

## Toyota Material Handling in Europe

### Total coverage

The Toyota Material Handling network extends to over 30 countries in Europe with more than 4500 mobile technicians.

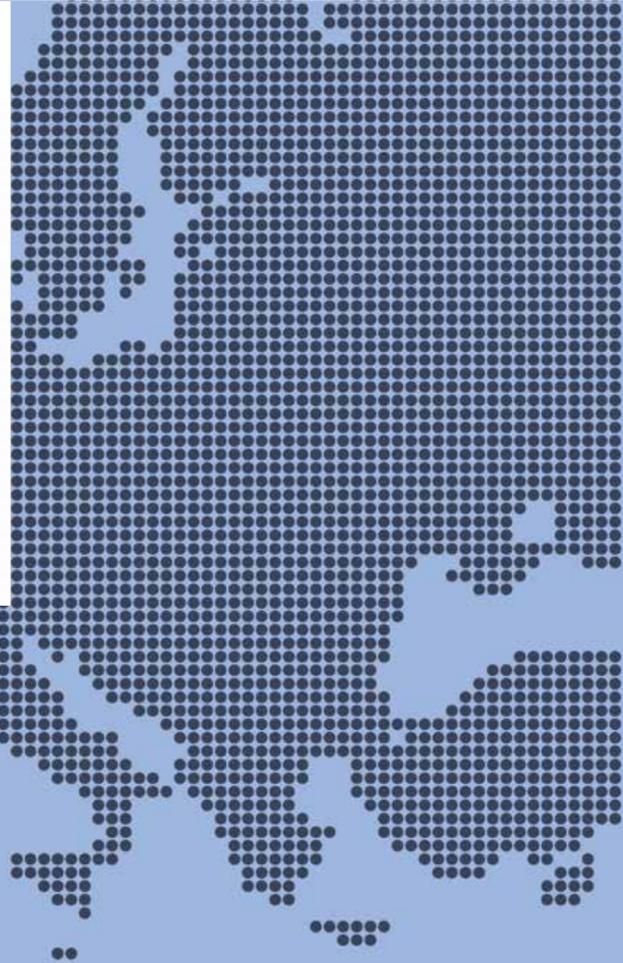
### Always local – with global support

Wherever you are located in Europe, we are always local, due to our extensive coverage, but with the stability and back-up of a worldwide organisation.

### Made in Europe

Over 90% of trucks we sell are built in our own European factories, in Sweden, France and Italy – all to TPS quality standards. We employ over 3000 production staff in Europe and work with over 300 European suppliers.

Approximately 15% of our European production is exported to other parts of the world.



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## Autopilot

Automated carts for lean transport



### Simple automation: simplify – standardise - optimise

Introducing automation to your business can be a big investment in terms of time and cost, but it does not always need to be complicated to be efficient and productive. For simple A-to-B transport or more complex routes, the Autopilot TAE050 from Toyota, an automated guided cart, can optimise your operation. You can install this low-cost solution yourself and have it up and running in no time. The TAE050 will smoothen the internal flow of your site in an accurate and safe way, reducing damage cost. Your operations will be simplified and optimised, especially in manufacturing sites, e-commerce business or healthcare.



# Simplify

## AUTOMATION DOES NOT NEED TO BE COMPLEX.

The Autopilot TAE050 is simple and compact, ideal for handling light items. This automated guided cart is very easy to use and install. You can simply stick magnetic tape on the floor, add markers to command the truck and let it run. More advanced routes can be programmed via Excel. Its flexibility in layout, programming and item handling make the TAE050 a simple low-cost automation tool.

### SIMPLE INSTALLATION

Sketch out the layout you want and place the magnetic tape and markers on the floor. For a simple layout with 45° turns the Basic drive commands (FFC) with green & blue markers are ideal including 3 drive, 4 safety scanner area and 2 pin commands. For more flexibility in layout, turns and speeds, you can use the Advanced drive commands (PCC) to link several commands to a single green marker.

### SIMPLE PROGRAMMING

The advanced drive command (PCC) programming can be done without any special software or equipment. Each green marker has a number in an Excel program, and several commands can be enabled at each marker according to the settings you create in the Excel table.

### SIMPLE TURNING

Turning is controlled by two drive motors located in the centre of the chassis. This allows for tight turns in confined areas. Programming is made very easy with the pre-selective turns in the Excel sheet.

### SIMPLE CONTROL

The user-friendly touch screen gives you access to key information and allows you to select a certain pre-programmed drive mission. With the infrared remote control option you can start the vehicle from a distance. Plug-in solutions for more advanced integration can be provided.

### SIMPLE CHARGING

The XFC-battery can be easily exchanged sideways with a dedicated tool. The TAE050 can also be ordered with a built-in charger for fast opportunity charging.

# Standardise

## CREATING A SAFER WORK SPACE

According to industry estimates, around 70% of the cost of material handling operations relates to the driver, and an even higher percentage to driver errors. Automation is therefore a safer alternative for consistent productivity levels thanks to a fork-free, predictable and accurate method of delivery. They can operate around the clock without any breaks needed, and follow fixed routes.

### FLEXIBLE LOAD CARRIERS

The TAE050 is available with aluminium trolleys from Toyota adaptable to all loads. For light loads up to 140 kg, we offer bolt-on racking to carry the load. For heavier loads the machine can be combined with an adjustable EURO pallet-sized trolley to tow the carrier via the telescopic arm (up to 500 kg). It can also be used as a compact tow version (100-175 kg depending on the speed). In both cases the machine can be programmed to put the pin up or down to release or pick a trolley. Local fixtures can be attached to the carriers. Even customised carriers can be used.

### ACCIDENT-FREE OPERATION

The safety laser scanner with 7 monitoring fields stops and makes sound when detecting an obstacle or person in front of the vehicle. An advanced 16-field obstacle scanner is available as option for mixed or very busy traffic situations. A strong metal bumper with rubber skirt sweeps away tiny items that could damage the wheels avoiding the machine to stop. The TAE050 can have a personalised sound to improve awareness and safety.

### HIGH ACCURACY

The marker positions are continuously checked by the machine by measuring the distance in-between. If the 10%-tolerance is exceeded the machine will stop. This is a cost-effective way to maintain high accuracy without the need for RFID tags.

# Optimise

## A LEANER PROCESS IS A MORE COST-EFFECTIVE PROCESS

The Autopilot TAE050 is an economical solution that can replace repetitive, light-duty work, leaving operators to do more value-added tasks. Truck and operator levels are therefore optimised, which saves cost and increases productivity. The risk of damage is also lower, thanks to the TAE050's lean and accurate way of working with high flexibility.

### LOWER DAMAGE COST

The high precision of the TAE050 without possible human errors lowers the risk of accidents or damage to goods, or racking reducing costs.

### LOWER LABOUR AND HEALTH COST

TAE050 can replace operators' repetitive work, allowing workers to do more complex tasks increasing staff efficiency. This simple automation system brings less risk of work-related injuries or health problems by applying the highest safety level

### LEANER PROCESSES

Simplified processes with an optimised amount of trucks and operators, consistent productivity levels, optimised internal flow with no bottlenecks and on-time deliveries increase efficiency and productivity.

## Autopilot TAE050 Automated guided cart

Automation does not need to be complicated to be effective. The Autopilot TAE050 is an economical solution to optimise your operation, whether in simple A-to-B transport or more complex layouts. The TAE050 can take away bottlenecks and takes over manual and repetitive work. Especially in production areas, e-commerce business or the healthcare environment the TAE050 can increase efficiency.

### Easy installation

The TAE050 automation system is very easy to set up. After defining the (un)load stations and material flow the magnetic tape and floor markers can be stuck to the floor. The machine will detect the tape when starting up.

### Simple programming

No programming is required for working with the basic drive commands, and for more complex routes, programming is very simple. After setting out the workstations and route, you can easily link the commands to each marker in Excel via the TASK Data Tool. Full installation and programming can be done on site by yourself, making it very cost-effective.

### Always on the move

The TAE050 comes with an XFC battery that allows for 2-shift operation. The battery can be removed sideways for quick replacement in a multi-shift application. The machine is also available with a built-in charger option for opportunity charging.

### Safety above all

This fork-free vehicle is designed to follow the magnetic tape accurately and read the command markers. An obstacle detection scanner is fitted at the front to stop for people or items on the route to avoid any accidents or damage.

### TPS

Like all Toyota trucks, the Autopilot TAE050 is built according to the Toyota Production System, assuring the highest levels of quality, durability and reliability.

A leaner and more cost-effective process

100%  
Accuracy in positioning

