

STORAGE AND CONVEYORS SYSTEMS

INTRALOGISTICS AND SUPPLY CHAIN



PiBRn

STORAGE AND CONVEYORS SYSTEMS

Industry 4.0 brought new technical possibilities, namely at the Intralogistics and Supply Chain level and has facilitated the vision and execution of "Smart Factories". With more than 25 years of experience with new information technologies, PIBRA presents automation solutions for logistic systems, allowing you to be in the forefront of the industrial sector.

At PIBRA, we suggest automated transport systems – **Storage Systems** and **Conveyors Systems**, connected by the several software services and with the possibility of being connected to other existing systems like ERP systems or the like.

Our engineering teams work in strict collaboration with our clients and according to their needs in developing integrated systems for storing, transferring, packing and conveying components to working areas, therefore creating a synergy between equipment and means, aiming at increasing effectiveness and reducing production costs. This process is monitored by teams from prototyping to execution.

Our projects observe all storage, transport and safety standards. In addition, we have specialized technicians for the installation, check-up and maintenance of all client systems.

We ensure the effectiveness of our equipment, by using state-of-the-art technology like laser cut, robot welding, high-protection paints and proper controls.

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STORAGE AND CONVEYORS SYSTEMS

AUTOMATED STORAGE

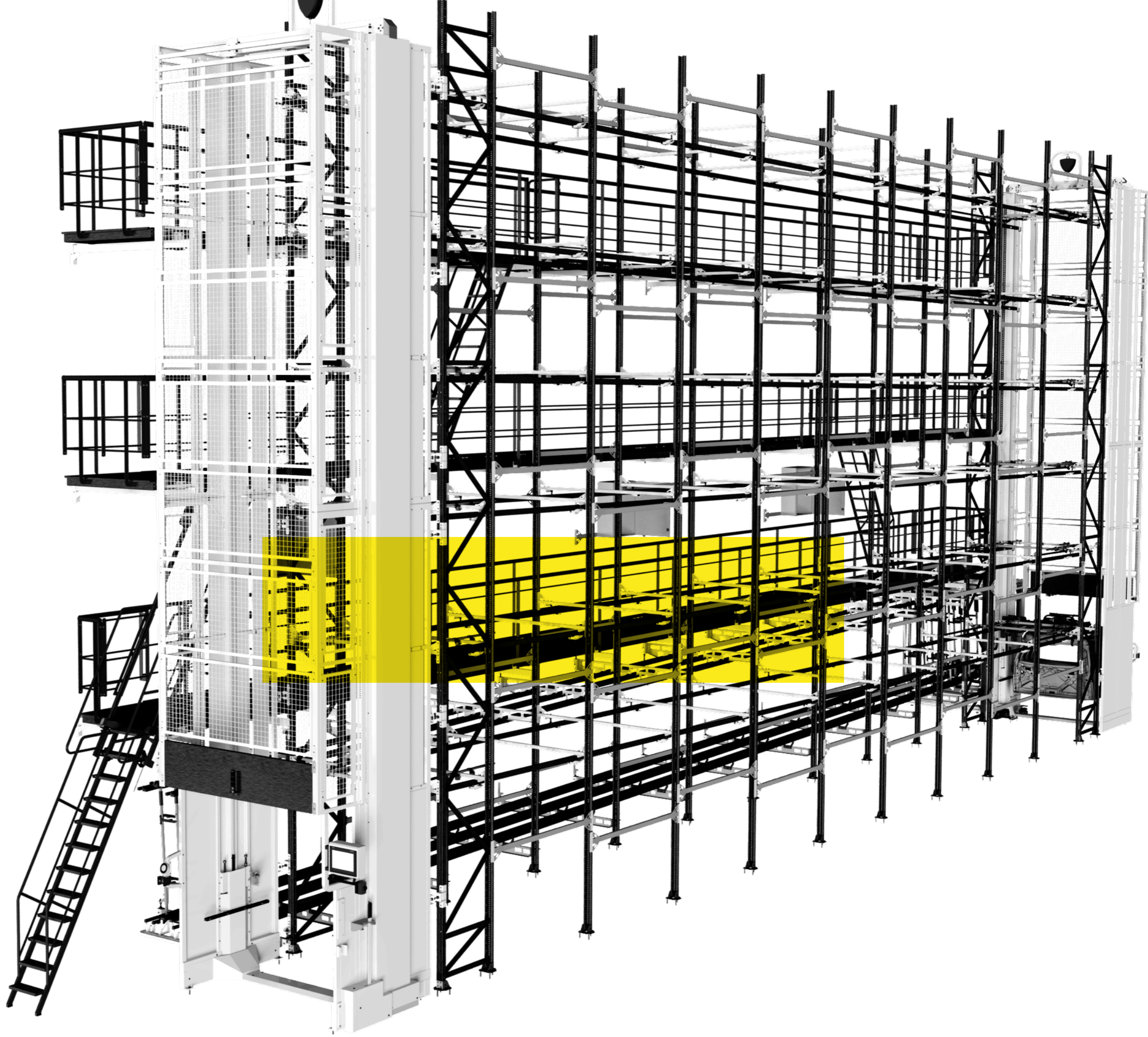
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**AUTOMATED STORAGE
CONVEYOR SYSTEMS**



SHOPSTOCKER

PIBRA's industrial areal conveyors allow the handling of components, parts of vehicles, wiring or baskets with products. The ShopStocker is a modular intralogistics solution, that transports and stores items vertically and horizontally. This technology makes the storage space optimized and helps the operator ergonomically. ShopStocker technology is based on a ground base structure, supporting the route paths up in the air.

"We designed a solution that combines **automated storage** and **transportation** through overhead conveying systems."



BODY PARTS



WIRE HARNESS



TIRE AND WHEEL



AUTOMOTIVE ELECTRONICS



NON AUTOMOTIVE



SUPPORTS UP TO 120 Kgs

Our hook can load up to 120 kgs. Its design can be adapted to your specific product.



STORES VERTICALLY OR HORIZONTALLY

According to your product shape and weight, the item can be stored and transported in both positions.



EASY LOADING/UNLOADING GRIPS

Our hooks are designed to improve your employee's experience and reduce the time spent. From 2 sec of loading/unloading time.



BENEFITS



MAXIMIZE FLOOR SPACE UP TO 65%

If maximizing your floor space is your goal in your intralogistics setup, this is the solution for you. Our last implementation registered a 65% increase in storage capacity.



COMBINES STORAGE WITH TRANSPORT

The ShopStocker is the only Automated Storage and Retrieval System that combines Warehousing and long overhead conveying in one product.



CONNECT DIFFERENT PRODUCTION CHAIN PROCESSES

To build a truly automated logistics system it's important to connect the different processes and technologies. The ShopStocker was built with this mindset.



DATA COLLECTION AND ANALYSIS

Big Data and Small Data collection are some of our main offers when designing ShopStocker's technologies.



REDUCE HUMAN ERROR

Reduce human error and processes is one of the benefits of the ShopStocker. When using forklifts and manual stock control it's impossible to ensure a good accuracy rate.



THROUGHPUT OPTIMIZATION

Time is money. With the ShopStocker Warehousing technology, your production Throughput time will be reduced considerably.



CONTROL YOUR WAREHOUSE WITH A SINGLE TOUCH

With the help of touch panels and data collection displays, your warehouse and logistics experts will be able to make decisions using just their fingers tips.



INCREASE YOUR EMPLOYEES PRODUCTIVE TIME

With the ShopStocker, the wasted time and nonproductive time will decrease due to the elimination of human processes.

CUBESTOCKER

The **CubeStocker** is a modular metallic structure designed for the packing, management and storage of wire spools.

Spool movement inside the warehouse is automatic and made by means of a rotary and sliding crane on linear rails. This storage also allows working at height, therefore enabling a higher layout and factory area optimization for component storage areas.

A **Mini-Load AS/RS** that brings **space efficiency** to your logistic center



AUTOMOTIVE



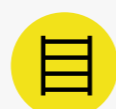
APPAREL



ELECTRONICS



FOOD & BEVERAGE



RETAIL



SUPPORTS UP TO 90 Kgs

The CubeStocker can load up to 90 kgs. Its design can be adapted to your specific product.



CHOOSE THE NUMBER OF LEVELS YOU WAREHOUSE NEEDS

Adapt the CubeStocker to your company needs, the sky is the limit and our technicians will help you choose the best possible setup.

HOW THE CUBESTOCKER WORKS?

- 1 | Pack your products in a suitable container.
- 2 | Load the CubeStocker buffer using AGVs (integration), ground conveyors or manual transportation.
- 3 | The CubeStocker item tracking system will talk to the software and keep track of the item.
- 4 | The product will be stored in the best suitable place inside de CubeStocker.



MAIN BENEFITS



ADAPTABLE TO ANY TYPE OF CONTAINER OR ITEM

According to your needs, the CubeStocker is compatible with most standard containers. This able you to use multiple types of containers in the same warehouse.



DATA COLLECTION AND ANALYSIS

Big Data and Small Data collection are some of our main offers when designing ShopStocker's technologies.



USE OF IOT TECHNOLOGIES

The use of IoT technologies improves your employee's experience when using the System. This intelligence will help to connect the different processes in your floor space and collect data.



CONTROL YOUR WAREHOUSE WITH A SINGLE TOUCH

With the help of touch panels and data collection displays, your warehouse and logistics experts will be able to make decisions using just their fingers tips.



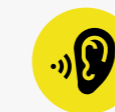
FAST LEARNING CURVE FOR OPERATORS

The ease of use makes the learning process quick and simple. This will help you save a lot getting the full performance of your staff.



ERGONOMIC WORKSTATION

To keep the health of your workers, the CubeStocker has an Ergonomic design.



MODULAR AND FLEXIBLE SOLUTION

The CubeStocker is fully adapted to your warehouse. Our consultants and engineers will design a solution suitable for your needs and constraints.

MAXIMIZE FLOOR SPACE UP TO 65%

If maximizing your floor space is your goal in your intralogistics setup, this is the solution for you. Our last implementation registered a 65% increase in storage capacity.



CONNECT DIFFERENT PRODUCTION CHAIN PROCESSES

To build a truly automated logistics system it's important to connect the different processes and technologies. The ShopStocker was built with this mindset.



MINIMIZE ERROR BY 80%

Reduce human error and processes is one of the benefits of the CubeStocker. When using forklifts and manual stock control it's impossible to ensure a good accuracy rate.



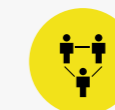
THROUGHPUT OPTIMIZATION

Time is money. With the ShopStocker Warehousing technology, your production Throughput time will be reduced considerably.



INCREASE YOUR EMPLOYEES PRODUCTIVE TIME

With the CubeStocker, the wasted time and nonproductive time will decrease due to the elimination of human processes.



QUIET OPERATION

Our engineering team developed a quiet system to maintain low dB levels.

TRANSTOCKER

The **TranStocker** is a dynamic component storage system based on the FIFO principle. It is a modular metallic structure for the packing, management and storage of components. Due to its excellent utilization of industrial buildings useful height, it reduces the high area occupation costs.

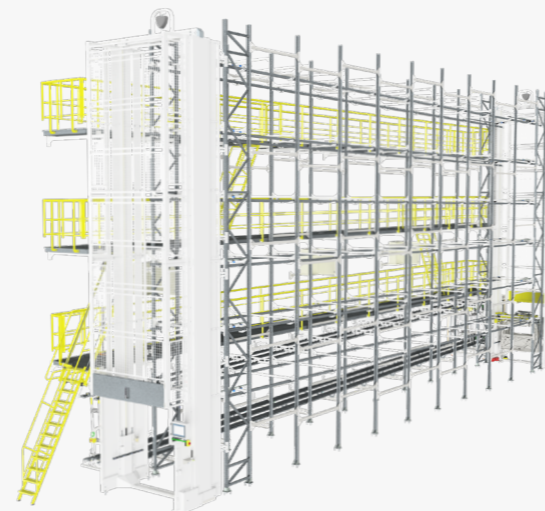
The **TranStocker** it's an **AS/RS to store medium/large items vertically**.



-  **Save up to 50%** of occupation costs.
-  **Build with 2** load/unload elevators.
-  **Ideal** for medium/large items.

IT'S SIMPLE, BUT POWERFUL!

- 1** | Pack your products in a suitable container.
- 2** | Load the **TranStocker loading elevator** buffer using AGVs (integration), ground conveyors or manual transportation.
- 3** | The **TranStocker** will store the container in the best suitable place.
- 4** | The **TranStocker** makes the learning process **quick and simple** for operators.



BODY PARTS



AUTOMOTIVE ELECTRONICS



TIRE AND WHEEL



NON AUTOMOTIVE

MAIN BENEFITS



MAXIMIZE FLOOR SPACE UP TO 65%

If maximizing your floor space is your goal in your intralogistics setup, this is the solution for you. Our last implementation registered a 65% increase in storage capacity.



CONNECT DIFFERENT PRODUCTION CHAIN PROCESSES

To build a truly automated logistics system it's important to connect the different processes and technologies. The TranStocker was built with this mindset.



MINIMIZE ERROR BY 80%

Reduce human error and processes is one of the benefits of the TranStocker. When using forklifts and manual stock control it's impossible to ensure a good accuracy rate.



THROUGHPUT OPTIMIZATION

Time is money. With the TranStocker Warehousing technology, your production Throughput time will be reduced considerably.



INCREASE YOUR EMPLOYEES PRODUCTIVE TIME

With the TranStocker, the wasted time and nonproductive time will decrease due to the elimination of human processes.



INCREASE YOUR WAREHOUSE PROFITABILITY

Using your Warehouse space vertically will increase considerably your investment profitability



CHOOSE THE NUMBER OF LEVELS YOU WAREHOUSE NEEDS

Adapt the TranStocker to your company needs, the sky is the limit and our technicians will help you choose the best possible setup.



MODULAR AND FLEXIBLE SOLUTION

The TranStocker is fully adapted to your warehouse. Our consultants and engineers will design a solution suitable for your needs.



**DISTRIBUTION
CONVEYOR SYSTEMS**

HLS | HARNESS LOGISTIC SYSTEM

PIBRA's industrial areal conveyors allow the handling of components, parts of vehicles, wiring or baskets with products. Our products are the "station to station" connection with semi-finished products and products resulting from different tasks.



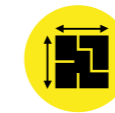
Aerial industrial conveyors are formed by a ground-based or building-based supporting structure with pre-defined circuits. These products can have several features, depending on weights to be conveyed, like:

- 1 | With chain and hooks for cargo, the chain is pulled by a drive unit, usually placed at the highest point of the line, and a chain stretcher, placed at the lowest point of the line, controlled by a central panel with PLC and switches distributed along the line;
- 2 | The pulleys on rails, and the supports allow the placement of different materials to be conveyed, and these materials are carried over a current line and pulled by a drive unit;
- 3 | Working area descents can be made according with the requirements and buffer zones of components to be sent to their destination, by means of the included management software (HMS: Harness Management System).

ADVANTAGES

- 1 | FLEXIBILITY;
- 2 | GROUPING;
- 3 | VERSATILITY;
- 4 | EASY HANDLING;
- 5 | PRODUCT PROTECTION;
- 6 | STORAGE QUALITY.

The **HMS® (Harness Management System)** software is the proper solution to ensure a high performance and effectiveness level in the management of PIBRA's HLS, by means of its several functional modules.



SPACE OCCUPATION

Aerial space occupation.



PROGRAMMING

Specific programming and software (HMS: Harness Management System).



MATERIAL SEGREGATION AND PACKING

Possibility of creating component buffers.

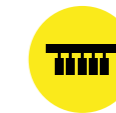


STOCK MANAGEMENT

Automated.

GENERAL DIMENSIONS

Please refer to manufacturer for different configurations, dimensions and component quantities



SUPPORTS

Several loads as per the weights and products to be conveyed.



USE

Automated.



WEIGHT

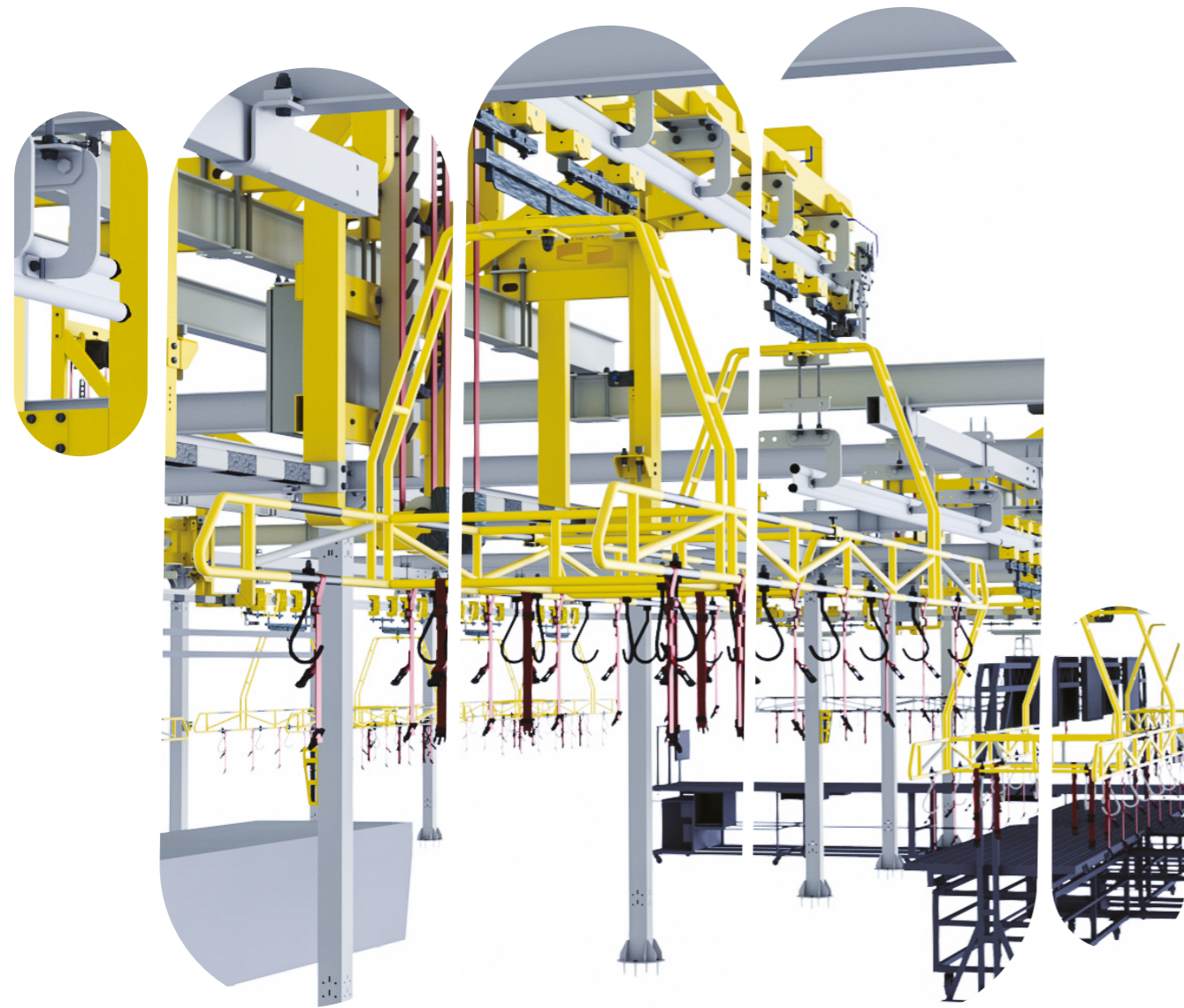
Structure load (according with client's needs).



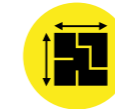
HLS XL | HARNESS LOGISTIC SYSTEM

PIBRA's industrial areal conveyors allow the handling of components, parts of vehicles, wiring or baskets with products. Our products are the "station to station" connection with semi-finished products and products resulting from different tasks.

HLS XL is based on a ground base structure, supporting the route paths up in the air.



Harness supports can be customized in shape/materials according to client's request.



SPACE OCCUPATION

Aerial space occupation.



PROGRAMMING

Specific programming and software (HMS: Harness Management Software).



MATERIAL SEGREGATION AND PACKING

Possibility of creating component buffers.



STOCK MANAGEMENT

Automated.

GENERAL DIMENSIONS

Please refer to manufacturer for different configurations, dimensions and component quantities



SUPPORTS

Several loads as per the weights and products to be transported.



USE

Automated.



WEIGHT

Supports up to 120Kgs.



EMS | ELECTRIFIED MONORAIL SYSTEM

The **Conveyors Systems** offer tailor made solutions for every material. The **EMS (Electrified Monorail System)** is included on our portfolio.

This system allows you to adopt several manufacture and logistic industrial solutions. We provide full tailor-made solutions for planning, design, construction and implementation of equipment, as pallet, box movement and several supports for several people. Ideal for assembly tasks and lengthy conveying.

The trolley systems and control of integrated monitoring via PLC e control connected to an autonomous management system allow a proper management of means.



PRODUCT PORTFOLIO

- EMS
- Assembly Line

SERVICES

- Consulting
- Simulation
- Design
- Assembly
- Test and Maintenance

We deliver storage, conveying, assembly and logistic process systems.



SUSPENDED LINE SIMULATION

Starts with system simulations, allowing the visualization of flows and strategies to adopt, and helping with the confirmation of system affection and layout, identifying all bottlenecks. Schedules can also be estimated.

Robust, adaptable and easy maintenance systems. Different type of materials to convey and conveyance requirements.



CONTROL SYSTEM
Software PIBRA.



WEIGHT
Supports up to 300Kgs.
(Addaptable to client's needs).



OPERATOR-CONTROLLED
Trolley stops and movements.

GENERAL DIMENSIONS

Please refer to manufacturer for different configurations, dimensions and component quantities



MOVEMENT

Automatic support movement along the rail.



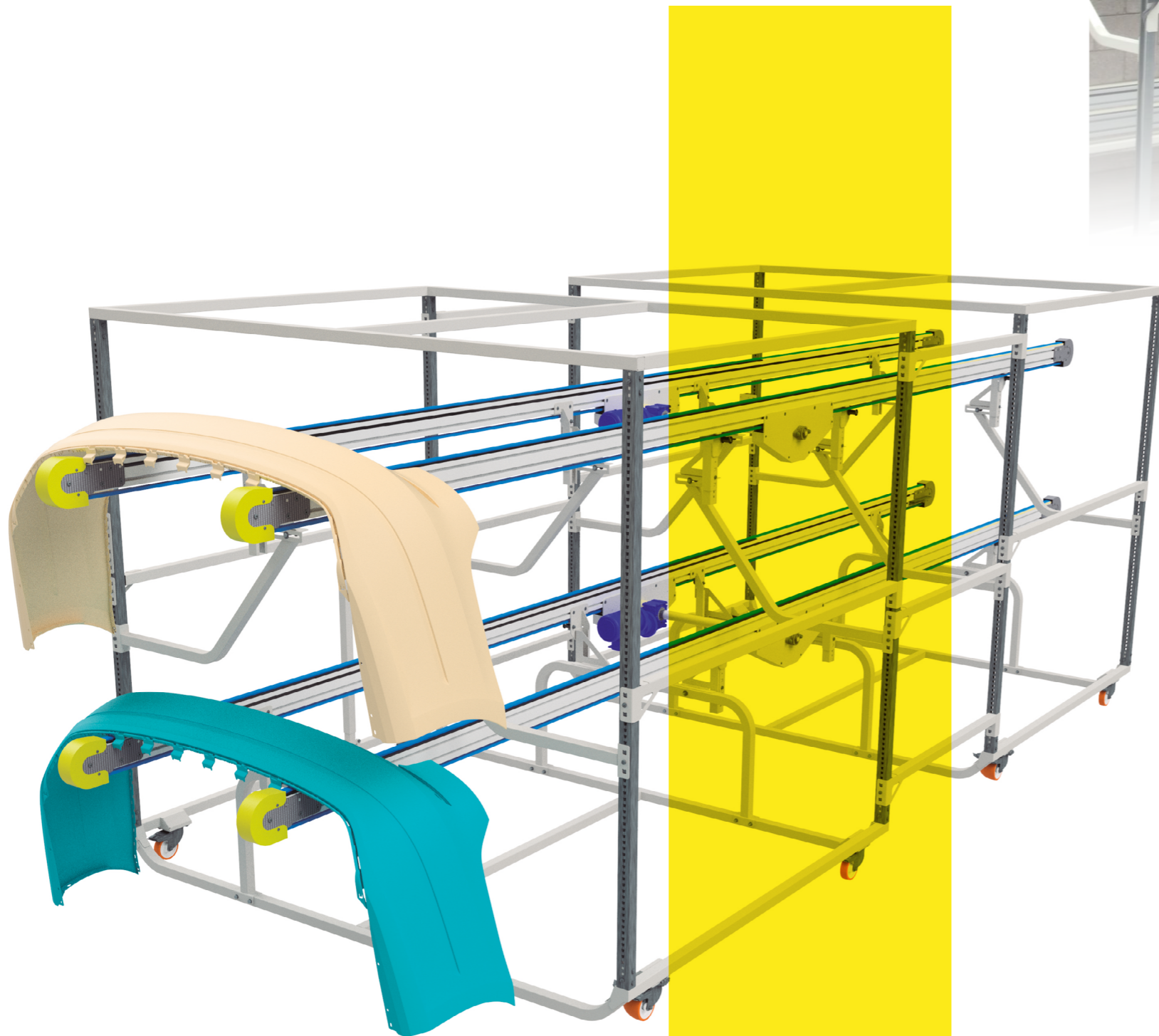
SPEED

Variable.



GROUND BELT CONVEYOR

Ground Belt Conveyor is a modular system built with 3m modules with a loading and unloading side capable to move parts forward and backward.



CONVEYORS LENGTH

Between 3.5m-18m.



ROTATING WHEELS

Equipment equipped with rotating wheels with brakes.



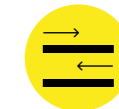
WEIGHT

Automatic conveyor control with sensors.



BELTS

Belts with polyurethane surface and an average width of 25mm.



CONVEYORS LEVELS

Between 1-4 levels depending on ergonomic standards.



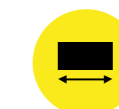
MODE

Continuous mode or step by step.



SPEED

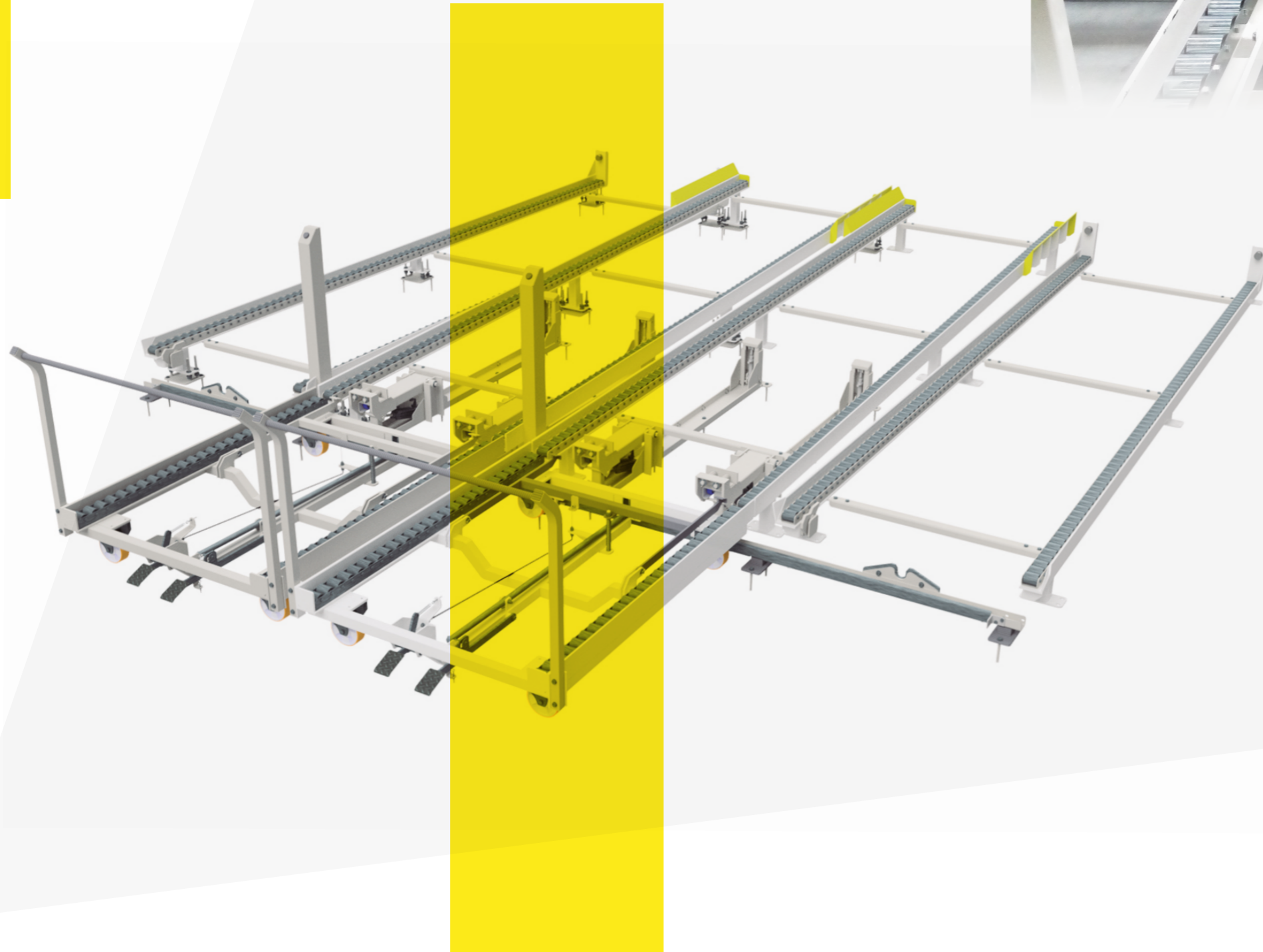
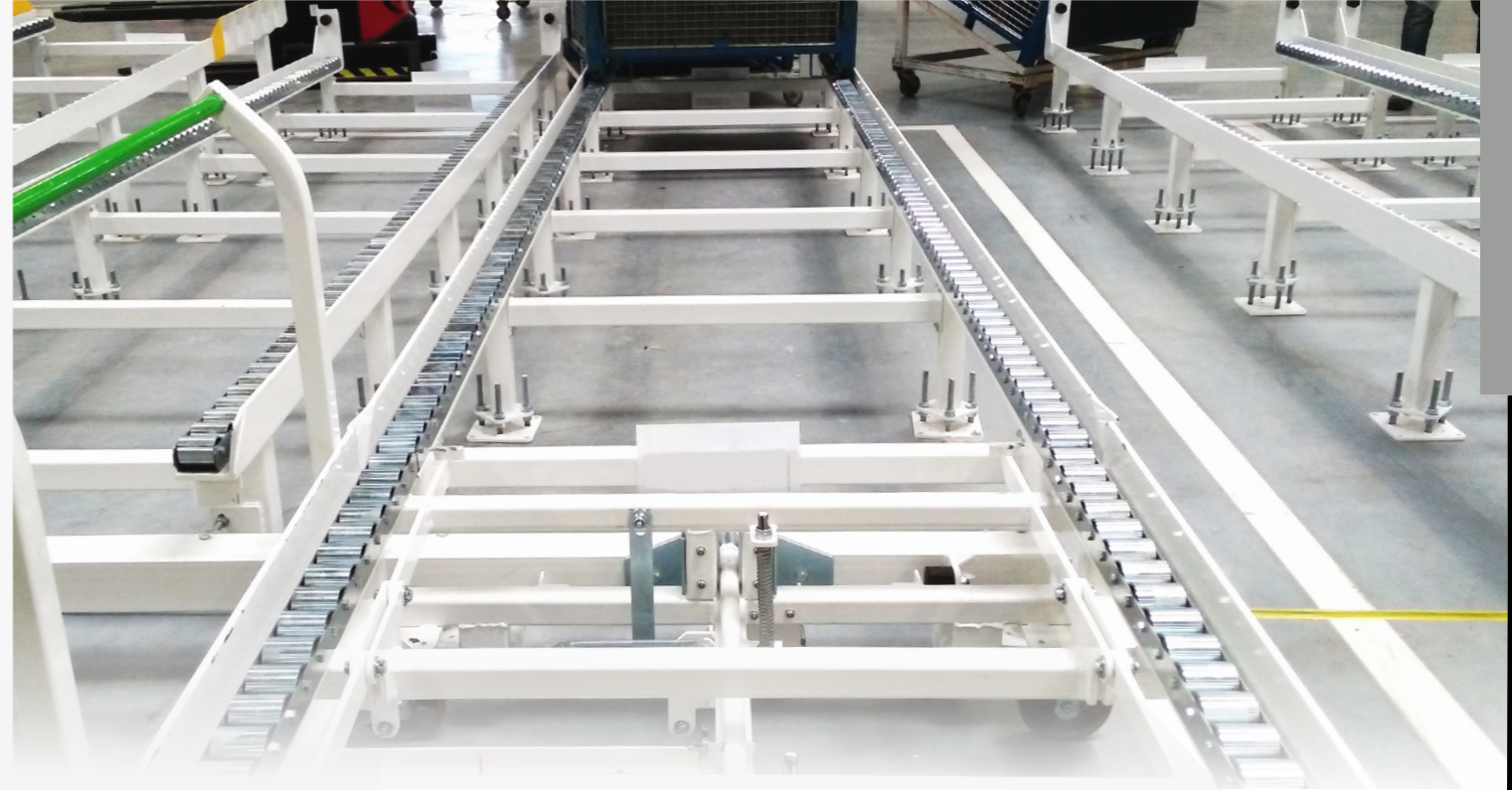
Aerial space occupation.



SHOPSTOCKER FOR CONTAINERS

PIBRA presents the **ShopStocker** as a supply chain logistics solution that allows an improved organization and gains in package reception, segregation and storage. This equipment enables the automated or semi-automated placement, handling, preparation and entry control of materials in an effective and efficient way.

Each **ShopStocker** project made according with client's needs and specifications, therefore observing, for instance, all space limitations and loading and unloading requirements.



FOR CONTAINERS AND PALLETS

Software PIBRA.



GENERAL DIMENSIONS

Please refer to manufacturer for different configurations, dimensions and component quantities



FOR BOXES

DIMENSIONS
0,6m x 0,4m x 0,3m
(Please refer to manufacturer for other dimensions)

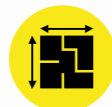
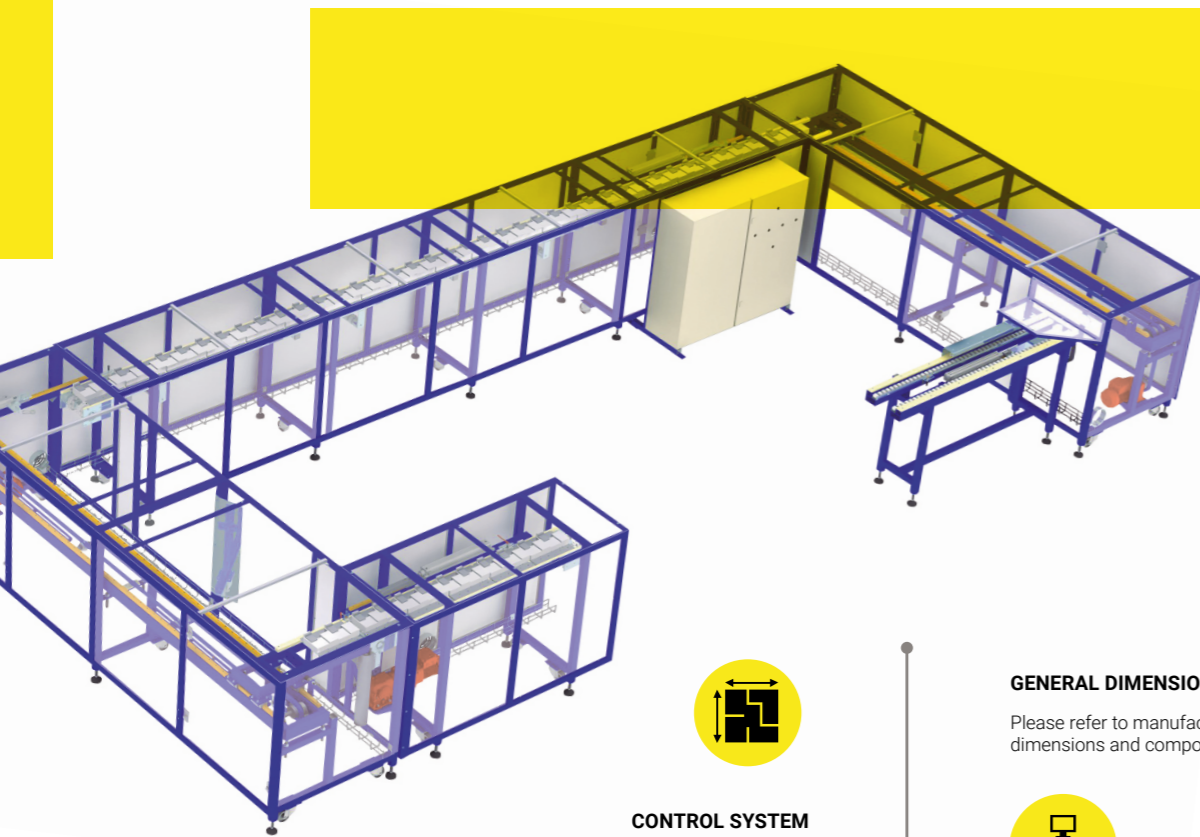
AUTOMATED CONVEYOR SYSTEM

The **automated conveyor system** is formed by a set of **conveyors** operating in a synchronized way.

Complemented with protection, they allow a high degree of safety both for operators and products to be conveyed. This system also enables placement in specific working areas.

Some of the conveying elements are equipped with **accumulation systems**, in order to accommodate a higher quantity of circulating products.

The transition of products between conveyors is ensured by clamps and pneumatic units. All parameters are introduced in the system by means of a console.



CONTROL SYSTEM

Software PIBRA.



EC LEGISLATION

Equipment developed according with the EC legislation.



MOTORIZED CONVEYORS

Motorized conveyors with conveying chain and accumulation chain.

GENERAL DIMENSIONS

Please refer to manufacturer for different configurations, dimensions and component quantities



SPECIFIC COMPONENTS

Please refer to manufacturer.



PAINT

Structure painted with epoxy paint according with client specifications

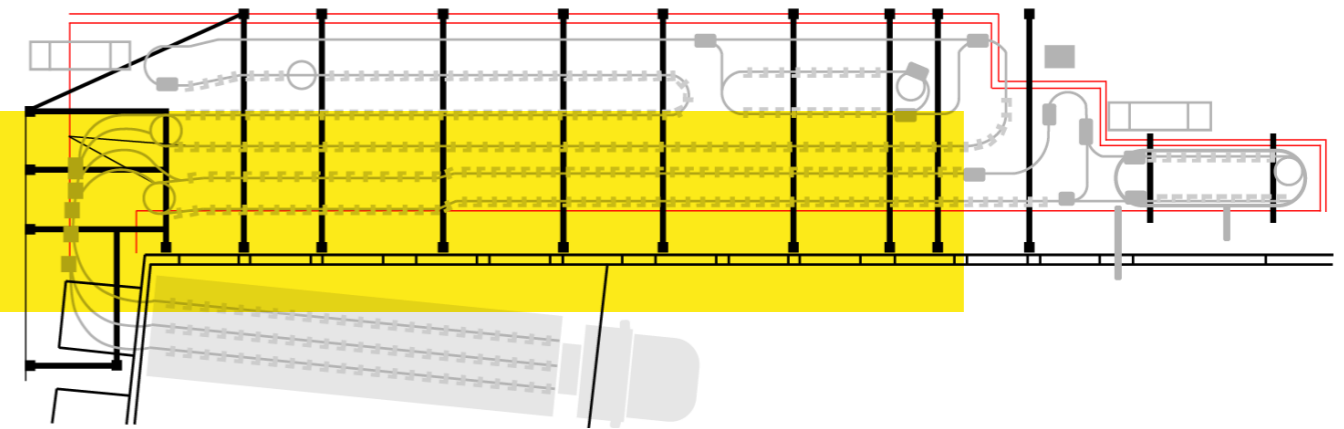


CRM | CONVEYOR ON RAILS MOTORIZED

PIBRA's industrial areal conveyors allow the handling of components, parts of vehicles, wiring or baskets with products. Our products are the "station to station" connection with semi-finished products and products resulting from different tasks.

CRM is based on a ground base structure, supporting the route paths up in the air.

The hooks supports can be customized in shape/materials according to client's request.



SPACE OCCUPATION

Aerial space occupation.



PROGRAMMING

Specific programming and software (HMS: Harness Management Software).



MATERIAL SEGREGATION AND PACKING

Possibility of creating component buffers.



STOCK MANAGEMENT

Automated.

GENERAL DIMENSIONS

Please refer to manufacturer for different configurations, dimensions and component quantities



SUPPORTS

Several loads as per the weights and products to be transported.



USE

Automated and manual.



WEIGHT

Supports up to 120Kgs.



TELESCOPIC CONVEYOR

The Telescopic Conveyor is the ideal and effective solution for handling packages, since it will minimize the need for manual handling of the products by the operators.

Its purpose is to transport components to the interior of the truck, since it extends from the permanent conveyor to the end of the truck, making the process of entry and exit of materials faster, easier and safer.

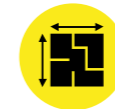


- 
AUTOMOTIVE
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APPAREL
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ELECTRONICS
- 
FOOD & BEVERAGE
- 
RETAIL
- 
TIRE AND WHEEL
- 
WIRE HARNESS

HOW THE TELESCOPIC CONVEYOR WORKS?

- 1 | One or more operators load the components on the first screen.
- 2 | The components move to the last screen, where they will be removed by 1 or 2 operators, positioned on the lifting platform.

MAIN BENEFITS



FAST LEARNING CURVE FOR OPERATORS

Tasks that would normally involve several operators are now completed with just 1 or 2 operators.



REDUCED EFFORT REQUIRED IN THESE PROCESSES



MANUAL SCREEN SPEED ADJUSTMENT 30-50M/MIN

With the help of touch panels and data collection displays, your warehouse and logistics experts will be able to make decisions using just their fingers tips.



MODULAR AND FLEXIBLE SOLUTION



MAXIMUM ALLOWABLE LOAD OF 1000 KGS

Each screen of our telescopic conveyor can load up to 200Kg.

SPACE OPTIMIZATION



INCREASES PRODUCTIVE TIME FOR YOUR EMPLOYEES

A lot of time was spent walking or stacking packages, with the extendable conveyor eliminates the time wasted in handling materials by bringing the conveyor straight to the loading or unloading point.



REDUCED RISK OF INJURIES

Reduces the risk of repetitive strain injury, as well as strains or other stress injuries, by placing the loading or unloading point at favorable level for the operator.



FASTER LOADING AND UNLOADING



SAFE AND RELIABLE OPERATION

With the aid of the tail lift operators can perform their tasks safely.



MACHINE LEARNING AND AI AT THE PIBRA'S WAREHOUSING. READY?

Due to Machine Learning elements on our warehouse managing software, the storage and transport behavior will be analyzed through complex computing intelligence, that will recognize patterns. This technology will help your logistics to make decisions and trigger specific processes.



REAL-TIME OPTIMIZATION

Our AS/RS can be adapted to sudden changes in the intralogistics environment, gathering information to optimize the storage and transport process.



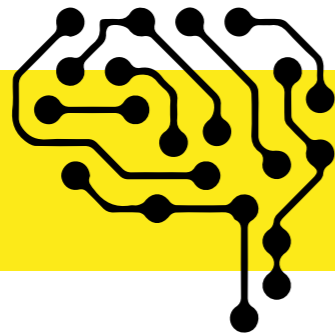
TARGET ORIENTED SETUPS

The technology can be adapted answering to a specific target or final goal, reducing the complexity of the warehouse system, making complex results with simple decisions.



ADAPTS THE LAYOUT BY PREDICTION

The Machine Learning coding will optimize and predict behaviors by analyzing data from your logistics system.





INDUSTRIAL SOLUTIONS

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