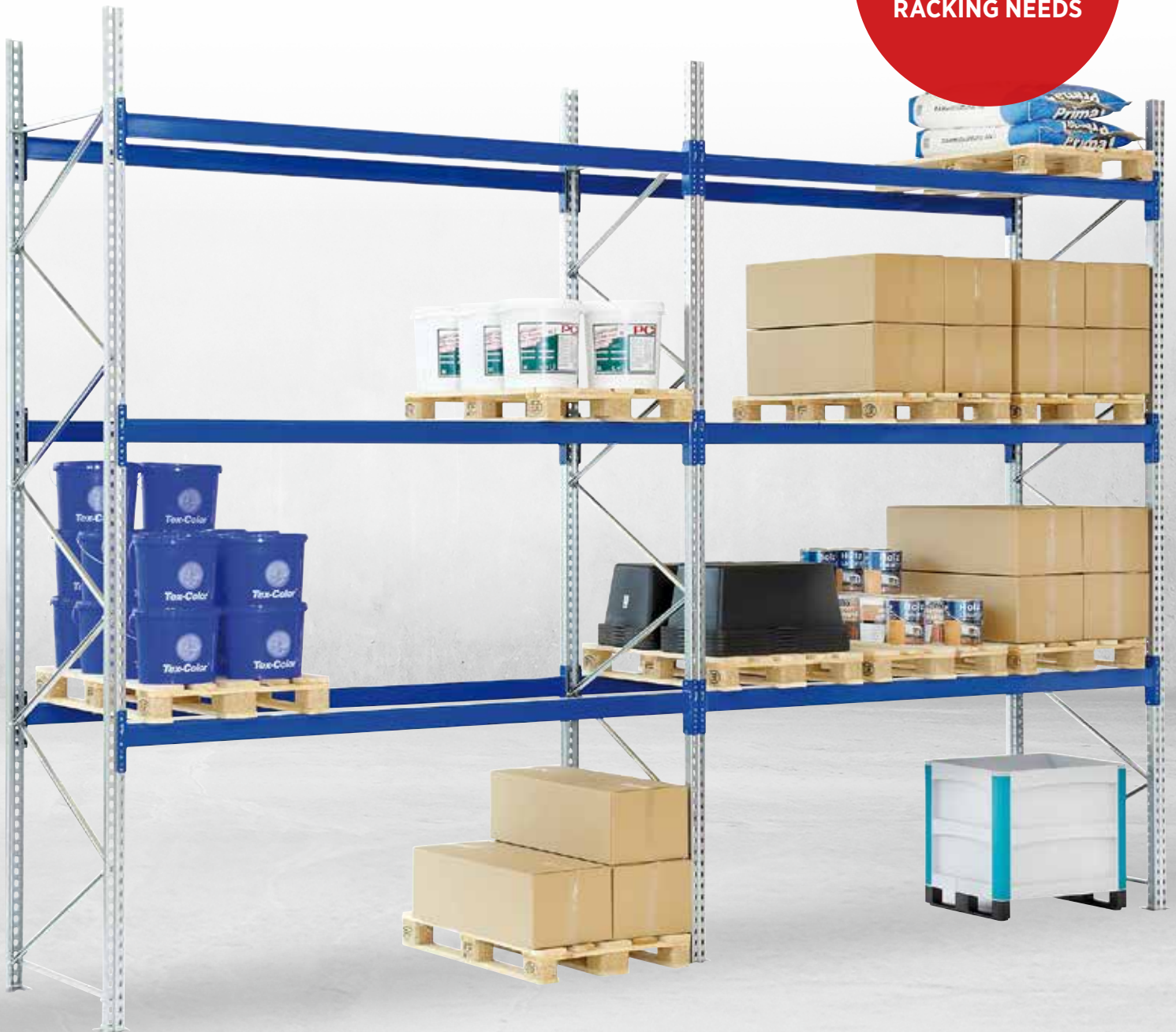


PALLET HANDLING SOLUTIONS

For storage & handling of goods stored on pallets

CUSTOMISABLE
TO SUIT YOUR
RACKING NEEDS





**VERSATILITY
IS KEY TO
EFFICIENCY!**

WHY BITO?

For more than 50 years BITO has been counting among the market leaders in the storage & material handling industry and is known as a reliable and innovative partner in planning and realizing complex storage and picking solutions.

Our clear focus on market demands has helped us to maintain and strengthen this position. BITO innovations are inspired by the requirements of our customers and the needs of the industry in which our customers have to compete.

With our expertise in the intralogistics field we are able to support our customers in gaining the competitive edge.

As one of the few full line providers in this field, BITO supplies shelving & racking, bins & containers, order picking and in-house transport solutions for all industries. BITO products and services range from catalogue products to large-scale systems, from shelving for workshops, factories and offices to compact pallet storage for your intralogistics requirements, from small sized storage bins for your archive to large volume containers for efficient product handling.

On top of this, BITO provides customers a concept-to-completion service for any project size – whether for complex and demanding storage installations integrating different types of shelving & racking or for automated bin or tray storage facilities. BITO – Your single source supplier.

BITO performs all tasks related to a project, from layout planning over project management to assembly and after-sales service.

Your benefit: You only have to contact one person who will coordinate and realise your entire project.

THE WAREHOUSE CLASSIC COMES IN MANY VARIATIONS

BITO PALLET RACKING PRO

IDEAL IF ...

- + ... you need direct access at any time to all products in your range.
- + ... you need a versatile storage system and want to store load carriers of all shapes and sizes.
- + ... you want to store large quantities of each item, with a relatively small range of goods or if you need to store a wide range of goods, but each type in small quantities.
- + ... you want to pick goods directly from the pallet and use the upper storage levels as buffer space.

BITO PRO PALLET RACKING CONTENTS

- 3** WHY BITO?
- 4** APPLICATION
- 5** THE SYSTEM
- 6** CONVERTING A
SUPPLY STORE INTO
A PICK STORE
- 18** COMPONENTS
- 22** SERVICE



THE SYSTEM

Classical pallet racking remains, as ever, the most popular storage system for palletised goods. Flexibility and relatively low investment costs have made this system essential for storage and order picking. Despite modern technologies which are increasingly adopted in warehousing and order picking, “classic” pallet racking is still most commonly used in this field.

What are the specific benefits of BITO pallet racking?

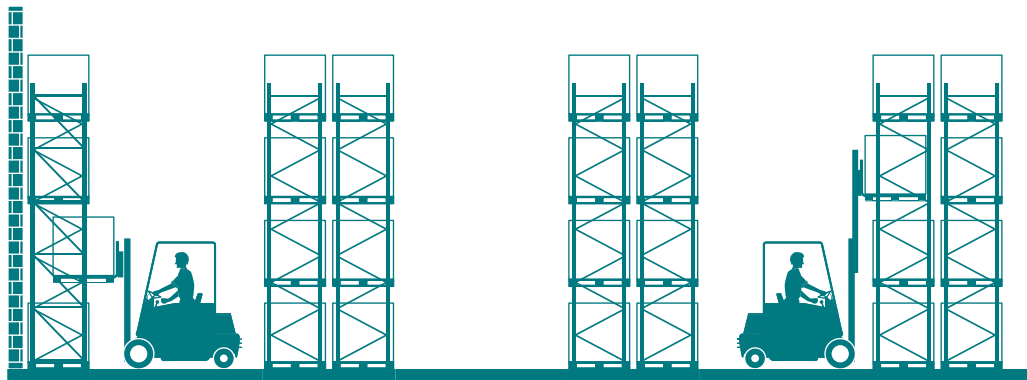
- + BITO Pallet racking can be arranged in many different racking configurations.
- + Available with a wide range of practical accessories improving safety and functionality.
 - + All pallets are easily accessible.
 - + Ideal for storing products of any size and shape.
- + Utmost flexibility, since BITO pallet racking can be adapted at any time to suit a wide range of applications.
 - + Cost competitive solution.

BITO Pallet racking is available in a range of variations, the most common of which are broad aisle racking, narrow aisle racking and mobile pallet racking.

BITO WIDE AISLE PALLET RACKING

A wide aisle configuration is the standard solution for pallet racking. It is generally serviced with front stackers, reach trucks or man-up stacker cranes. The aisle width depends on fork lift truck dimensions. Loads stored at floor level height can be conveniently handled with a hand pallet truck or an electric lift truck.

CLASSIC SOLUTION



- + Entry-level variant for cost-effective pallet storage
- + Ideal for storing all types of goods while providing easy accessibility to all products
- + Access by all types of truck
- + Changes to product range are no problem, since racking re-configuration is possible at any time
- + Various in-feeding options (short-side facing, long-side facing, double deep storage)
- + Intelligent colour selection provides increased safety and a quiet work atmosphere
- + Cleverly designed upright and beam profiles maximise racking rigidity and stability
- + Combines perfectly with other BITO storage systems
- + Low investment costs

More information and downloads on
www.bito.com/en-gb/pallet-racking
www.bito.com/en-gb/success-stories
www.bito.com/en-gb/downloads

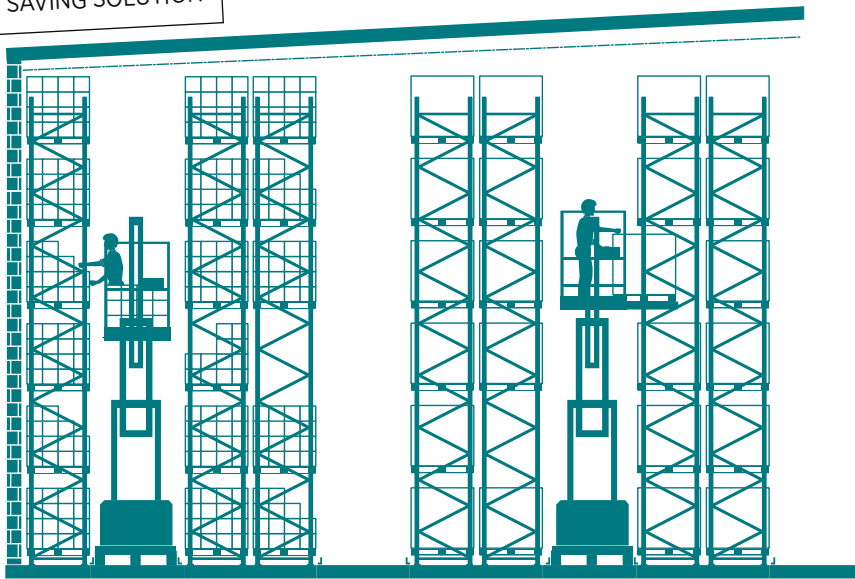


BITO WIDE AISLE PALLET RACKING

BITO NARROW AISLE PALLET RACKING

Narrow aisle racking allows to benefit from high density storage by making best use of your floor space and roof height. As a rule, narrow aisle facilities are serviced with man-operated stacker cranes or high-level order pickers. This solution also allows manual picking of smaller unit loads from all racking levels. Guide rails and inductive steering ensure that service vehicles always move precisely as intended.

SPACE SAVING SOLUTION



- + Perfect for optimal usage of floor space and vertical space.
- + Man-up stackers allow manual picking from all racking levels.
- + No need to relocate goods to lower storage levels for convenient picking.
- + The system offers high operating safety, as there is no need for individuals to walk in the aisles.
- + Medium investment costs because compact racking layout requires narrow aisle service vehicles.

More information and downloads on
www.bito.com/en-gb/pallet-racking
www.bito.com/en-gb/success-stories
www.bito.com/en-gb/downloads



BITO NARROW AISLE PALLET RACKING



BITO MOBILE PALLET RACKING

BITO MOBILE PALLET RACKING

Mobile pallet racking reduces the need for costly floor space. With the entire racking facility mounted on mobile bases, only one aisle needs to be open for picking at any one time. The other racking runs close together, enabling you to use most of your floor space for pallet racking. You can move individual aisles or entire sections of the racking, enabling you to access all pallets at all times. Instead of opening one main aisle it is also possible to open several smaller aisles simultaneously still wide enough for truck traffic.

HIGH DENSITY SOLUTION



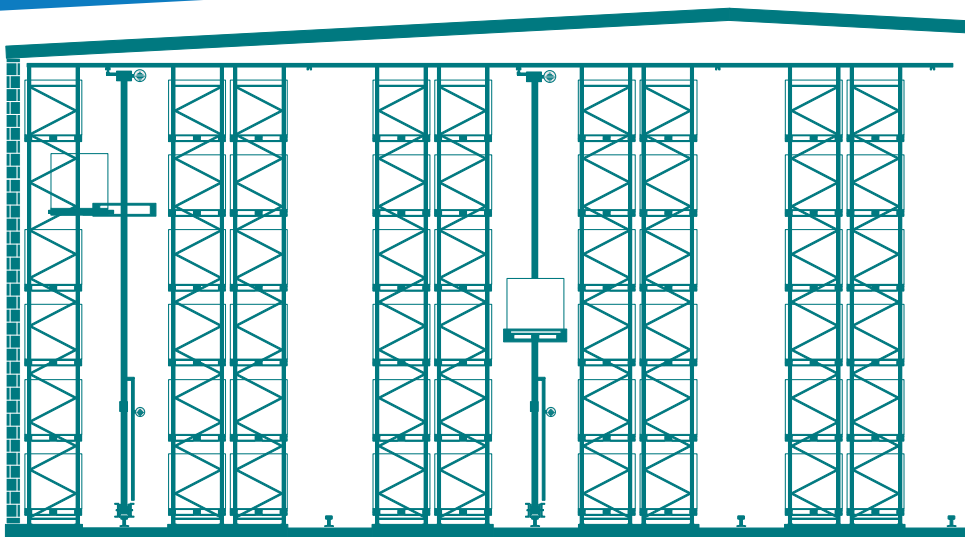
- + Ideal configuration for maximising storage capacity
- + Significant savings on floor area and best use of roof height
- + Ideal for stock supplies and seasonal stores
- + Compacting inventory in cold and chill stores means a significant decrease in energy costs
- + Higher investment costs

More information and downloads on
www.bito.com/en-gb/mobile-pallet-racking
www.bito.com/en-gb/success-stories
www.bito.com/en-gb/downloads

BITO PALLET RACKING WITH AUTOMATED STORAGE & RETRIEVAL (AS/RS)

Although “classic” pallet handling with fork lift trucks is widely spread, automated pallet handling is becoming more and more important. The higher initial investment costs pay off quickly, because orders can be picked and processed in much less time.

AUTOMATED SOLUTION



- + Near 100% product availability
- + Substantially shorter cycle and delivery times
- + Travel routes can be optimised
- + Continuous workflow without idle times
- + Enormous increase in productivity
- + Closed system without human intervention prevents workplace accidents
- + Higher investment costs

More information and downloads on
www.bito.com/en-gb/automated-pallet-storage
www.bito.com/en-gb/success-stories
www.bito.com/en-gb/downloads



BITO PALLET RACKING WITH AUTOMATED STORAGE AND RETRIEVAL (AS/RS)

BITO RETRO-FITTING SOLUTIONS

BITO PALLET RACKING: CONVERTING A SUPPLY STORE INTO A PICK STORE

STORAGE REQUIREMENTS CAN CHANGE OVER TIME

A business' circumstances can change, as can its storage and logistical requirements. If a picking system has become inefficient and picking poses stresses and strains on the body, f. ex. because retrieving items from the floor level becomes unergonomic or because too many individual items must be retrieved, a company should act quickly to adapt the existing storage system to the new situation.

BITO PROVIDES THE IDEAL SOLUTION

BITO pallet racking has a very wide range of applications. The system has been designed to allow fast adaptation to new needs, providing customers with a maximum amount of flexibility. A large selection of accessories helps to meet changing requirements and convert static pallet racking into picking installations. A rich set of configuration options that are quick to realise allows to customize BITO pallet racking. By fitting flow levels into the lowest racking level, pallet racking provides stock units for convenient picking at operator reach height whereas the pallet storage levels on top are used as buffer store. Depending on the type of accessory fitted to an existing system, the number of reference lines available for picking can be substantially increased.

BITO RETRO-FITTING OPTIONS

- + Extractable first pallet position
- + Various level decking options (mesh decks, steel panels, chipboard panels)
- + Carton or pallet flow levels
- + Combination with shelving (straight or inclined shelves)
- + Integration of pick walls with bins and containers of your choice
- + More options upon request (f. ex. pallet racking accommodating heavy duty containers with long-side pick opening, roller rail segments with flanged rollers, etc.)

BENEFITS

- + Considerably higher number of reference lines available at the picking face
- + Shorter travel routes and reduced pick times
- + Maximum flexibility in warehouse planning
- + Excellent ergonomic conditions for strain-free working

ORDER PICKING WITH BITO PALLET RACKING

RETRO-FITTING OPTIONS

AT FLOOR LEVEL HEIGHT



PALLET RACKING WITH ROLLER TRACK LEVELS FOR CARTON LIVE STORAGE (DROP-IN SEGMENTS)



PALLET RACKING WITH PUSH-BACK ROLLER TRACK LEVELS FOR CARTON LIVE STORAGE (SLOPED LEVELS)



PALLET RACKING WITH ROLLER CONVEYOR LANES FOR PALLET



PALLET RACKING WITH CONTAINER PICK WALLS



PALLET RACKING WITH SHELVING (STRAIGHT SHELF LEVELS)



PALLET RACKING WITH DROP-ON MESH DECKING



PALLET RACKING WITH CHIP-BOARD PANEL DECKING



PALLET RACKING WITH INTEGRATED SHELVING (SLOPED LEVELS)



PALLET RACKING WITH STEEL PANEL DECKING

[More information](#)

www.bito.com/en-gb/pallet-racking-as-a-picking-installation

BITO RETRO-FITTING SOLUTIONS

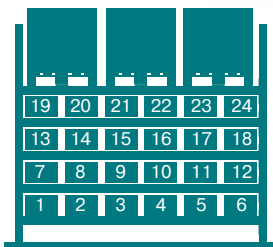
PALLET RACKING WITH FLOW LEVELS FOR CARTON LIVE STORAGE

It is possible to convert pallet racking used as buffer store into a pick store by fitting flow levels at operator reach height.



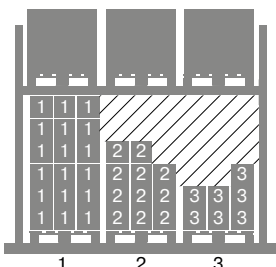
The upper level is still used to store products on pallets.

The lower levels can now accommodate on little space cartons, bins, boxes or other smaller sized unit loads as well as single products for convenient and ergonomic picking.



WITH BITO RACK TUNING

- + Product storage in **FIFO order** (first in - first out)
- + **High-density storage** of many reference lines on a small footprint
- + **Short travel routes**, this solution allows to stock **24** reference lines instead of only two or three reference lines.
- + **High pick rates**: 150-250 picks/h



WITHOUT RACK TUNING

- **Too much space left unused** above partly loaded pallets
- **Long pick routes**, because each bay only accommodates 3 different products
- **Low pick rates** → 30-50 picks/h
- **Poor ergonomics** → operators have to bend and stretch too far to access products behind the front row

BITO RETRO-FITTING SOLUTIONS

PALLET RACKING WITH EXTRACTABLE FIRST PALLET POSITIONS

BITO extractable first pallet positions allow to pull forward the first pallet at the picking face into the service aisle, providing easy access to goods and eliminating the strain on employees' backs. Since pallets can be pulled out into the aisle for convenient picking, all pallets can be positioned long-side on into the racking, thereby allowing to reduce aisle length.



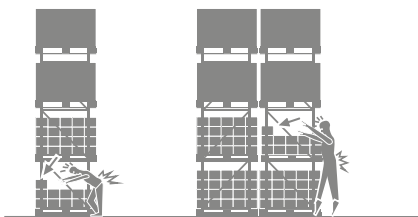
The pull-out module can be retro-fitted into existing pallet racking without any difficulty.

This solution is particularly useful, if very heavy or bulky products must be handled.



WITH BITO RACK TUNING

- + **Convenient picking** directly from the pallet that is pulled forward into the service aisle of static racking
- + Heavy or bulky goods are within **easy reach** and can be picked from three sides **without straining the back**
- + **Prevents injuries** – no head bumping on the beam carrying the level on top
- + **Direct access to all items**
- + Depending on pallet load height or reach height, pull-out modules can be mounted at floor level height or on the first level



WITHOUT RACK TUNING

- **Poor ergonomics:** operators have to bend and stretch too far to access products behind the front row
- **Difficult access** to many products
- **Increased risk of work related accidents** – head bumping on the beams carrying the level on top is likely

COMPONENTS

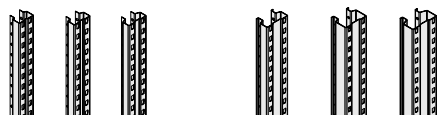
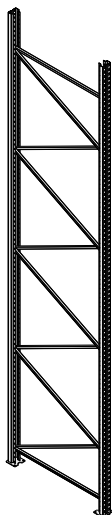
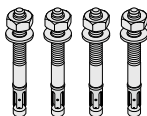
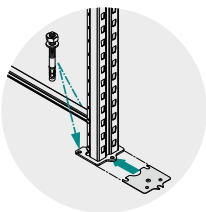
BITO Pallet racking can easily be adapted to your specific storage requirements, whether by changing racking configuration, retrofitting special purpose modules or adding more bays. We provide a large choice of components, all of which will be available for a long time to come should you decide to make further purchases.

Racking modifications such as exchanging level decking or adapting lane features can be realised without the help of technicians – a clear benefit for companies with a varying product assortment, f. ex. seasonal products.

FRAME

All parts are galvanised to prevent corrosion. Sturdy anchor bolts provide excellent stability.

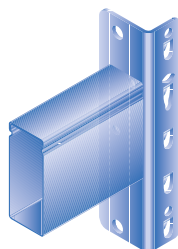
The bolt-together construction allows to easily exchange damaged components.



TWINTOP® BEAM

- + Beams are double-walled on top
- + High rigidity
- + Easy loading and picking

All BITO pallet racking beams are made from BITO TwinTop® profiles. BITO TwinTop® profiles have a unique design featuring a double-walled upper side - hence the name "TwinTop" - that transfers loads to the uprights and eventually to the ground. This optimal relationship between material input and carrying capacity meets highest demands as to quality and rigidity.



The racks can therefore be assembled without disruptive horizontal or vertical struts, which makes access to goods easier.

Profiles are available in various height and material thickness options.



LEVEL DECKING

- + Several options available
- + Beam levels can be adjusted in height
- + Level decking can be fitted without bolts
- + Decking can be retro-fitted

Depending on the product or the type of load carrier to be stored, racking levels can be equipped with different decking options. Decking segments are either placed onto box-type beams or fitted between stepped beams.

Pallet racking levels can be adjusted without bolts in 50 mm intervals for perfect adaptation to the height of your loads.

SAFETY ACCESSORIES

- + Designed for rough environments
- + Reduce the risk of damage or injury

BITO Pallet racking comes with a wide range of safety accessories to help you prevent damage and subsequent repair costs.

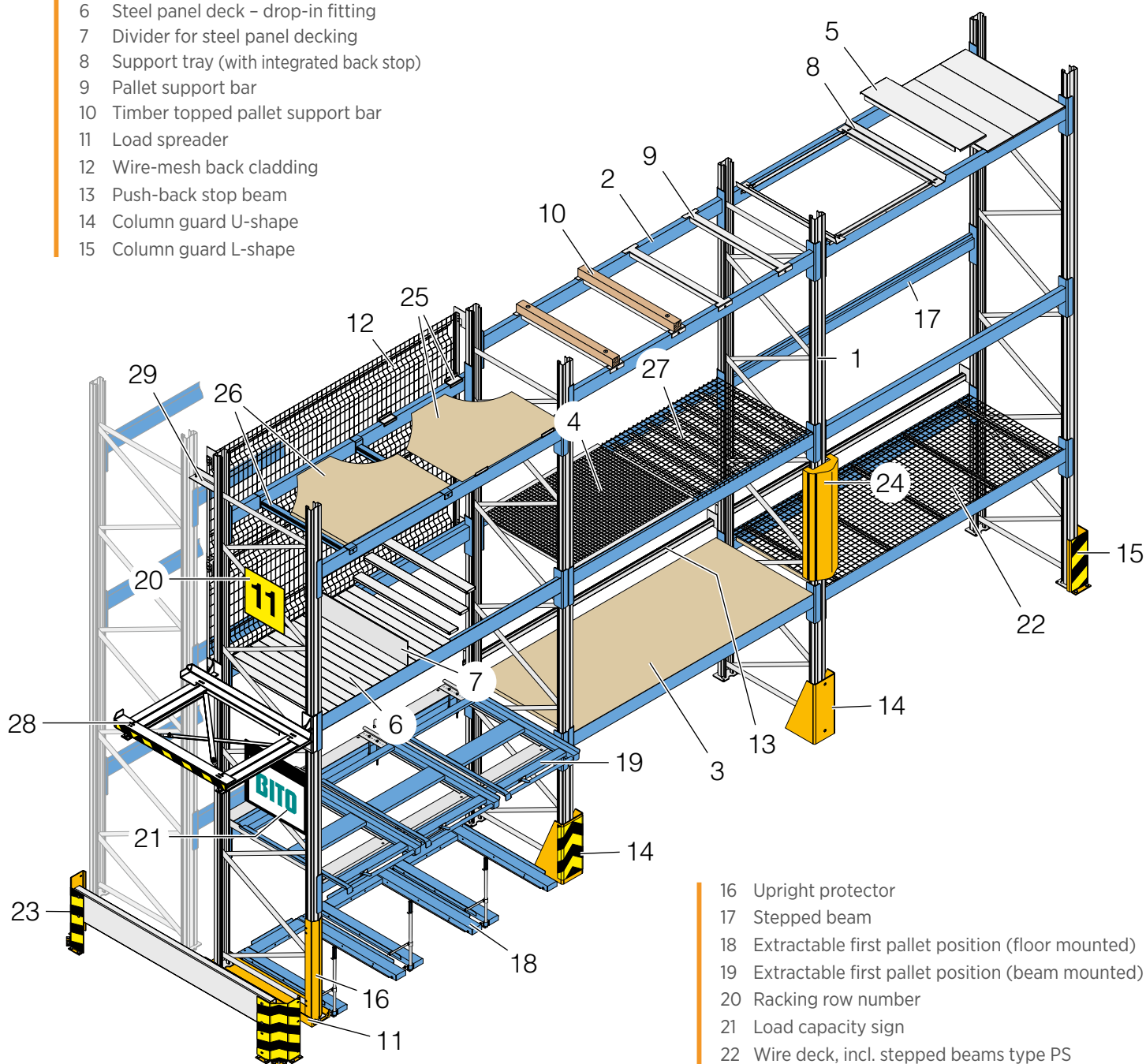
PALLET RACKING PRO

Strong, reliable and extremely versatile

BITO
STORAGE SYSTEMS
MIDDLE EAST

**CUSTOMISE
YOUR STORAGE
SOLUTION!**

- 1 Frame
- 2 Beam
- 3 Chipboard panel deck
- 4 Mesh deck – hot-dip galvanised
- 5 Steel panel deck – drop-on fitting
- 6 Steel panel deck – drop-in fitting
- 7 Divider for steel panel decking
- 8 Support tray (with integrated back stop)
- 9 Pallet support bar
- 10 Timber topped pallet support bar
- 11 Load spreader
- 12 Wire-mesh back cladding
- 13 Push-back stop beam
- 14 Column guard U-shape
- 15 Column guard L-shape



- 16 Upright protector
- 17 Stepped beam
- 18 Extractable first pallet position (floor mounted)
- 19 Extractable first pallet position (beam mounted)
- 20 Racking row number
- 21 Load capacity sign
- 22 Wire deck, incl. stepped beams type PS
- 23 Fencing
- 24 Flexible upright protection
- 25 Chipboard panel decking on positioning angles
- 26 Chipboard panel decking on support bars
- 27 Drop-on wire decking
- 28 Pallet transfer position
- 29 Row spacer

BITO. STORAGE SOLUTIONS THAT MEET YOUR NEEDS.

YOUR SOLUTION IS JUST A FEW CLICKS AWAY:

www.bito.com





BITO WIDE AISLE PALLET RACKING

A GLOBAL PLAYER, PROUD OF ITS REGION

Storage systems and material handling equipment made in Germany: We are a long established, medium sized family business, locally rooted, yet acting on a global scale.

Ever since BITO was founded in 1845, our company headquarters including research & development as well as our production facilities have been located in our region. Our customer-oriented and innovative product range as well as our competence as full service provider made us one of Europe's leading intralogistics providers with currently more than 70,000 customers.

Since March 2007, BITO has been manufacturing shelving and pallet racking components in northern India for the Indian market as well as for neighbouring countries and the Middle East. In order to handle sales in these regions, BITO has established a joint venture with the Indian firm Nilkamal Plastics Ltd. – Nilkamal BITO Storage Systems.

CLICK HERE FOR A LIST OF OUR LOCATIONS AROUND THE WORLD:

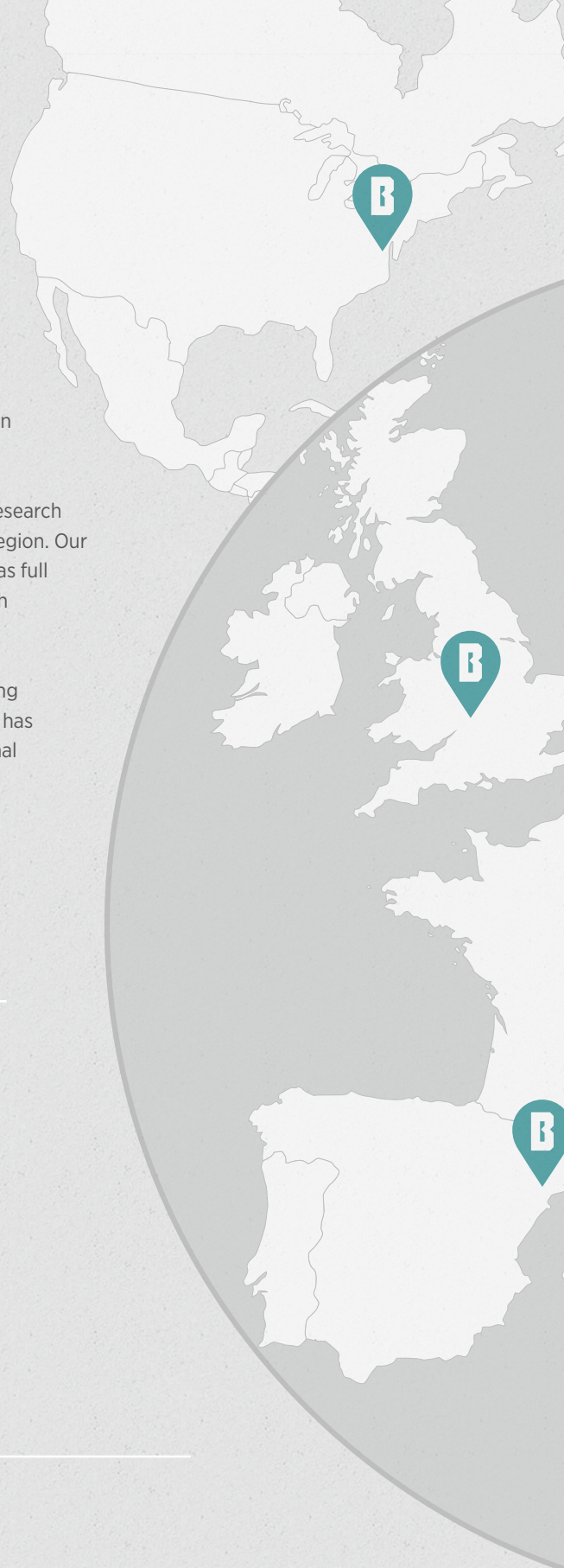
www.bito.com/en-gb/our-global-network

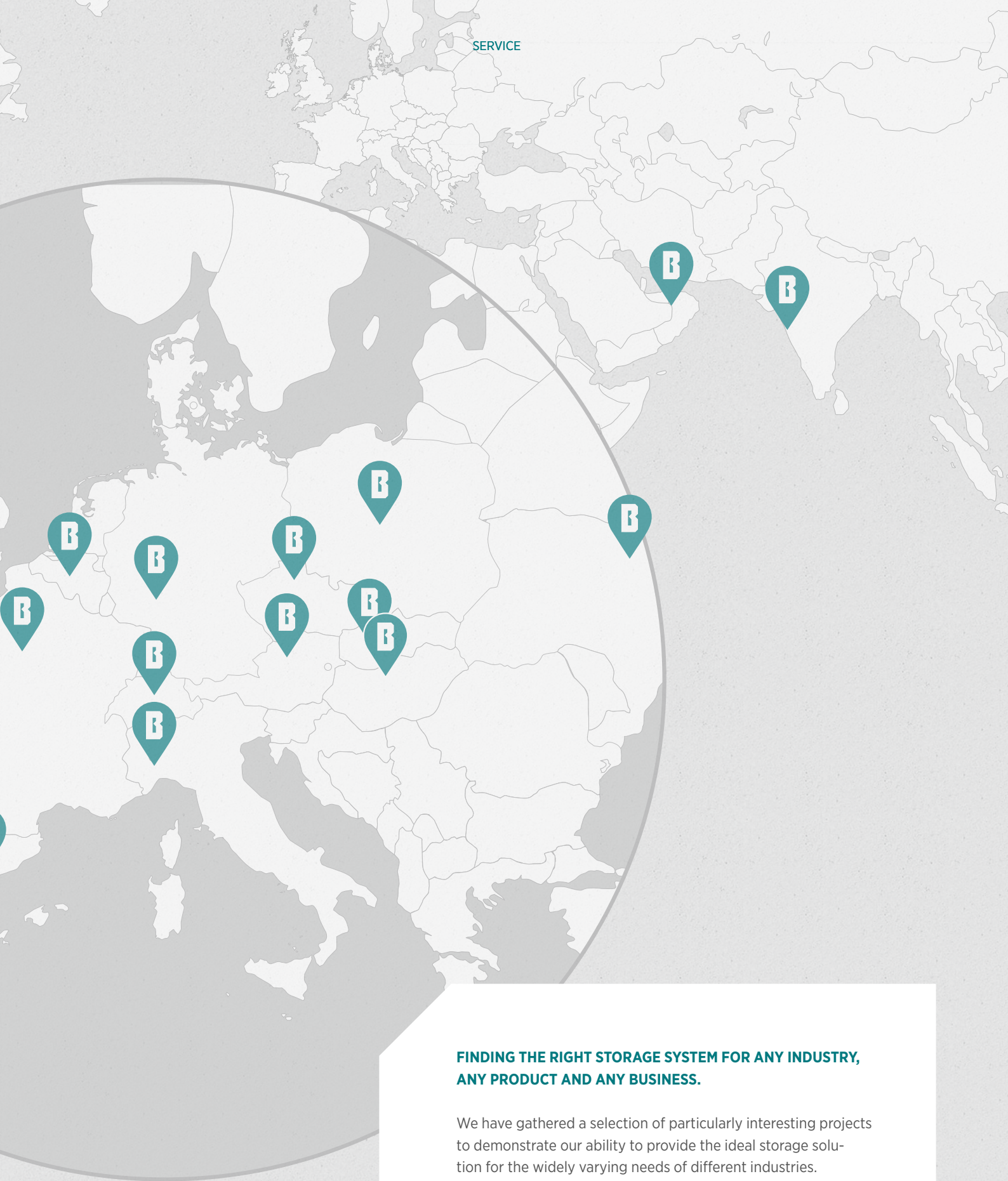
OUR CUSTOMERS ARE OUR PARTNERS

At BITO, we think that personalised and comprehensive customer support and direct communication are most important to provide exceptional and efficient customer service. Our dense network of regional sales representatives helps to ensure that a competent person is close to your location and can see you on short notice.

FIND YOUR LOCAL BITO REPRESENTATIVE:

www.bito.com/en-gb/contact/contact-us/





**FINDING THE RIGHT STORAGE SYSTEM FOR ANY INDUSTRY,
ANY PRODUCT AND ANY BUSINESS.**

We have gathered a selection of particularly interesting projects to demonstrate our ability to provide the ideal storage solution for the widely varying needs of different industries.

www.bito.com/en-gb/downloads

www.bito.com

BITO PALLET RACKING.
UNRIVALLED VERSATILITY & ADAPTABILITY.
MANY ADD-ON OPTIONS AVAILABLE.
RECONFIGURATION POSSIBLE AT ANY TIME.

**BITO STORAGE SYSTEMS
MIDDLE EAST**

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