions.

Our formula for satisfied customers is simple: an active partnership with fast decision-making processes and an individually tailored solution. We have used this formula for many years to meet the increasingly specialized needs of customers in the automotive industry - with great 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 constructors. We are able to give you the very best support - from the bidding phase to the production of vehicles. We oversee your supplier network, supporting you in the description of all your requirements and the call for bids. With our solutions, we make mechanical engineering tasks easy.

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



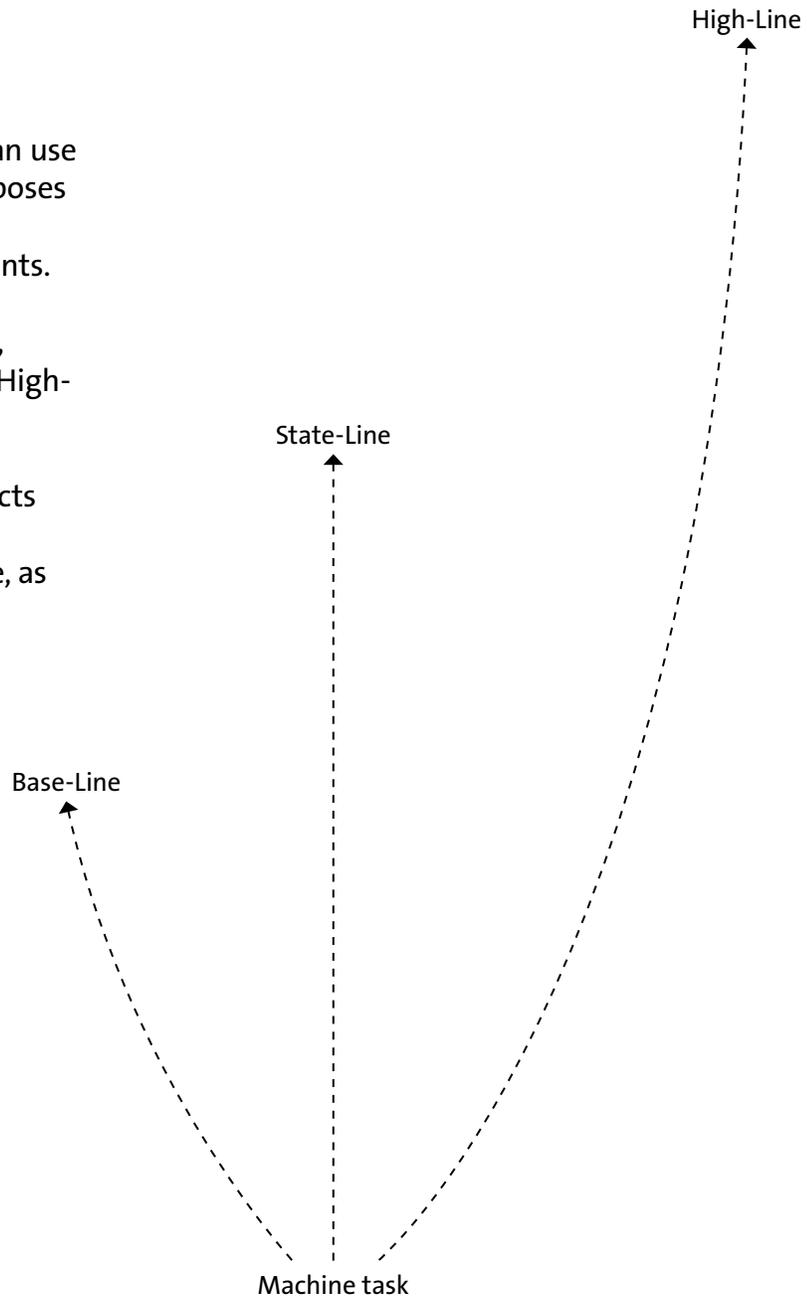
A large industrial factory with yellow robotic arms working on car chassis. The scene is filled with complex machinery, metal structures, and bright lighting. The robotic arms are in the foreground, and the car chassis are visible in the background.

**We produce
satisfaction.**

You and your plant constructors 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 complex tasks and High-Line for challenging tasks.

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



Discover a multiplicity of functions in harmony.

As one of the few complete solutions providers, we can supply you with the exact 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. With worldwide order management and global logistics concepts, five centers in the USA, Europe and China, we guarantee worldwide availability and quick delivery – and, of course, the quality to which you are accustomed.

To ensure your swift progress from planning the machine to implementing it, we also make things very easy for you with our standardized 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. Additionally, we support you and your plant constructors with tailor-made training courses that educate you on 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 visualization.



Inverters **Control cabinet**



Servo Drives 9400 HighLine:
extremely versatile for complex tasks



Inverter Drives 8400 StateLine:
ensure movement in extensive applications

Inverters **Decentralized**



Inverter Drives 8400 protec:
boost horizontal and vertical material 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

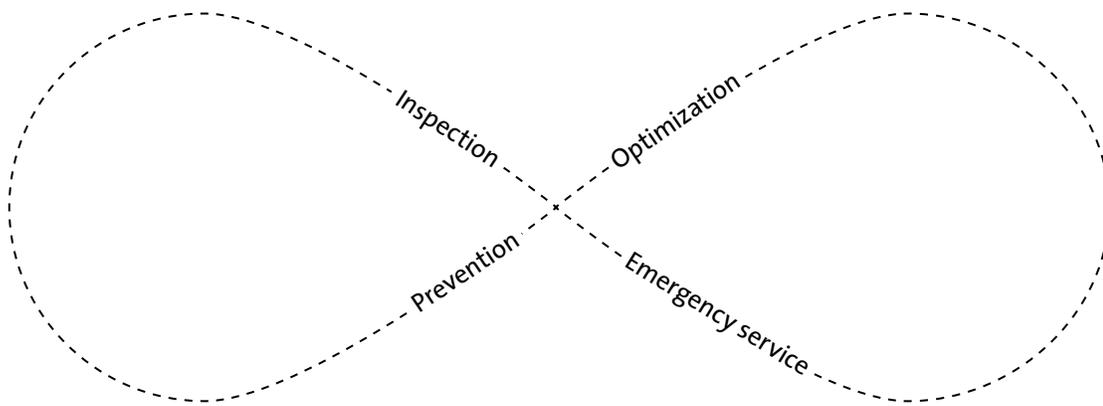
High-Line

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 optimization and 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
- Inventory of the existing equipment

Lenze prevention

Forward-looking, also in hindsight:

- Optimization of spare parts inventories for key components
- Drafting of inspection and maintenance plans
- Development of emergency plans
- Risk analysis on the basis of a Failure Mode Effects Analysis (FMEA)
- Maintenance and preventive replacement of key components



Lenze optimization

Key services as part of our partnership:

- Improved open and closed loop control parameters
- Optimization 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

Lenze emergency service

Always glad to be there when you need us:

- 24-hour Expert Helpline worldwide: 008000 24 46877
- Expert customer service for the Americas: 1-800-217-9100 toll free, 1-508-278-9100, customer.service@LenzeAmericas.com
- 24-hour delivery service for all Lenze products
- Express installation, repair, logistics and direct courier management
- Incident management and fault analysis on site.

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 the future. Please feel free to contact us directly or visit us at:

**www.
Lenze.
com**

This document is the intellectual property of Lenze SE, Hameln (Germany). All the information contained in this brochure corresponds to the information available at the time of printing and only serves as preliminary information. Possible deviations in color from the original product are due to the printing technique used. Lenze is the sole and exclusive holder of the copyright and intellectual property rights. All use, especially distribution, reprinting, exploitation, and modification of this document are only permitted with the express written permission of Lenze.

