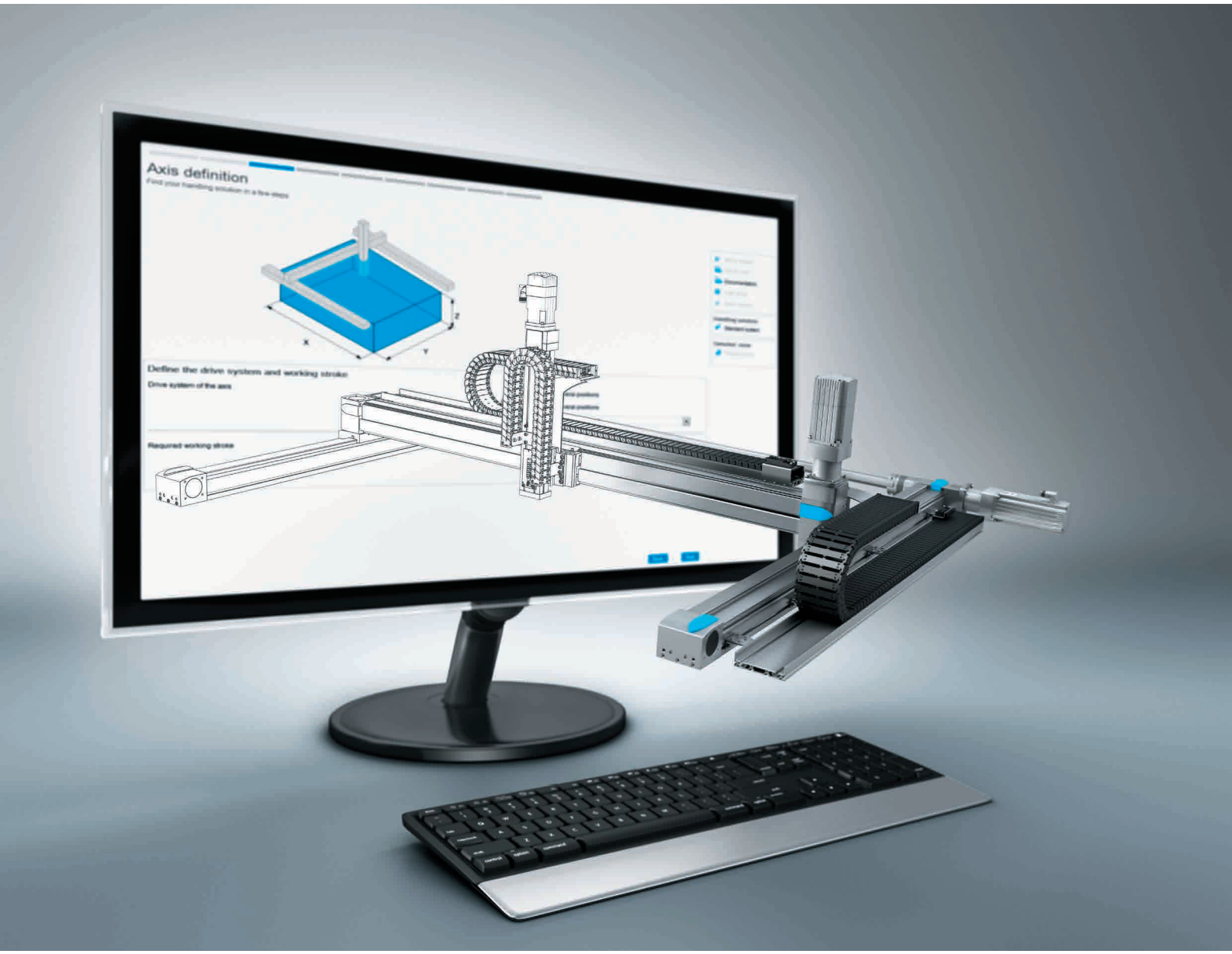
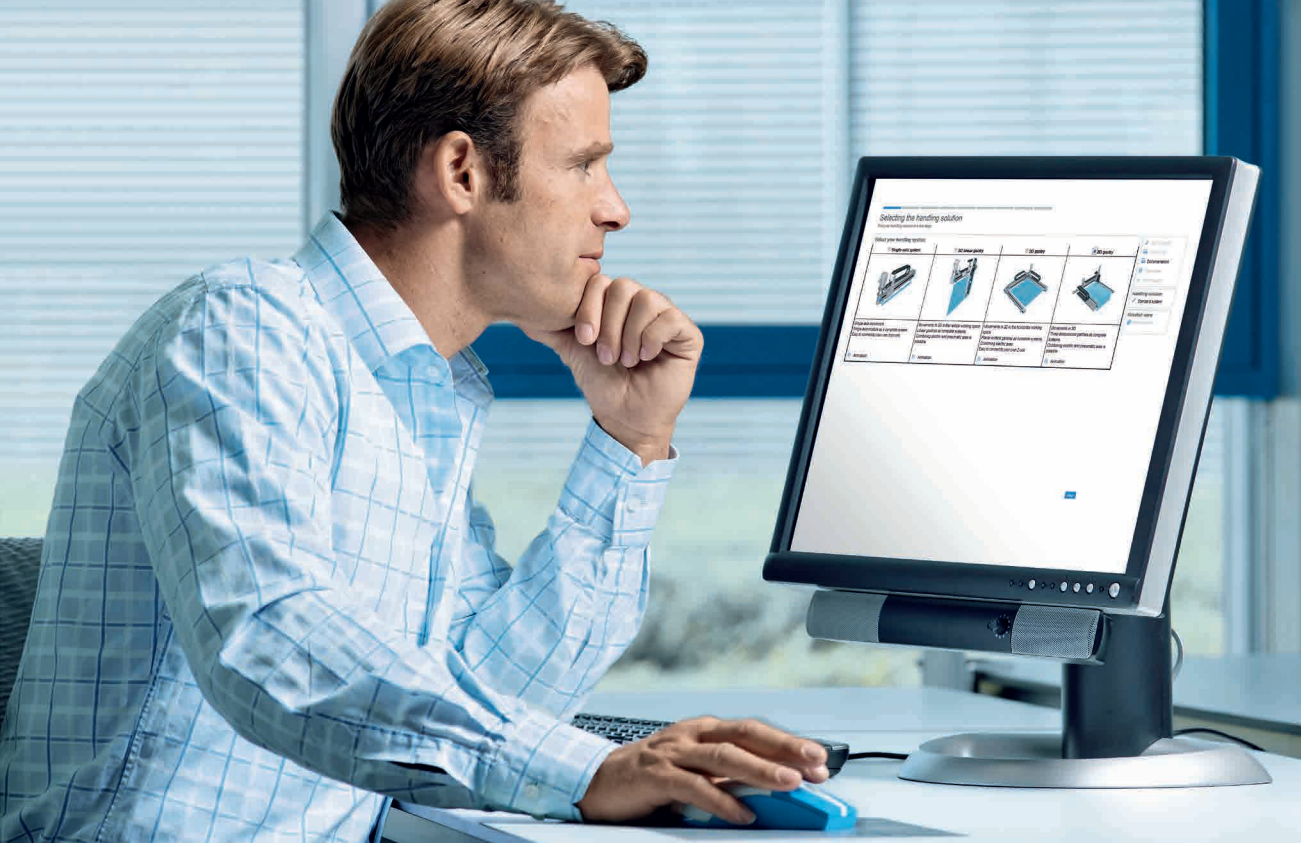
Handling Guide Online

FESTO





You need complete systems.
You want reduced complexity.
We are your dependable solutions partner.

→ WE ARE THE ENGINEERS OF PRODUCTIVITY.

Handling systems from Festo: versatile, economical, perfectly fitting

Perfectly fitting, economical, dynamic and flexible: create the perfect system using the extensive range of handling systems and Cartesian robots from Festo. And our ready-to-install systems, software and services reduce your engineering time and effort. We support you from the design stage through to installation and commissioning. That allows you to concentrate entirely on your core business and increase your productivity.

Engineering with the Handling Guide Online is efficient, intuitive and fast. With this online tool, you can configure and order your handling system in record time. It encompasses all the know-how of our experts, so all you have to do is enter the data for your application. The Handling Guide Online automatically works out suitable solutions, including CAD model, technical data and net price. You then simply select the system you want and order it immediately through the Online Shop. There's no faster or simpler way to get the right handling system.

Additional information:
→ **www.festo.com/handling**

To the Handling Guide Online:
→ **www.festo.com/handling-guide**

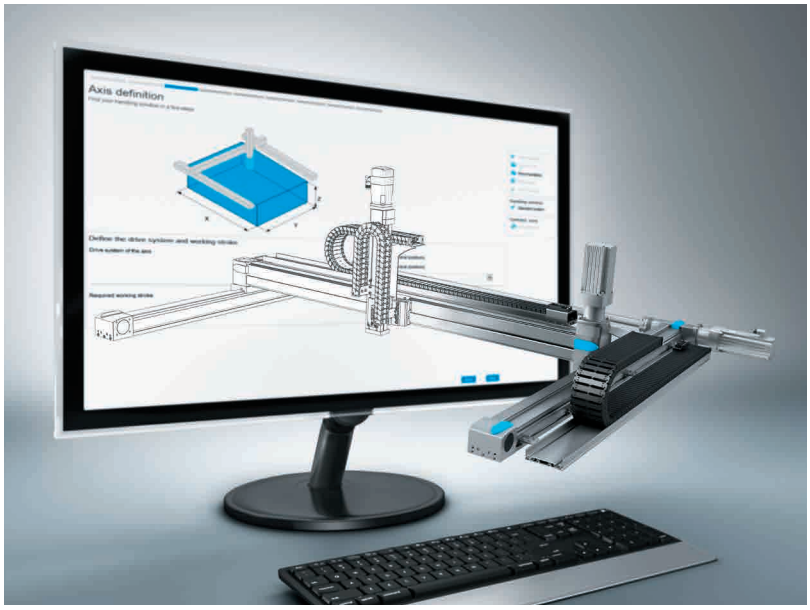
Why is it worthwhile to use Cartesian robots?

The answer is simple: Cartesian robots from Festo offer many benefits. They are always exactly right for the task and are never oversized. In addition, the use of electric and pneumatic technologies or a mix of the two also makes them very flexible and offers excellent value for money. This full flexibility is especially noticeable when it comes to load, dynamic response, working space and mechanical design of the high-speed versions and compact systems. The space-optimised systems with freely scalable strokes are designed specifically for the application. They require less space for movement and lend themselves more easily to customised and modular adaptation to application conditions. This enables maximum working space coverage.

Their mechanical design makes the systems easy to program; for example, only one axis needs to be activated for vertical movements. Functions such as energy switch-off in the normal position also make the handling systems very energy efficient, while the Cartesian robots from Festo are also easy to maintain and service.

The quickest way ever to the right handling system

There really is no quicker or easier way: the Handling Guide Online considerably increases your engineering efficiency and gives you the certainty that your system is correctly sized. From design to delivery and installation only takes around 3 weeks.



Benefits

Quick: Find the right handling system, including CAD model and commissioning file, in 20 minutes.

Intuitive: The Handling Guide Online is very easy to use and features structured data prompts.

Efficient: Greatly reduces engineering time and effort since the design is ready in just a few minutes.

Planning reliability: The net price is displayed immediately, allowing you to calculate your costs with certainty.

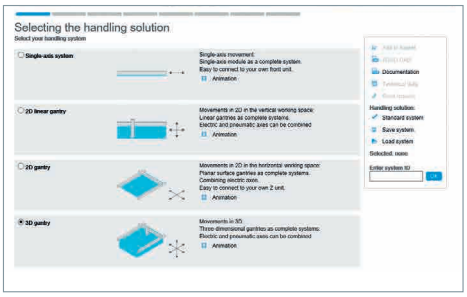
Shorter time-to-market: Only around 3 weeks from configuration and ordering to delivery and installation. It helps you reach your goal more quickly.

Versatile: The Handling Guide Online now also includes highly dynamic and compact handling systems. So nothing is left to be desired. If you still cannot find what you need, we will design it for you.

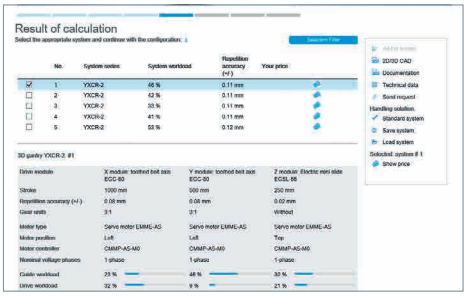
The Handling Guide Online – the fast route to your handling system

The Handling Guide Online is a configuration and ordering platform in one. This unique online engineering tool helps you to configure and order your standard handling system. It minimises your engineering time and effort and guides you to the right solution in record time.

Three steps to your handling system:
www.festo.com/handling-guide



1st step:
Choose the type of handling system and enter your application data into the Handling Guide Online. The tool calculates appropriate handling systems, including price.



2nd step:
Select the most suitable handling system from the list of suggestions. The correctly configured CAD model and the data sheet with all the relevant figures are immediately available for download.

3rd step:
You can use additional options to configure your selected system in accordance with your requirements. Then add the preferred handling system to your shopping basket and confirm your order. Festo will deliver a ready-to-install system, including all user documentation in accordance with the EC Machinery Directive, as quickly as possible.

Efficient commissioning:
The commissioning files are custom created in the Handling Guide Online on the basis of user input and the calculated system. They can be loaded directly into the motor controller. The sets of values are individually adapted to the handling system and consist of axis dimensions, motor characteristics, feed constants and dynamic data. A special feature is that the controller settings are automatically calculated based on the payload, the dead weight and the system dynamics entered by the user. This shortens the time-to-market for you or your users.

If you have specialised technical requirements, you can simply send the application data you have entered to our experts with a single mouse click, and receive a customised offer.

Simply configure and order – handling systems and Cartesian robots

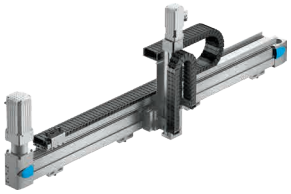
The ready-to-install systems provide you with fast and reliable solutions for standard applications: fully assembled, tested and perfectly coordinated, including energy chain, connection technology and matching drive package.

1D handling systems

Single-axis system: for movement in one dimension
The single-axis system with its high mechanical rigidity and sturdy design is ideal for long, one-dimensional strokes and large loads. A matching motor and motor controller package from Festo, as well as many other options, round off the ready-to-install complete system.

- Fully assembled and tested
- Energy chain for reliable operation
- Standardised interface for easy connection of individual front units

2D handling systems

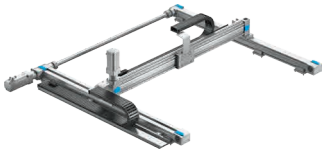


Linear gantry: for vertical movements in 2D
High mechanical rigidity makes this linear gantry precise, even with very long strokes of up to 3000 mm in the Y direction. The tubing and cables are routed through energy chains, ensuring outstanding operational and process reliability.

- Fully assembled and tested
- User-friendly mounting and assembly, even during servicing

Highly dynamic linear gantry: for maximum dynamic response in limited space
The Cartesian high-speed robot offers maximum dynamic response with max. 95 picks/min, high flexibility and a compact design. Its mechanical design is based on the linear gantry EXCT. Ideal for flexible handling with free movement in the vertical plane even when installation space is limited.

- Slim design with very compact Z-axis
- Parallel kinematic principle
- Integrated energy chain



Planar surface gantry: for horizontal movements in 2D
With its high mechanical rigidity and sturdy design, this planar surface gantry can be used anywhere, whether with heavy workpieces or high payloads. At the same time, it is extremely precise – even with long strokes.

- Different sizes and variants are available
- Standardised interface for easy connection of individual front units

Simply configure and order – handling systems and Cartesian robots

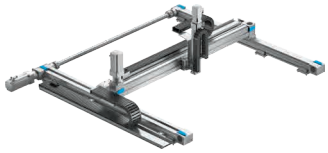
Highly dynamic surface gantry: maximum dynamic response in the installation space
The gantry with robotic functionality has an excellent dynamic response of up to 100 picks/min and covers the working space of two SCARA robots. The working space of the XY planar surface gantry makes handling highly flexible with free planar movement.

- Extremely compact and flat design
- Excellent dynamic response thanks to extremely small moving mass
- Virtually free of vibration

Compact planar surface gantry: for maximum working space coverage
Where every millimetre counts, the compact planar surface gantry based on the EXCM shows its advantages. It combines outstanding functionality with an extremely compact, flat design and maximum working space coverage.

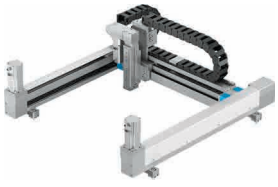
- Flat and compact for optimised use of space
- High payload

3D handling systems



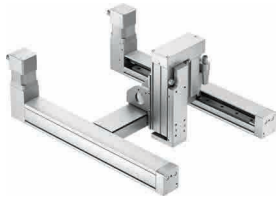
Three-dimensional gantry: for three-dimensional movements in a space
The Cartesian robot is ideal for very long strokes of up to 3000 mm in the X direction – even with high loads. The combination of several axis modules means it can be used anywhere, for light to heavy workpieces or large payloads.

- Pneumatic and electric components are freely selectable
- With matching Festo motor and motor controller package, and energy chain



Highly dynamic three-dimensional gantry: for maximum performance
With up to 100 picks/min, the three-dimensional gantry based on the EXCH is highly dynamic as well as extremely compact and flat. The working space can be scaled in the X and Y direction.

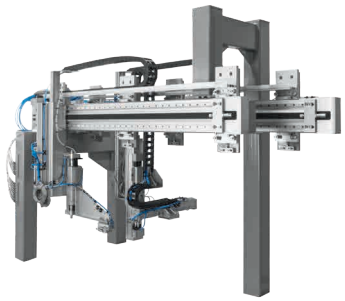
- Optimum dynamic response with up to 100 picks/min
- 30% more efficient due to a lower moving mass
- Low centre of gravity: minimal overshoot, enhanced positioning accuracy and reduced demands on the frame



Compact three-dimensional gantry: for high payloads in the smallest working space
The extremely space-saving 3D system is excellent at absorbing high forces and torques. It offers the same smooth running characteristics and high positioning precision.

- Flat and compact for optimised use of space
- High payload
- Configurable length and width
- With electric mini slide EGSC or pneumatic mini slide DGSL

Tailored to your requirements – application-specific solutions and control cabinets



Individually developed
In addition to flexible standard products, Festo also develops handling systems based entirely on your individual, industry-specific requirements, for example with freely definable axis geometries for shorter cycle times or for integration into machines with minimal space requirements.

The benefits to you:
- Optimised performance
- Customised solutions for special applications
- Fast planning, design and assembly
- Optional: customised gripper solutions

Matching control cabinet solutions
The matching control cabinet for your handling system for simple control tasks, pick & place applications or complex control systems for coordinated, highly dynamic and precise movement sequences with up to 6 axes. Festo control cabinets for control systems provide protection for control components for single-axis and multi-axis systems.

Take advantage of our specialists' many years of experience and know-how and describe your project requirements to us. We will take care of the rest.

Commissioning service for axis systems

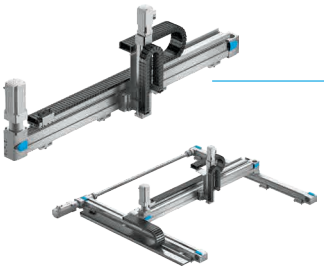
We make sure that everything runs smoothly for you. Festo supports you with hardware, software and service. The commissioning service offered by our trained experts reduces your process costs and increases system availability. You are also freeing up your staff, saving time and getting completely reliable systems with the best possible performance.

Our services:
- For reliable operation: checking the wiring, connections, motion paths and energy chains
- For optimum path travel: axis configuration and parameterisation
- For maximum performance: optimising the control parameters and homing
- For tested safety: activating the axes in test mode
- For secure knowledge: data backup and documentation
- For safe operation: instructing the machine operators, e.g. on error diagnostics and elimination of errors or on changing the position values
- The commissioning service is available for 1-axis, 2-axis and 3-axis systems, including in each case as a "safety package" for axis systems with safety module

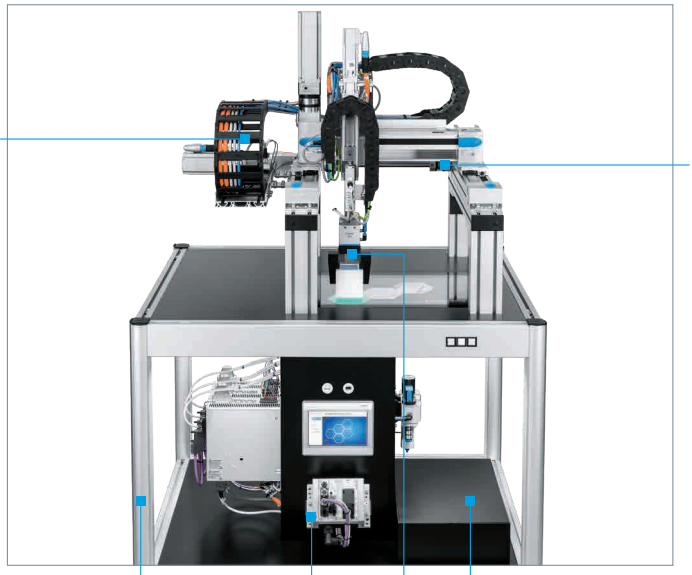
Simply complete: everything from a single source ...

Optimally coordinated hardware, software and services from one supplier: Festo. The complete, worry-free package extends from design engineering and advice on hardware to application-specific commissioning and after-sales service and training. It will enable you to quickly put your handling system to optimum use, lower your process costs and increase system availability.

Kinematic system



Our highly dynamic mechanical systems with integrated energy chain are available in numerous sizes and stroke ranges.



Vision system

Intelligent compact vision system for optimum quality inspection and conveyor tracking.

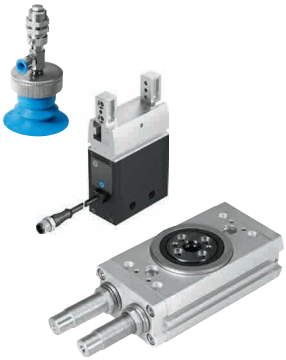
Frames

Tested frames you can rely on. Designed to match every kinematic system and application, in aluminium or steel.

Controller

For centralised control directly in the system or decentralised control in the control cabinet.

Front unit



Rotating, gripping or vacuum: you receive lightweight, precise and powerful solutions.

Service

Our experts take care of your handling systems. From commissioning and training to after-sales service, we are there to help.

135625 en 2018/12 – Errors and omissions excepted