

INDUSTRIAL SOLUTIONS

CUTTING EDGE ENGINEERING



PINTO BRASIL
FÁBRICA DE MÁQUINAS INDUSTRIAIS



Key points

Always at the forefront of technology, Pinto Brasil demonstrates, through the quality of its products, why it is a supplier of a wide range of clients in various sectors as relevant as the automotive or aeronautical.



Pinto Brasil provides answers to specific requirements through customized solutions that focus on the ease of use and user safety with the objective of improving productivity and increase of quality.

Pinto Brasil uses 2D and 3D design software for the development of systems specifically designed according to customer needs and requirements.

In the prototype phase, the follow up of the client in the various stages is essential to ensure that the compromise is reached within the deadline requested.

PINTO BRASIL PRECISION TO DETAIL

Industrial Solutions

Pinto Brasil appeared in 1991 and since then has dedicated its activity to the development of technical solutions to satisfy the needs of its costumers.

Specialized in metalworking and highly oriented to the automotive industry, Pinto Brasil meets the highest demanding standards of this industry, thus being a preferred supplier to some of the largest companies in automotive industry.

Pinto Brasil works in the design of production, logistic, costumized and Lean systems, thus ensuring, the fulfillment of each customer needs.

This positioning in a market increasingly demanding and globally competitive, is due to several success factors, among which can be noted:

- High flexibility and adaptation to supply the most appropriate solution for the specific needs of each customer
- Constant investment in a context of employee development and innovation
- Experience and specialized know-how

The experience acquired by the development of different projects and the involvement of personnel with comprehensive knowledge ensures that the main objective is reached, thus being an advantage on the reactivity to develop solutions for the customer.



WIDENING HORIZONS MACHINERY IS ART

Production and Services

The continuous innovation of the infrastructures and production technologies aims to increase competitiveness and improve the products quality and service.

Production planning is required in highly competitive markets, where it is required to be efficient and reactive in the solutions proposed, this is ensured by the access to equipment with high quality standards, such as laser cutting technology, robotic

welding and other CNC equipments.

Pinto Brasil focuses on the quality of its products and ensures their reliability by using a system of integrated solutions. The use of a system of integrated solutions is the pillar that guarantee the respect and satisfaction of the needs of each costumers.

In order to ensure a complete quality service, Pinto Brasil performs the entire process of training and assembly on the customer site, ensuring a fast response higher than needed.

All the planning and development in the manufacturing of the final product is prepared according to specifications provided by the customer.

KNOWLEDGE RIGOROUS AND EXCELLENCY PROCESS



INTERNATIONALIZATION PINTO BRASIL IN THE WORLD

Worldwide Objective

With headquarters in Portugal, Pinto Brasil is presente in several countries, proving its potential while supplier of machinery and industrial peripherals for some leading market companies.

International presence is justified by the guarantee it gives in assuring a quality servise in which the response capacity is adequate to the needs of its multinational costumers.

This way, Pinto Brasil intends to be present near its costumers in order to ensure efficiently the quality of its products and services.

Costumer Dedicated

Pinto Brasil has as goal a balanced evolution between financial strength, profitability, growth, operational efficiency and social responsibility, with a permanent attention to the customer and the optimization of the quality of service provided. Pinto Brasil favors the strength, management correctness, competence and working efficiency; values which guide Pinto Brasil actions and acquire a greater relevance, reflecting the importance of permanent protection of its customer's interests.

Integrated Management System

The organizational improvement is a daily goal in Pinto Brasil, thus, the certification of the company, in a first phase in ISO 9001 and in a near future with a Quality Integrated Management System (ISO 9001), Environment (ISO 14001) and Safety (OHSAS 18001), is a step that will allow placing into practice this objective.

Always with the client satisfaction as main priority, the certification is seen as a way of assessing the areas where actions are needed, increasing productivity, motivating employees, maintain the balance with the environment and ensure the safety and good working conditions of the employees, being this only possible with the cooperation of all.

Implementation and application of ISSO 9001 guidelines is one of the ways Pinto Brasil ensures the quality and competitiveness of its processes,

products and services in constantly changing market in which the degree of demand of the costumer is increasing.

The implementation of the environment guidelines in its daily activities will be based on a company's commitment towards the environment. It is also a way of eliminating unnecessary wastes and scraps (reinforcing the values inherent to ISO 14001), in order to improve the environmental efficiency of the processes and products, preventing and minimizing possible environmental accidents.

The set of OHSAS 18001 requirements will give Pinto Brasil the essential tools to comply with the legislation, in order to control and know the risks associated with the tasks and products manufactured, allowing to take appropriate actions for the continuous improvement in the processes.

Pinto Brasil is a certified company and is ready for the challenges of the future. The investment in creating new products and technology, without ever losing sight of the commitment with quality and tradition makes Pinto Brasil a solid and respected company in its area.

Only with the satisfaction of the clients and commitment towards innovation its possible to Pinto Brasil to maintain the loyalty and trust of its costumers.



Manufacturing and Installation
of Assembly Lines, Conveyors and Industrial Peripherals

Portugal

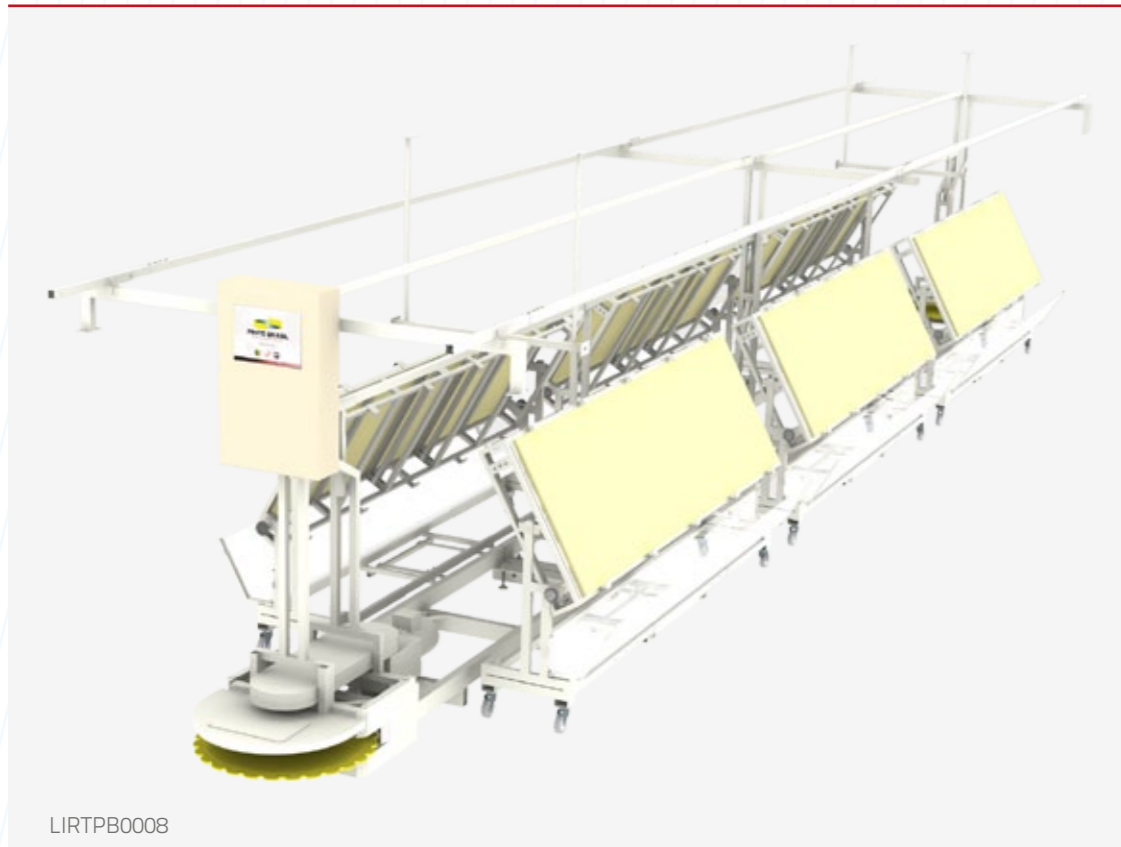
Germany | Spain | Morocco | Mexico | Romania | Russia | Tunisia

Assembly lines - 6
 Produci Software - 8
 Accessories and Components - 10
 Peripherals - 12



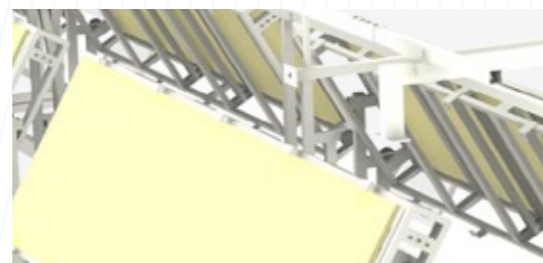
PRODUCTION SYSTEMS ASSEMBLY LINES

ROTARY LINE 08



LIRTPB0008

Modular structure (from 6 meters with multiples of 3 meters) / Single, double or triple boards (rotating) with fast setup / Adjustable boards in length (Min. 2 meters, Max. 6 meters) / Variable width of boards (between 0,7 e 1,2 meters) / Speed of carriers variable between 1 to 4 m/min (other speeds under request) / Movement of the carriers in continuous mode or intermittent (start-stop) / Emergency stop system on the entire length of the line, according to CE directives / Control panel with functional parameters for setup of the line ("Produci" control system)



The Rotary line 08 has as working principle, the controlled movement of the assembly board along the workposts, according to a carroussel typology.

These boards are fixed in carriers that move on the ground guided by the central structure of the line.

The elements of the line are built according to a modular approach, allowing quick setup adjustments.

EQ LINE (EFFICIENCY & QUALITY)

The assembly line LIEQPBI600 works according a start-stop concept, in which the products to assemble are moved between workstations on a belt. This line offers great advantages in an ergonomic point of view, as it allows the feeding of components on the front of the operator. The fact that the supply of the components is made from the front of the line, and due to its reduced dimensions, the optimization of the plant layout is ensured with the use of the line model.



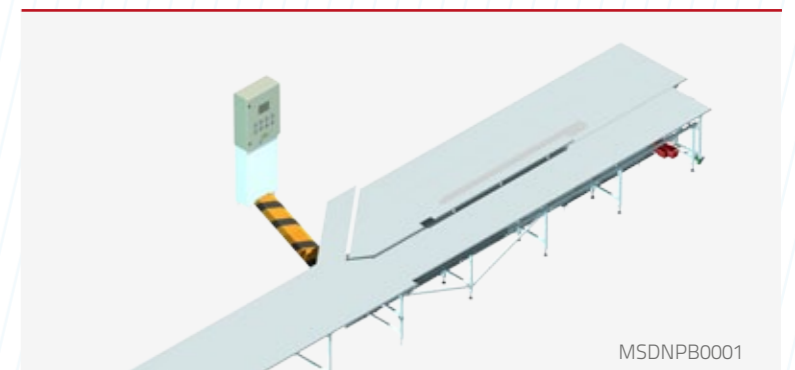
LIEQPBI600



Modular structure (from 6 meters with multiples of 3 meters) / Width of the canvas belt of 600mm (available also with 400mm) / Adjustable inclination in the work area / Support structure allows fixation of racks for feeding of components / Emergency stop system on the entire length of the line, according to CE directives / Movement of the canvas belt according to start-stop principle / Control panel with functional parameters for setup of the line ("Produci" control system)

DYNAMIC TABLE

Automatized work table for assembly works. Adjustable to different configurations in automatic mode according to the defined work plan. The positional control of the table can be made manually in the command console or through the database controlled by the client ERP software. According to the coordinates defined, the control system will move the sections of the table in order for it to have the desired configuration.



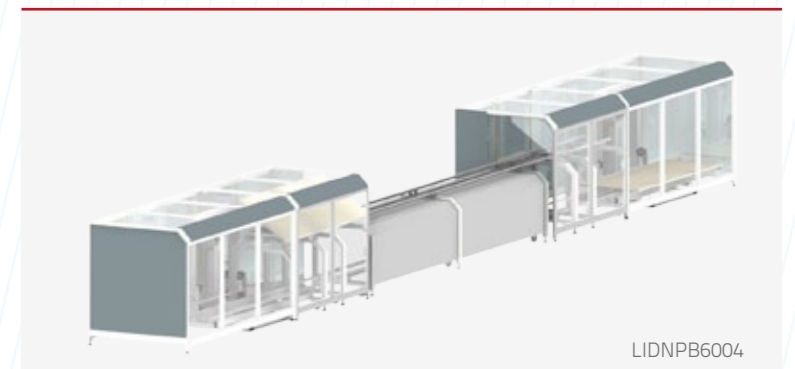
MSDNPB0001



Developed for specific components (consult for different configurations, dimensions and quantity of componentes) / General dimensions 11,3x1,95x0,9m (LxWxH) / Welded construction in tube and steel plate / Fixed and swivel wheels / Structure painted with epoxy ink / Modular structure

DYNAMIC LINE

The assembly line LIDNPB6004 works according a start-stop concept, where the board trays are moved along the workstations. The sliding movement of the board trays is made on top of tubular guides in two platforms (upper platform where the assembly is made and lower platform used for the return of the empty board trays). The configuration of this line allows the feeding of components from the front of the operator ensuring an optimal ergonomomy for the operators.



LIDNPB6004



Modular structure (from 6 workstations with multiples of 1 workstation) / Standard board trays with 2,2x0,8m or 1,8x0,6m (consult for other dimensions) / Adjustable inclination in the board trays / Support structure allows fixation of racks for feeding of components / Movement of the board trays according to start-stop principle / Emergency stop system on the entire length of the line, according to CE directives / Control panel with functional parameters for setup of the line ("Produci" control system)

Assembly lines - 6
 Produsi Software - 8
 Accessories and Components - 10
 Peripherals - 12



PRODUCTION SYSTEMS PRODUSI SOFTWARE

PRODUSI 2.0



- Main features:
- Improved Design
 - Faster processor and better graphic resolution
 - Low energy consumption
 - Allows saving production data at the end of each work shift, in a pen drive
 - Data stored in .dtl and .csv format (possibility to convert to Excel)
 - Possibility to save the daily production data in only one Excel file
 - TFT widescreen (7" or 12")

Pinto Brasil has developed a new solution for the PRODUSI system used in the touchscreen of 7" or 12" and it is totally compatible with the previous PRODUSI version.



EXAMPLES FOR NEW MENUS

UNPRODUCTIVE TIME

Motive

- Undetermined
- Accident
- Operator Absence
- Mechanical Failure
- Lack of Material
- None
- Break Time

LANGUAGE

CLOCK

12:24

02:05:2012

LOGIN

User: Operator, Line Chief, Administrator, Pinto Brasil

MENUS

STOPPED STATIONS - DETAILS

S1	00:00	00:00	0	0	S7	00:00	00:00	0	0
S2	00:00	00:00	0	0	S8	00:00	00:00	0	0
S3	00:00	00:00	0	0	S9	00:00	00:00	0	0
S4	00:00	00:00	0	0	S10	00:00	00:00	0	0
S5	00:00	00:00	0	0	S11	00:00	00:00	0	0
S6	00:00	00:00	0	0	S12	00:00	00:00	0	0

LINE PARAMETERS

Cycle Time	120 sec	Movement Time	10 sec
Siren Time	2 sec	Number of Posts	18
Wait Time	1 sec	Minimum Time History	10 sec

SHIFTS

Shift	Begin	End	Pause 1	Pause 2	Pause 3
1	08:00	18:00	10:00 - 10:30	13:00 - 14:00	16:00 - 16:30
2	00:00	00:00	00:00 - 00:00	00:00 - 00:00	00:00 - 00:30
3	00:00	00:00	00:00 - 00:00	00:00 - 00:00	00:00 - 00:30

PRODUCTION

Cycle Time	120	Current Objectives	20
Difference	12	Produced	8

TIME / REFERENCE STATISTICS

Reference	Objectives	Working Time (h)	C. Time (s)	Produced	Downtime (h)	Downtime (s)
8352161	202	76	12	46	5	15

STOPPED STATIONS

Assembly lines - 6
 Produzi Software - 8
 Accessories and Components - 10
 Peripherals - 12



PRODUCTION SYSTEMS ACCESSORIES AND COMPONENTS

EXAMPLE OF JIGBOARD



Pinto Brasil is dedicated also for the production of metal componentes and plastic injected components according to the specifications of the costumer.

Range of produtos developed and produced for the routing layout and fixing of componentes on the workstations of the assembly lines.



Metallic components:

- Hinged Forks, fixed or fall-down
- Pins
- Fixed pins or spring pins
- Fixed or hinged supports for conector holder

Plastic components:

- Fixing rubber springs
- Fixing Toufix springs
- Fixing springs with elastic band

EXAMPLE OF COMPONENTS

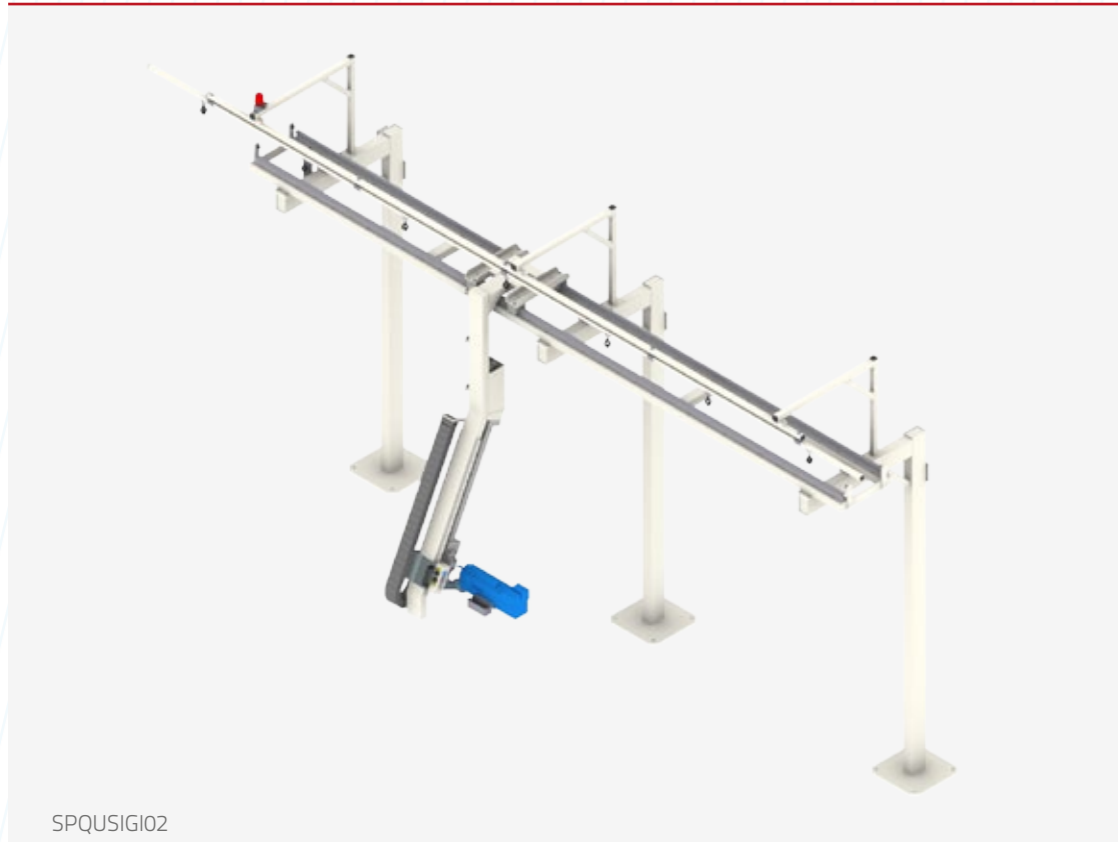




Assembly lines - 6
 Produzi Software - 8
 Accessories and Components - 10
 Peripherals - 12

PRODUCTION SYSTEMS PERIPHERALS

SUPPORT STRUCTURE FOR ULTRASOUND WELDING MACHINE



SPQUSIGI02

Objetive: welding of components without removing them from the assembly line.

Equipment consisting of:

Guiding system which must be fixed to the ground; allows the positioning of the support aligned with the assembly line, allows displacement with the normal movement of the assembly line, thus allowing to make the welding even with movement.

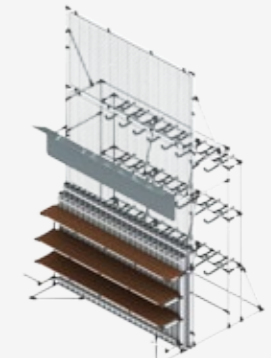
Support that allows fixing perpendicularly the welding machine to the board; It has position and angular regulation, which makes it possible to place the machine in a more favorable working position; allows changing the machine in height through the use of pneumatic cylinder.



When the support reaches the end of the guiding system a limit switch is actuated and the line stops, allowing to finish the welding process without damaging components or the equipment / The movement of the support along the guiding system is manual/ All the movements are made and controlled by the operator.

SUPPLY SHELF (WIRES/COMPONENTS)

This shelf is specifically for the supply of wires and components for assembly in the workstations. Components placed on shelves and feeding of wire using "pagoda methodology" to ensure feeding from the front side and load from the rear side of the shelf.



ESAOFIPB48

Developed for specific components (consult for different configurations, dimensions and components quantities) / Construction in tubular profiles and fixation accessories according Lean philosophy (see PIBRA Easyform products) / Wooden shelves and "pagoda" feeding structure in electro galvanized iron tube

ELEVATING CARRIER (WIRES)

Carrier for feeding of wires to the workstations. Light structure, easily maneuverable, built with two independent levels of lifting. The movement of the shelves is accomplished by manually operating the carrier winches. This carrier has also a bag in PVC crystal canvas to protect the wires to transport/supply.



CRCIEVPB06

Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions: 0.8x0,6x3,00m (LxWxH) / Guide in aluminium profile / Winches with steel cable for elevation of the arms / Bag in PVC crystal canvas / Swivel wheels with brake / Construction in welded steel tube / Structure painted with epoxy ink

RACK FOR BOXES

Structure for feeding of components stored in boxes to the workstations, ensuring a FIFO (First In, First Out) methodology, and return of the empty boxes. Rack with one shelf for performing small assembly tasks.



RKCXSBBP92

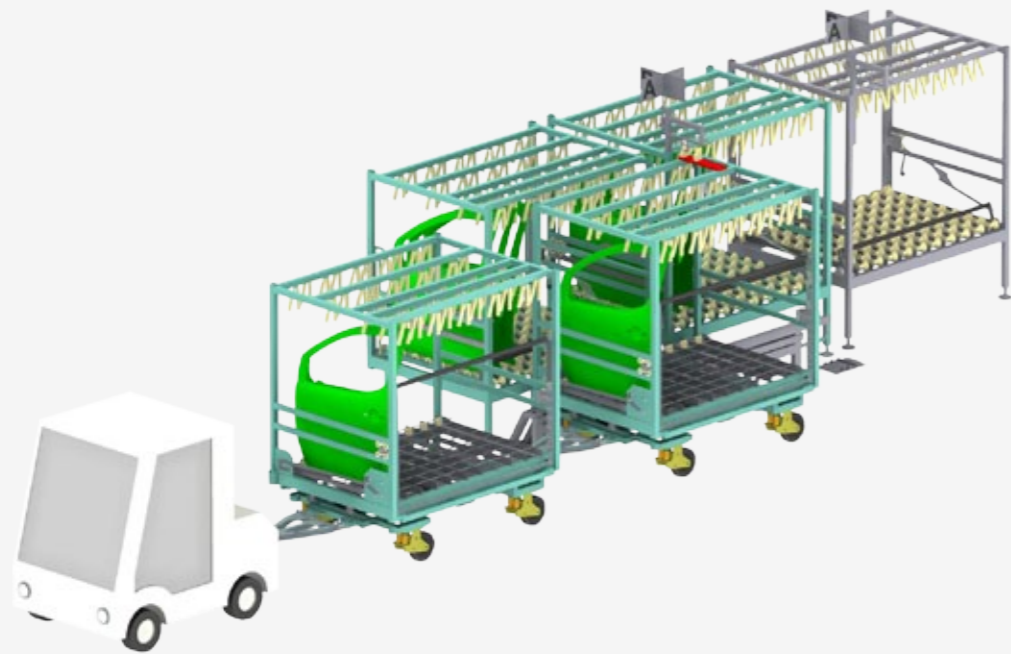
General dimensions 1.8x1x1.8m (LxWxH) / Developed for boxes with dimensions of 0,6x0,4x0,3m (consult for other dimensions and/or quantities) / Construction in tubular profiles and fixation accessories according Lean philosophy (see PIBRA Easyform products) / Metallic gutter with plastic rollers for sliding of the boxes

Internal - 14
 External - 16
 Storage - 18



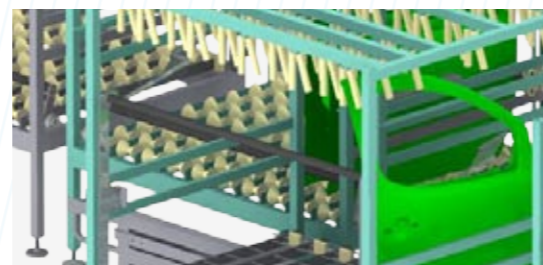
LOGISTIC SYSTEMS INTERNAL

SYNCHRONOUS DOOR SUPPLY SYSTEM



STTTPTPB01

Developed for specific components (consult for different configurations and components quantities)/ General dimension of stations of 1,9x1,4x2,2m (LxWxH) and wagons of 2,15x1,4x2,2m (LxWxH) / Packaging of components between polyamide rollers / Simultaneous blocking and movement systems manually driven / Wagon guide system in two-axis / Wagon movement by towing vehicle / Construction in welded tube and steel plate / Wagons with swivel wheels of 250mm diameter and shock absorber / Structure painted with epoxy ink



System consisting of loading and unloading system and wagons for synchronous supply of a mix of door models.

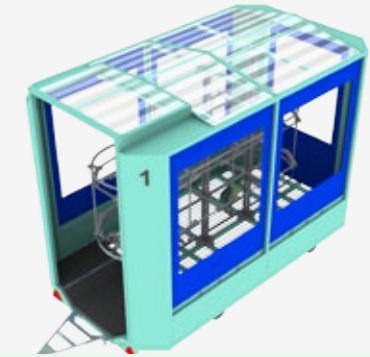
Manual system for moving the doors inside the wagons simultaneously. It has a system that allows to block the movement of the parts during transport and transfer all the parts with only one movement.

The positioning of the wagons near the loading and unloading stations is made with the use of a guide system in two-axis.

Wagons equipped with bumpers and signalization in order to be used in an external environment.

BUMPERS TRANSPORT

Wagon for transport and synchronous supply of a mix of bumper models. The bumpers are packed in supports specifically designed to accommodate different models. In order to guarantee the synchronism of the supply of components, the supports are placed on top of a manual rotating system. The wagon is equipped with roofing in polycarbonate, canvas, bumper and signalization to allow its use in external environment. Wagon has a handle allowing manual movement.



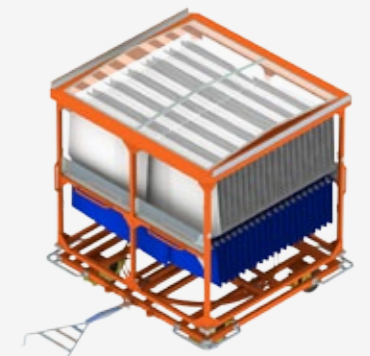
VGTTPCPB02



Developed for specific components (consult for different configurations, dimensions and components quantities)/ General dimensions of 3,3x1,8x2,5m (LxWxH) / Structure with supports for components placed on top of a manual rotating system / Wagon movement by towing vehicle / Roofing in polycarbonate and canvas / Wagons with swivel wheels of 250mm diameter and shock absorber / Structure painted with epoxy ink

GLASS TRANSPORT

Wagon for transport and synchronous supply of glass. The components are packed in individual PVC canvas alveoli, separated by polyamide tabs. Wagon with rotation of the central structure and pedal brake, allowing loading/unloading from two sides. The wagon is equipped with roofing in polycarbonate, bumper and signalization to allow its use in external environment. Wagon has a handle allowing manual movement.



VGTTVDPB02



Developed for specific components (consult for different configurations, dimensions and components quantities)/ General dimensions of 1,8x1,65x2,1m (LxWxH) / Wagon movement by towing vehicle / Rotating structure with alveoli in PVC canvas for packing of components / Construction in welded tube and steel plate / Roofing in polycarbonate plates / Wagons with swivel wheels of 250mm diameter and shock absorber / Structure painted with epoxy ink

TRANSPORT CARRIER (MISSILES)

System that allows to place the missile in any position:

- Movement in height done manually through the use of a hydraulic pump that lowers through the valve opening.
- Transversal, front and rear movement of the angle on the support table to align with the angle of the airplane wing to compensate small deviations of the position of the aircraft.
- Allows forward and backward movement of the support table (140mm) to ease the insertion on the guides of the airplane wings.



CRTTPCPB09



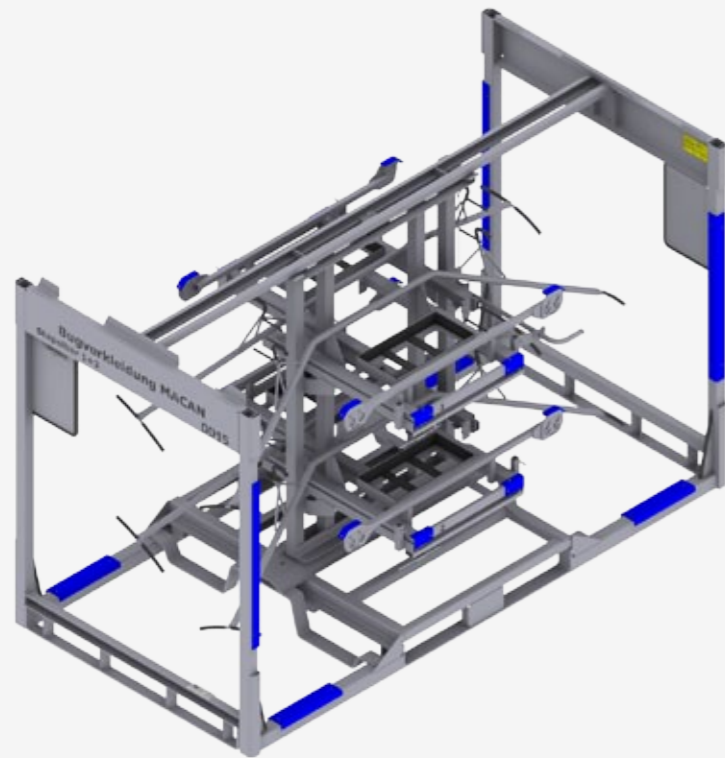
Maximum speed: 12 km/h / Weight without load: 475 kg / Weight with load: 675 kg / Pneumatic wheels / Foldable coupling / Chains to ensure the safe transport of the missile by towing vehicle / System for stabilization and positioning of the parking brake during the final phase of loading of the missile in the aircraft / Compliant with the existing missiles patterns / Capacity up to 2 missiles with length up to 2,9m length and several diameters and weight of about 100 kg each

Internal - 14
External - 16
Storage - 18



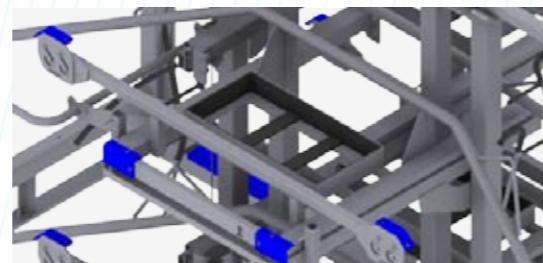
LOGISTIC SYSTEMS EXTERNAL

CONTAINER FOR STORAGE AND TRANSPORT OF BUMPERS



COTTPQB09/10

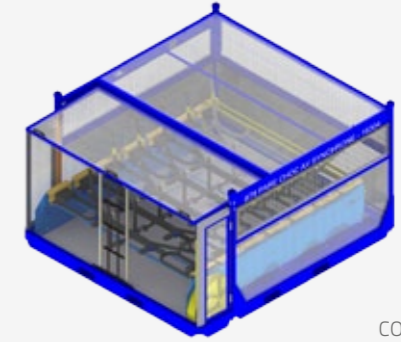
Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 1,2x2,4x1,5m (LxWxH) / Moved by lift-truck / Stackable configuration / Construction in welded tube and steel plate / Structure painted with epoxy ink



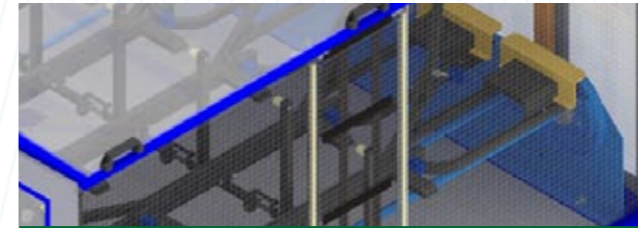
Metallic container for storage and transport of bumper components. The components to be packed will be placed on top of reinforced metallic rods. It is a stackable container, designed to be moved with lift-truck. The locking of the components is made with the use of foldable metallic arms.

BUMPERS TRANSPORT CONTAINER

Container for transport and synchronous supply of a mix of bumper models. The bumpers are packed in supports specifically designed to accommodate different models. In order to guarantee the synchronism of the supply of components, the supports are placed on top of a manual rotating system. The container is stackable and can be moved by lift-truck.



COTTPCB02/03



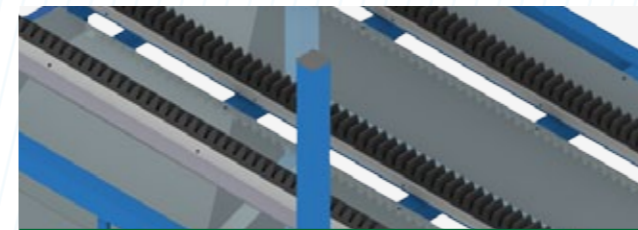
Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 2,4x2,2x1,4m (LxWxH) / Structure with supports for components placed on top of conveyor system for manual movement/rotating system / Moved by lift-truck / Construction in welded tube and steel plate / Structure painted with epoxy ink

GLASS COMPONENTS RACK

Metallic container for transport and storage of a mix of glass components. The components to be packed will be placed in 3 fixed supports coated in scaled rubber. The fixation is made with a foldable arm, coated with rubber brush, with the locking made by spring positioners. The container is stackable and can be moved by lift-truck.



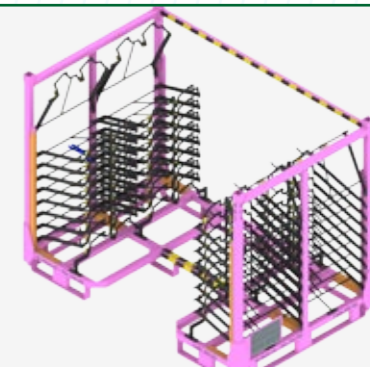
COTTVDPB01



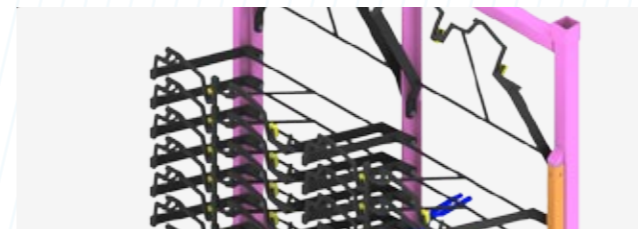
Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 1,2x1,15x0,9m (LxWxH) / Moved by lift-truck / Stackable configuration / Construction in welded tube and steel plate / Fixation of components with the use of fixed supports and foldable arm with locking / Structure painted with epoxy ink

INJECTED COMPONENTS RACK

Metallic container developed for the transport and storage specific injected components. The components to be packed will be placed on top of reinforced metallic supports. The locking in place of the components is made with the use of foldable metallic arms. The container is stackable and can be moved by lift-truck.



COTTPCB12



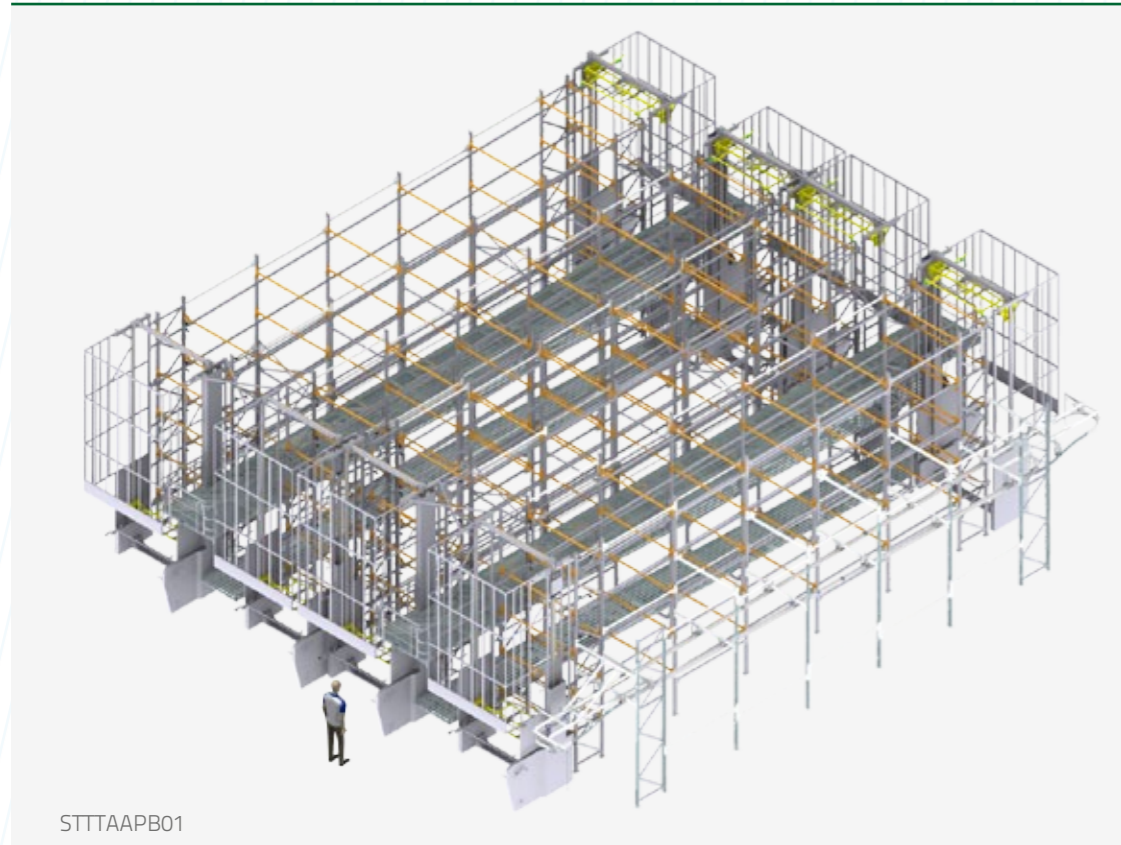
Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 1,2x1,9x1,5m (LxWxH) / Metallic structure with spring system supports / Stackable configuration / Construction in welded tube and steel plate / Structure painted with epoxy ink / Moved by lift-truck

Internal - 14
External - 16
Storage - 18



LOGISTIC SYSTEMS STORAGE

TRANSTOCKER



STTTAAPB01

Dynamic storage system for components according to the FIFO philosophy. Has an excellent use of the available height of the plants, reducing the high costs of the surface area occupation.

The lifts are manually driven (motorized option under consultation) after selecting the loading and unloading level.

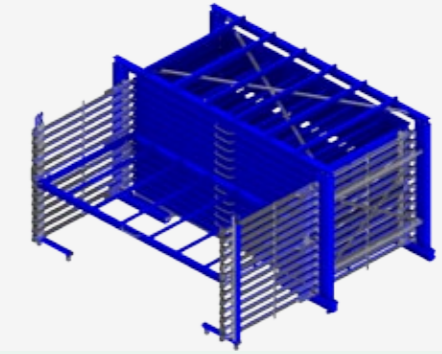
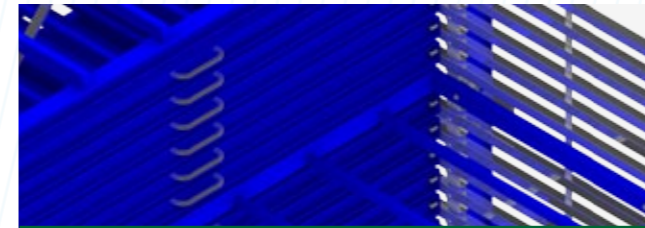
The system is composed by 2 lifts (load and unload) and a buffer with several storage levels.

Has catwalks along the length of the transtocker (for maintenance) / The components to store are placed in specific rollers, after its use they are sent to the loading area through the use of empty return ways / Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 17x14x6m (LxWxH) (adaptable according to the needs of the client) / Construction in welded tube, with screwed columns and traverses / Flexible and modular structure, painted with epoxy ink



METAL PLATES FEEDING SHELVES

The metal plate feeding shelf was developed for a better storage of metal plates, allowing the reduction of occupied area. Metallic structure composed by 13 drawers, spaced in about 75mm, allowing the storage of stacks of plates in each.

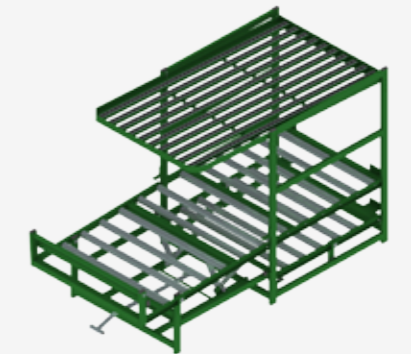


ESAOCHPB05

Reduced area of installation / High storage capacity / Reduction of work accident hazards / Reduction of human effort as it allows a smoother handling of material / Decrease of failures and errors

PALLETS DYNAMIC RACK

Self leveling structure for storage of components on pallets has a system for the return of empty boxes. Has a dynamic tray for placement of empty or on hold boxes in the upper part of the structure.

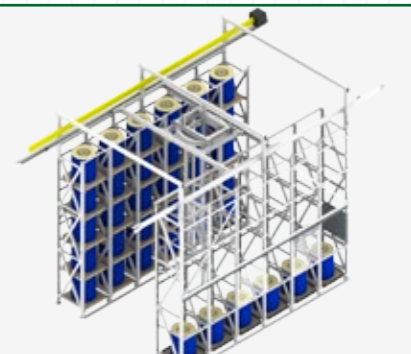
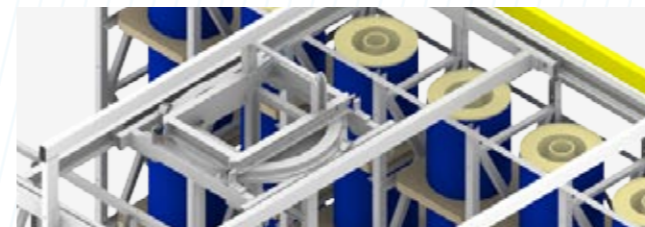


RKDNPLPB01

Developed for pallets with maximum dimensions of 1,2x1x0,15m (consult for other dimensions) / General dimensions of 2,6x1,2x1,7m (LxWxH) / Construction in welded tube / Metallic rolls with 60mm diameter and metallic gutters with rollers / Legs of the structures with adjusting feet to ensure perfect positioning on the floor / Structure painted with epoxy ink

SEMI-AUTOMATIC WAREHOUSE

Metallic structure for storage and management of wire coils with an unit weight of 90Kg. Storage structure composed by 2 main structures with active spaces where the wire is supplied to the production machinery and passive places where the coils are only stored. The displacement of the coils inside the warehouse is made semi-automatically with the use of a sliding and rotating crane over linear guides and operated by specialized personnel. By allowing the storage of coils in height, this warehouse gives a great optimization of the plant layout in the components' storage area.



ESBBFIPB05

General dimensions adaptable up to 100x3x6m (LxWxH) / Welded construction in tubular profiles and steel plates / Electrical system for actuating of the cranes / Modular construction to allow different configurations and dimensions (under consultation) / Developed for specific components (consult for different configurations, dimensions and components quantities) / Structure painted with epoxy ink



SPECIAL EQUIPMENTS

WELDING ROBOT TOOL



Precision tool designed for placement and fixation of components for robotized welding.

Quick setup that allows it to be adjustable to several references, ensuring the SMED philosophy.

System with a crank to rotate the equipment and ensure its correct adjustment and positioning.



TLMEFMPB07

Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 0,75x 0,34 m (DxH) / Milled and thermal treated steel components.

DIMENSIONAL CONTROL GAUGE

Mechanical gauge for dimensional control of different points (dimensions) on chassis transport carriers over 3 axis. Verification made through a vertical movement opposing to the carrier to be controlled and of the gauges support. The control is made according a "pass / does not pass" philosophy with a precision of 0.5mm. The positioning of the carrier is made with the use of manually driven levers and the gauge is moved electrically.



STCTDMPB01

Developed for specific components (consult for different specifications) / General dimensions of 5,6x1,7x1,96m (LxWxH) / Electrically driven / Thermal treated components/control gauges / Structure painted with epoxy ink / Equipment developed according to CE legislation

TEST AND PROGRAMMING

Developed for testing and programming of the air conditioned control button to install in some automotive vehicles. Ensures the fixation, connection and programming, test (conformity check), marking and glue of the label in the OK parts. All these made automatically, the operator only intervenes on the beginning and end of the cycle. This system is designed to work together with other devices, to form an assembly line. All the movements are done through the use of pneumatic actuators, with the remaining tests being done by vision cameras. The parameters are inserted in the system with the use of a console.



DITS03PB01

Developed for specific components (consult for different specifications) / General dimensions of 1,2x1,3x1,65m (LxWxH) / Pneumatic actuators / Vision cameras / Bar code label printer / Console and PLC with Pinto Brasil software / Structure in modular aluminium profile / Equipment developed according to CE legislation

POSITIONING CONTROL SYSTEM (UNICOAT TABLE)

The positioning control system unicoat table was designed and built to perform rotation and inclination movements. The rotating movement can go from 0 to 300 rpm and the inclination from 0 to 90°. These values are defined in the touchscreen panel. It is intended to work together with a plasma injection system. All errors/warnings, inclination and speed are presented in the touchscreen panel.



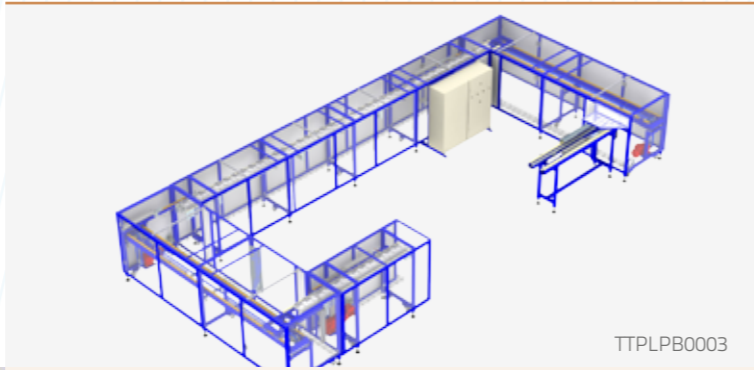
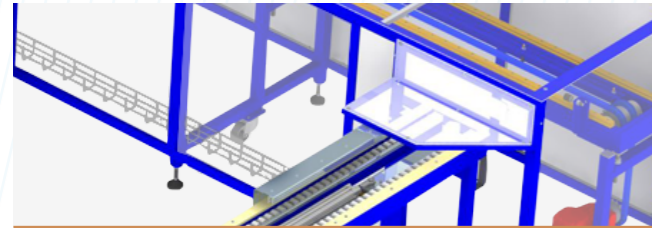
STCTPMPB01



Developed for specific components (consult for different specifications) / Electrical actuators / Touchscreen panel / Touchscreen panel and PLC with Pinto Brasil software / Origin and position detector / Brakes / Emergency / Equipment developed according to CE legislation

AUTOMATIC TRANSPORTER

Set of transporters, working synchronized with silicon injection equipment. The pallets are loaded to the injection equipment by the system. The injected silicon will dry and solidify during the path of the pallet through the automatic transporters. Some transporters have buffer zones in order to accommodate a bigger quantity of pallets being moved. The passage of pallets between transporters is made with the use of clamps and pneumatic actuators. All the parameters are introduced in the system using a touchscreen panel.

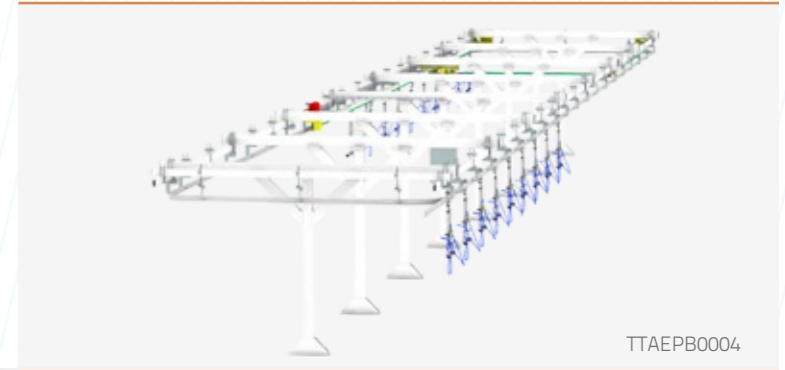


TTPLPB0003

Developed for specific components (consult for different specifications) / General dimensions of 6,8x4,0x1,2m (LxWxH) / Motorized transporters with transport chain and buffer / Clamps and pneumatic actuators / Touchscreen panel and PLC with Pinto Brasil software / Structure painted with epoxy ink / Equipment developed according to CE legislation

AERIAL TRANSPORTER

Aerial transporter made by manual movement lines and motorized movement lines, working synchronously with an assembly line. The components to transport are placed on hooks that can accommodate several models of components. The hooks are equipped with a sliding system over aluminium guides designed by Pinto Brasil. The transporter works in a closed circuit and short displacement of hooks are between workposts is made manually. The bigger displacement movements are made by motorized action. Os movimentos de grande deslocamento são realizados com ação motorizada. All the parameters are introduced in the system using a touchscreen panel.

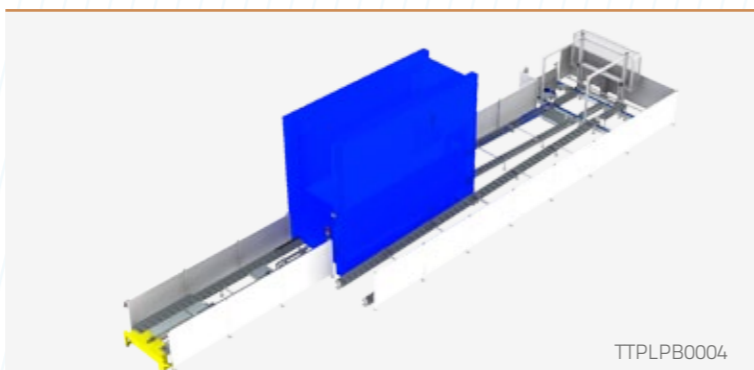
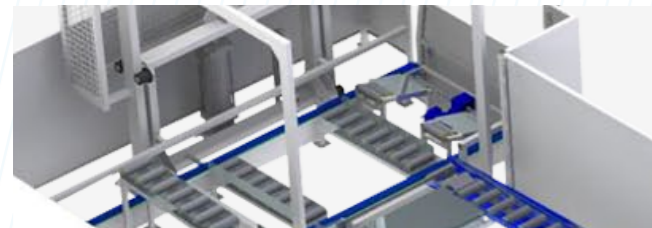


TTAEPB0004

Developed for specific components (consult for different specifications) / General dimensions of 30x4,5x4,5m (LxWxH) / Transport ensured by a sliding system over aluminium profile designed by Pinto Brasil / Motorized movements made with transport chain transmission / Touchscreen panel and PLC with Pinto Brasil software / Structure painted with epoxy ink / Equipment developed according to CE legislation

AUTOMATIC TRANSPORTER

Set of transporters, working synchronized with vacuum chamber. The plastic containers are loaded in the transporter that moves them to the vacuum chamber. After the cycle time is reached the containers are sent to a workpost. In this workposts, the system elevates and inclines in order to guarantee the ergonomoy of the operators. Next the empty containers are moved to a return transporter that places them in order to be retrieved. All the parameters are introduced in the system using a touchscreen panel.

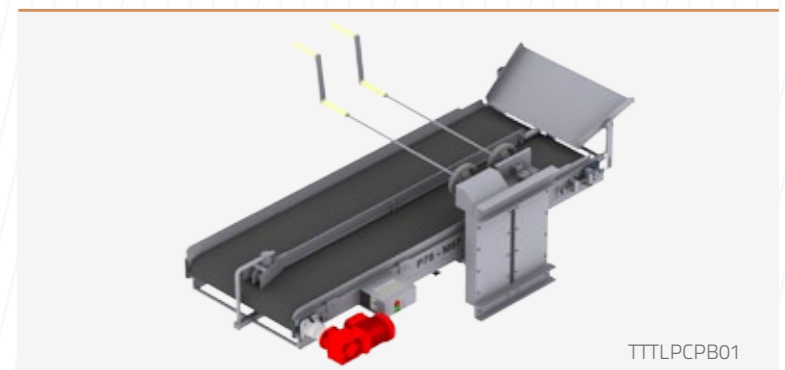
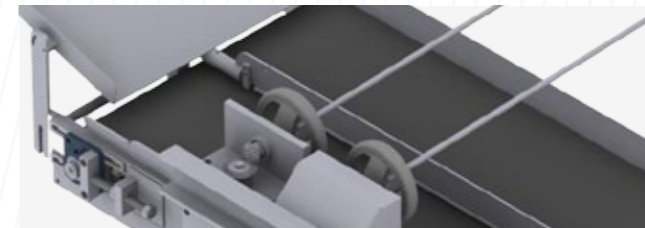


TTPLPB0004

Developed for specific components (consult for different specifications) / General dimensions of 15,2x3,5x3,7m (LxWxH) / Motorized transporters with transport chain and rolls with rollers / Lift pneumatically driven / Touchscreen panel and PLC with Pinto Brasil software / Structure painted with epoxy ink / Equipment developed according to CE legislation

TRANSPORTER FOR SCOBs

Belt transporter developed for the removal of aluminium scob from a cut and stamping press machine. Small dimension transporter, designed to be assembled inside the press, equipped with a longitudinal movement system in order to be adaptable to any tool being used in the press.

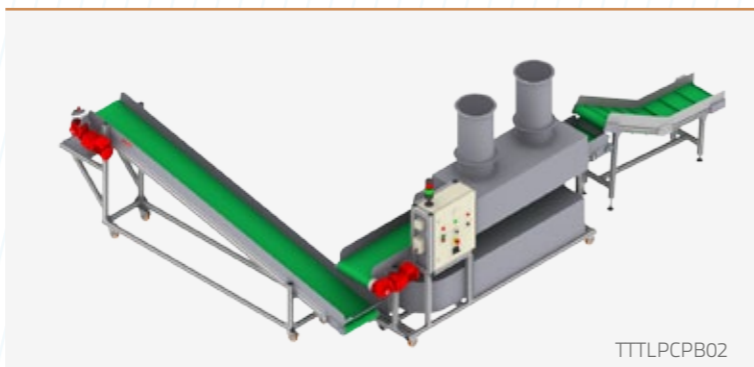


TTTLPCB01

Developed for specific components (consult for different specifications) / General dimensions of 1,8x0,6x0,15m (LxWxH) / Belt transporter with pneumatic motor actuation / PLC with Pinto Brasil software / Equipment developed according to CE legislation / Structure painted with epoxy ink

TRANSPORT SYSTEM

Set of 3 canvas transporters, for moving of metallic components between 2 workposts. The components are subject to welding operations on the workposts before the transport system. During the transports their temperature is reduced to levels close to the room temperature, this is done on the middle transporter which is equipped with a air cooling system. (chiller and soundproof fans). All the parameters (cycle time, speed, etc) are introduced in the system using a touchscreen panel.



TTTLPCB02

Developed for specific components (consult for different specifications) / General dimensions of 3,5x3,0x1,75m (LxWxH) / Canvas transporters driven by electric motors / Chiller and soundproof fans / PLC with Pinto Brasil software / Stainless steel and aluminium structure / Equipment developed according to CE legislation

TRANSPORTER ROLLER

Dynamic structure developed to be incorporated in the last work post of a packing line. The structure gets the pallet with the material already packed and makes it slide to the end of its course through the use of movement rolls. The platform, pneumatically driven, raises the pallet and turns it 90° in order to be remove from the line. The pallet transfer system on the end of the line is made with rotating movements and hydraulic lifting. The system allows repositioning a pallet in the required position on the end of the packing circuit, permitting an appropriate access to the pallet with equipments for handling loads.



RLCYLPB01

Lifting of the pallets with pneumatic motor / Construction in welded tube and steel plate / Control of the lifting with pedals / General dimensions of 1,4x0,73x0,1m (LxWxH) / Structure painted with epoxy ink

TUBE CUTTING MACHINE

This machine is developed to cut corrugated tube, allowing to cut different diameters with a quick change of tube. The length of the tubes to cut is ensured with the use of an adjustable scale. The machine is equipped with an anti-return system to ensure the dimensional tolerances. The cutting blade stays inside the machine is driven through a pneumatic cylinder and its movement is only activated by bimanual command. When the blade is rising, the safety of the operator is guaranteed by a shield, ensuring that the cutting area is no longer accessible.



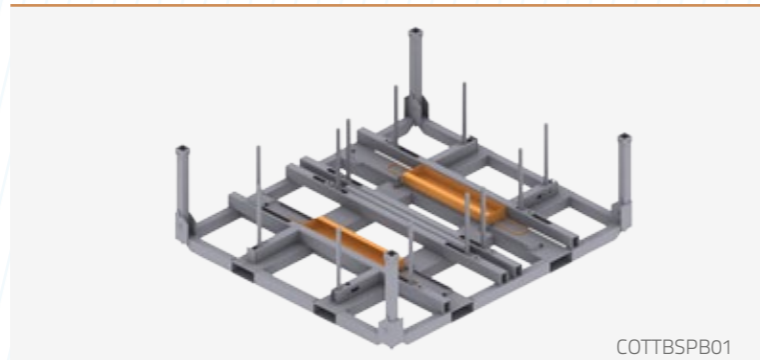
MQCTUPB01

Developed for specific components (consult for different specifications) / General dimensions of 1,65x0,45x1,05m (LxWxH) / Bimanual command / Motorized activation with trapezoidal chain transmission / Movement of the blade through pneumatic cylinder / Structure painted with epoxy ink / Equipment developed according to CE legislation



PACKING RACK

Metallic pallet for packing and transport of cutted metal plates for stamping. Built with a flexible structure, adjustable fitting of the blocking bars allowing the packing of metal plates. The base is built to allow the use of fork lift for its maneuvering. The arms of the structure are foldable enabling the stacking of structures.



COTTBSPB01

Developed for specific components (consult for different configurations, dimensions and components quantities) / General dimensions of 2x1,8x0,9m (LxWxH) / Handling by forklift / Stackable configuration with foldable arms / Construction in welded tube and steel plate / Structure painted with epoxy ink



ROTATIVE PLATFORM FOR PALLET PACKING

Rotative metallic platform manually driven, developed for packing of pallets. Has a brake in each quadrant (90°). Equipped with load rollers in order to ensure a smooth and continuous movement of the platform during the packing operation. Allows also the handling with fork lift. Can be automatized.



PLGRCOPB03

Developed for specific components (consult for different specifications) / General dimensions of 1,25x1,60x0,35m (LxWxH) / Pedal for blocking of rotation / Handling by forklift / Structure painted with epoxy ink



EASYFORM



Implementation of Lean Manufacturing, implies adopting a continuous improvement philosophy in which the main objective is to implement the efficiency in all manufacturing processes, eliminating activities that do not generate added value (waste) thus generating tangible benefits to the customer.

Lean manufacturing methodology ensures that the products are done always with the minimum raw material, equipments, production area, money and man power resources.

Pinto Brasil provides an integrated service that goes from the 3D project of the products to the production and supply of the final product.

The agility, flexibility and easiness of implementing an Easyform production system results in:

Increase of the quality levels of the production processes / Increase in productivity / Decrease of requests preparation time / Improvement of the working areas / Reduction of internal logistic costs / Resources optimization / Reduction in the length of assembly lines / Reduction of stock materials

PINTO BRASIL - FÁBRICA DE MÁQUINAS INDUSTRIAIS

Headquarters: Rua de Pardelhas, n.º 87, 4765-420 - Guardizela, Portugal
Phone: +351 253 479 240 | Fax: +351 253 479 249 | info@pintobrasil.pt