

# TORNADO Vertical Storage Machine

Visit [www.constructor-storage.com/Products/Storage-Machines-and-WMS/Lift-Systems-TORNADO/](http://www.constructor-storage.com/Products/Storage-Machines-and-WMS/Lift-Systems-TORNADO/) for the latest information.

## **(Dynamic) Storage (and retrieval) machines – Automated solutions for efficient warehousing.**

Highly efficient picking and packing, fast provision of small parts, quick delivery of ordered goods all delivered by the most efficient the route possible, to minimise operator walking and waiting times, it's all possible with Dexion's dynamic storage and retrieval machines (systems).

Custom-designed to suit individual requirements, the ultra-fast TORNADO storage machine and the Vertical Carousel are both designed to maximise building height while standing on small footprints. Alternatively, the HOCA Horizontal Carousel is the optimal solution for buildings with restricted ceiling heights yet large floor space.

Lift Systems (TORNADO) is a product in the category

## **Storage Machines and WMS**

Lift Systems (TORNADO)

Vertical Carousel (PATERNOSTER)

PaC-Light Update package

Horizontal Carousel (HOCA)

WMS & Control Software

Small part handling matrix

Please visit [www.constructor-storage.com](http://www.constructor-storage.com) to see our other products.

## Description

Storage Machines & WMS › Lift Systems (TORNADO)

Up to 65% increased productivity whilst saving up to 75% space

## References

Bosch, Denmark  
Berner Oy, Vantaa  
Elektroskandia, Finland  
Servistik, Sweden  
Stema Engineering, Denmark  
Scandinavian Eyewear, Sweden





**Studies show that more than 2/3 of operators' time at work is spent either retrieving or transporting stored goods.**

This means that picking operations account for up to 55% of all warehousing costs. Highly efficient warehousing therefore increasingly provides a major competitive advantage.

The benefits of our automated TORNADO storage machines allow you to:

- ✓ store small parts, bulky goods and large items
- ✓ up to 70% savings in floor space whilst providing the same storage capacity
- ✓ can be used as a lift between different warehouse levels and/or floors with multiple access openings
- ✓ guarantee fast, efficient and accurate order performance
- ✓ reduce operators' manual transport routes to a minimum

- ✓ minimise search times and avoid picking errors
- ✓ shorten operator training times
- ✓ minimise order throughput times

## Products

# You should have it in store

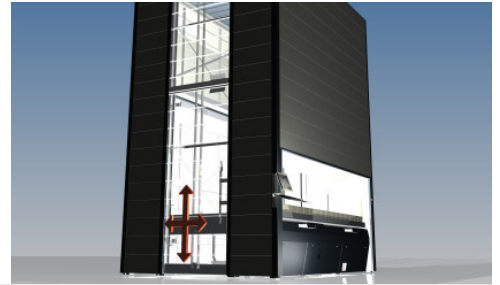
- **up to 70% savings in floor space** whilst providing the same storage capacity
- can be used as a lift between different warehouse levels and/or floors with multiple access openings
- **saves up to 65% picking time** compared to static systems
- **less search time** and **fewer picking errors** due to Pick-by-light system - optional
- **ergonomic operation** through “goods-to-person” principle“
- adapts to existing building structures
- **optimal protection** of the stored goods against dust, contamination and unauthorised access
- **safe warehousing** through continuously monitored storage shaft
- flexible and easy integration into existing IT structures with Windows-based machine controls
- supports external peripheral units such as barcode scanners, counting scales, label printers etc for a paperless operation



- **high picking accuracy**  
due to optimal operator guidance

## Technical Data

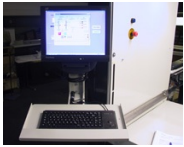
Storage Machines &amp; WMS › Lift Systems (TORNADO)



Tray width (internal)	1250 – 4250 mm
Tray depth (internal):	520, 620, 720, 820 and 1220 mm (other dimensions on request)
Tray load capacity:	up to 600 kg
Load height:	850 mm maximum
Total load capacity:	60 t maximum
Total height:	4 to 15 m
Electrical connection:	400 VAC
Motor output:	5.5 kW

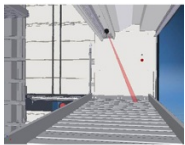
# Accessories - Lift systems (TORNADO)

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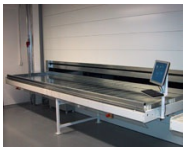
## Article Management Software TC2000

TC2000 is a complete WMS designed for automatic storage and can be integrated into all Constructor machines.



## Light Pointer

Light pointer shows where the next pick are located in the tray. This reduces picking errors and makes picking faster.



## In/Out feeder

In/out feeder automatically brings the tray out of the machine to a place where you can easily use a crane for handling of bulky heavy items.



## Electrical Door

With an electrical door you can easily close the machine for the night and prevent unauthorized use. It can also be integrated to fire suppression systems.



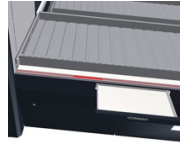
## Batch Picking List

TC2000 makes it possible to use batch picking with the machines. A batch picking list can be integrated beside all machines.



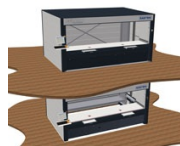
## Labelprinter

Model CLP521



## Position Indication List

The position indication list shows the operator in which direction the machine should move from their present location to the next pick. This improves picking speed and reduces errors.



## Picking Openings

Several picking openings can be placed on the same side of the machine or on opposite sides, on the same level or on different levels.



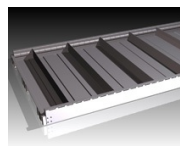
## Cladding Window

With cladding windows you can make your machine look more visual. Through plexi-glass windows you see the speed of the Tomado machine at work.



## Wireless Bar code reader

To optimise picking efficiency.



## Divider

When there is a need for separating items, Tomado trays and Paternoster carriers can be equipped with dividers instead of boxes.



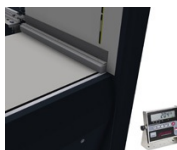
## Web camera

Web camera for remote support.



### Fibre Boxes

Tornado trays can be equipped with boxes in different sizes for small part handling.



### Tray weight control

Tray weight control can be installed to Tornado opening. The scale shows the tray load on a separate display that will be installed into the picking opening.