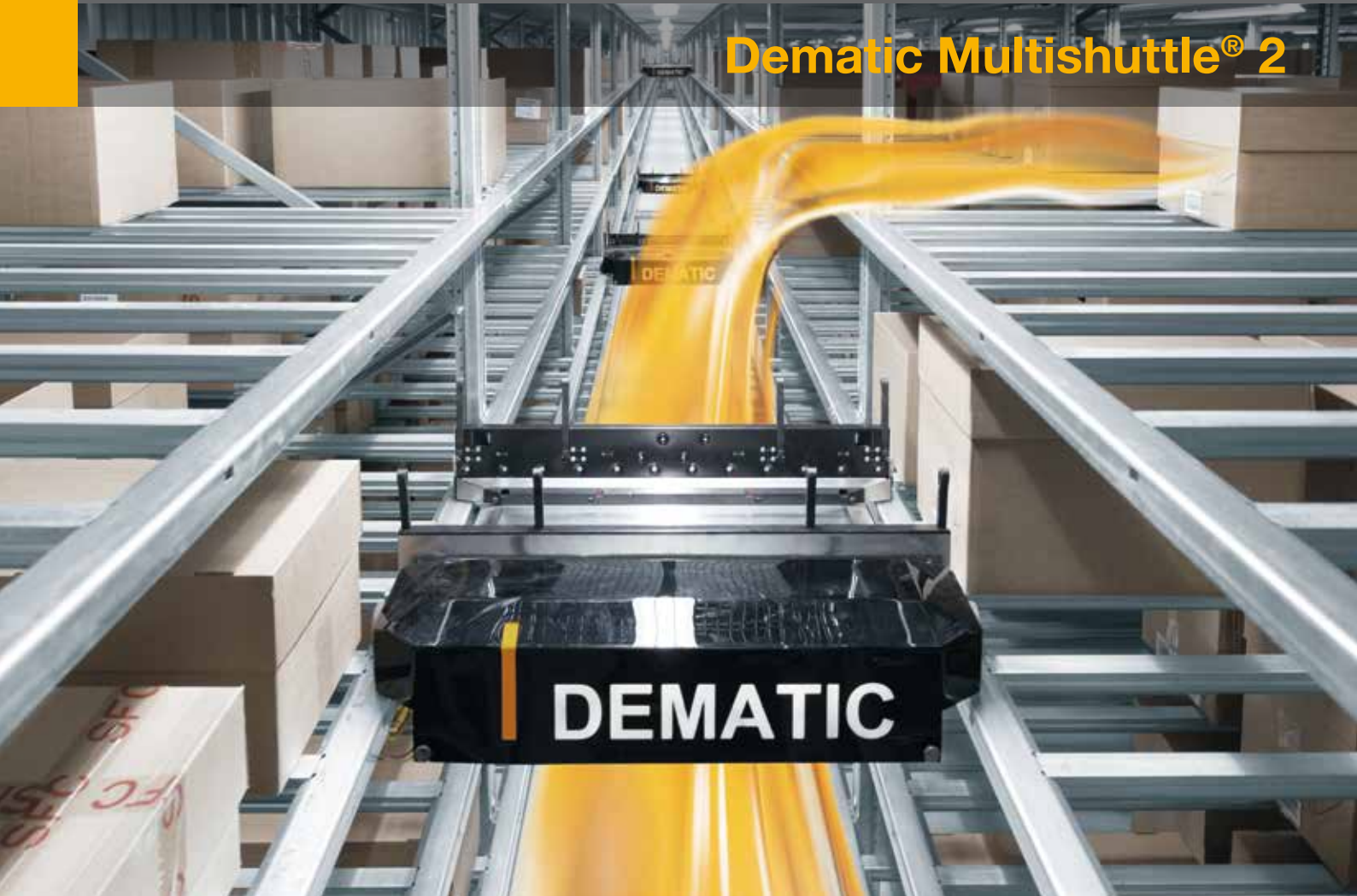




# Dematic Multishuttle<sup>®</sup> 2



We **Optimise** your Supply Chain



**DEMATIC**

In intralogistics new cross-industry trends emerge: rapid product growth, small batch sizes, higher performance requirements, sequence-based provision to name the most important.

To respond to these trends and to provide automated logistics solutions largely independent towards changes in the order structure and product diversity, we have followed a top design criterion in the development of Dematic Multishuttle<sup>®</sup> 2: Flexibility.

Thanks to its modular and redundant design you can be calm at heart with the Dematic Multishuttle<sup>®</sup> 2 for your future demands.

**STATIC**  
**FLEX**  
**BELTED**





## About Dematic

Dematic is one of the world's leading suppliers of logistics automation systems and solutions. With a global knowledge network of highly skilled logistics professionals, Dematic provides its customers a unique perspective in world class materials handling solution design.

What this means for you: Even in international projects, you have a single point of contact. Dematic takes responsibility for throughput and system uptime in logistics projects.

# Compact with high rate capacity

**Dematic Multishuttle® 2 is a highly effective system for buffering totes, cartons, trays or individual bundles. It is an efficient staging solution that provides precise load sequencing at high rates, in less space, with more operational flexibility.**

## Typical applications

Dematic Multishuttle® 2 is ideal for supplying product to piece pick order fulfilment modules or mixed case pallet building operations. It can also serve as a pick face replenishment solution. In addition, Dematic Multishuttle® 2 can be applied as a short term buffer storage system or as a manufacturing support subsystem for production operations.

## The new generation

The Dematic Multishuttle® 2 is the second generation of shuttle technology. The all new design incorporates outstanding engineering, a flexible load extractor, halving of weight, doubling of speed, higher payload capacity, and multi-deep storage capability. Static, Flex and Belted models allow the solution to be based on the customer's unique product requirements.

The Dematic Multishuttle® 2 Flex option incorporates flexible load handling technology, enabling high performance storage and retrieval of variable carton and tote sizes and package formats, without the use of trays. The load handling device "flexes" its telescopic arms to adjust to the exact width of the load to be handled as "fingers" engage the product for transfer on and off of the shuttle.

## Telescopic load extractor reaches both sides of rack

The innovative eight finger design of the load extractor and overlapping telescope arms allow for the use of only two telescopic sections to store products single, double, or multi-deep. The load capture fingers are plastic cast, carbon fibre reinforced for robust long term performance.

The Flex Shuttle minimises space between products and maximises storage density and hence minimises the cost per storage location.

## Dematic Multishuttle 2

### redefines warehouse logistics:

Increased throughput:	Up to 10 times higher than conventional storage systems
High utilisation:	Feeds workstations with high rates to keep workers fully utilised
Ultra-high storage density:	Supports multi-depth storage and handling of units of different sizes tightly packed without fixed storage locations. Lifts can connect work stations above and below to ensure maximum density and use of space.
More layout options:	Fits into overhead spaces, under/over obstructions, best cube utilisation
Precise sequencing:	Presents loads to pick stations or palletisers in exact sequence
Range of load types:	Flex option accommodates various load sizes
Redundancy with back-up:	Identical carriers provide duplicate service; carriers are interchangeable; work platforms in the rack aisles allow manual access to inventory and service to shuttles
Scalability:	Add more aisles, levels and lifts in future to provide more throughput



**Like all products from Dematic, Multishuttle can be optimally integrated into a SAP EWM or WMS solution**

- Load types: Plastic tote box, cardboard carton, trays, bundles
- Load weight: up to 50 kg
- Variants:
  - Static Telescopic load extractor (fixed length & width)
  - Belted Belt conveyor load deck
  - Flex Telescopic load extractor; expands/contracts, accommodates a range of load sizes
- Suitable for chilled storage
- Storage density: single or multiple-deep





# Specifications

Designed with flexibility and efficiency in mind, the Dematic Multishuttle® 2 offers standard modular components and the flexibility to be scalable, especially for companies experiencing rapid growth and change in product demand profiles.

## Specifications

### Load types

Plastic tote box, cardboard carton, trays, bundles

### Load weight

Capacity: Up to 50 kg

### Configuration

Multishuttle Static: Telescopic load extractor (fixed length & width)  
 Multishuttle Belted: Belt conveyor load deck  
 Multishuttle Flex: Telescopic load extractor; expands/contracts, accommodates a range of load sizes

### Load storage density

Standard: Single or double deep  
 Optional: Multiple deep

### Load sizes

Tote box/Tray mm  
 Length 200 - 875  
 Width 150 - 650  
 Height 50 - 600

Cartons/Packages mm  
 Length 200 - 850  
 Width 150 - 625  
 Height 50 - 600

## Specifications

Electrical system: Low voltage DC  
 Load extractor: Telescopic, two sided  
 Shuttle communication: DPC (Dematic Powerrail Communication)  
 Velocity driving axis: 4 m/s  
 Acceleration: 2 m/s<sup>2</sup>

### Operating temperatures

Ambient: 0 °C - 40 °C  
 Freezer (optional): Up to -30 °C (coming soon)  
 Relative air humidity: 5% - 90%, no condensation

## Benefits

**Throughput** 10 x higher than conventional stacker cranes

**Scalability** Extendable

**Layout** Fittable to existing building

**Flow** Precise load sequencing

**Racking** Simple & cost effective

**Energy** 60 volts DC

**Operator walkway** Manual access to inventory

**Configuration** Captive, single/double and multi-deep



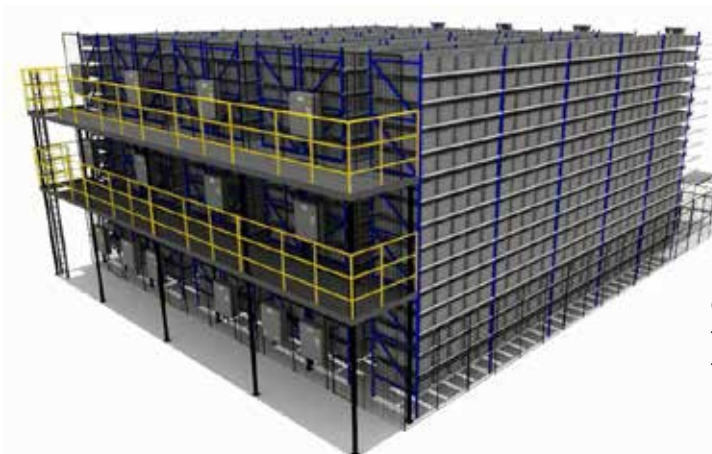
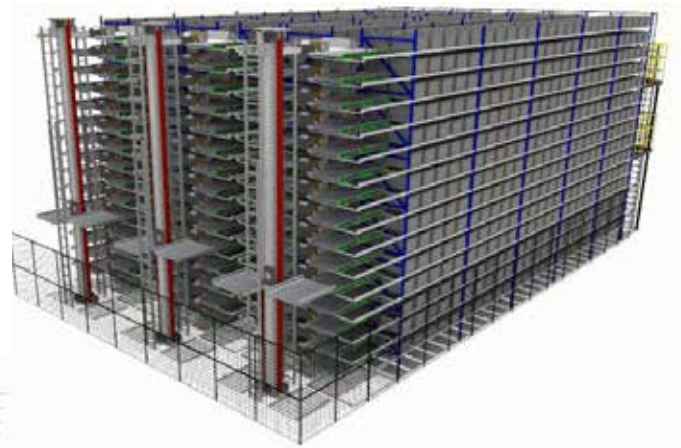


## The Dematic Multishuttle® subsystem

Flexible, scalable, modular

The **Dematic Multishuttle® 2 System** consists of multiple levels of racking, shuttles, lifts, buffer conveyors, controls and Warehouse Control System Software. Each level includes input/output conveyors and a shuttle that travels horizontally to access loads stored in the rack structure, typically totes, cartons or trays. An extraction device on each shuttle accesses the loads in the rack. Since there is a shuttle captive in each aisle, on each level, ultra high throughput can be achieved. A vertical lift is utilised to bring the load to the input/output conveyor. Load sequencing occurs as loads are retrieved in the order required for the order fulfilment function.

Front view of a typical 3 aisle Multishuttle subsystem, with double deep rack. A dedicated dual lift module provides flow into and out of each of the rack levels.



Rear view of a typical 4 aisle Multishuttle sub-system with double deep rack. Service platforms allow access to inventory and for service to each shuttle. Replacement devices for shuttles are optionally available.

[www.dematic.com/multishuttle](http://www.dematic.com/multishuttle)

#### Headquarters Central Europe

##### **Dematic GmbH**

Martinseestr. 1  
63150 Heusenstamm  
Germany  
T +49 69 583025-0  
[info@dematic.com](mailto:info@dematic.com)

#### Customer Contacts Central Europe

##### **Germany**

Dematic GmbH  
Martinseestr. 1  
63150 Heusenstamm  
Germany  
T +49 69 583025-0  
[anfrage@dematic.com](mailto:anfrage@dematic.com)

Dematic GmbH  
Marienbergstr. 94  
90411 Nuremberg  
Germany  
T +49 911 70401-100  
[anfrage@dematic.com](mailto:anfrage@dematic.com)

Dematic Services GmbH  
Martinseestr. 1  
63150 Heusenstamm  
Germany  
Hotline +49 180 DEMATIC \*  
[info.cs@dematic.com](mailto:info.cs@dematic.com)

Dematic GmbH  
Werner-von-Siemens-Str. 6  
86159 Augsburg  
Germany  
T +49 821 45025-100  
F +49 821 45025-150  
[anfrage@dematic.com](mailto:anfrage@dematic.com)

##### **Austria & Switzerland**

Dematic GmbH  
Birmensdorferstr. 87  
8902 Urdorf  
Switzerland  
T +41 43 455 60 60  
F +41 43 455 60 70  
[info.ch@dematic.com](mailto:info.ch@dematic.com)

##### **Benelux**

Dematic Services GmbH  
Europalaan 4c  
5232 BC Den Bosch  
Netherlands  
T +31 736 460-460  
F +31 736 460-469  
[info.nl@dematic.com](mailto:info.nl@dematic.com)

##### **Additional Contacts**

For more local offices, service locations and partners please refer to our homepage [www.dematic.com/contact](http://www.dematic.com/contact)

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