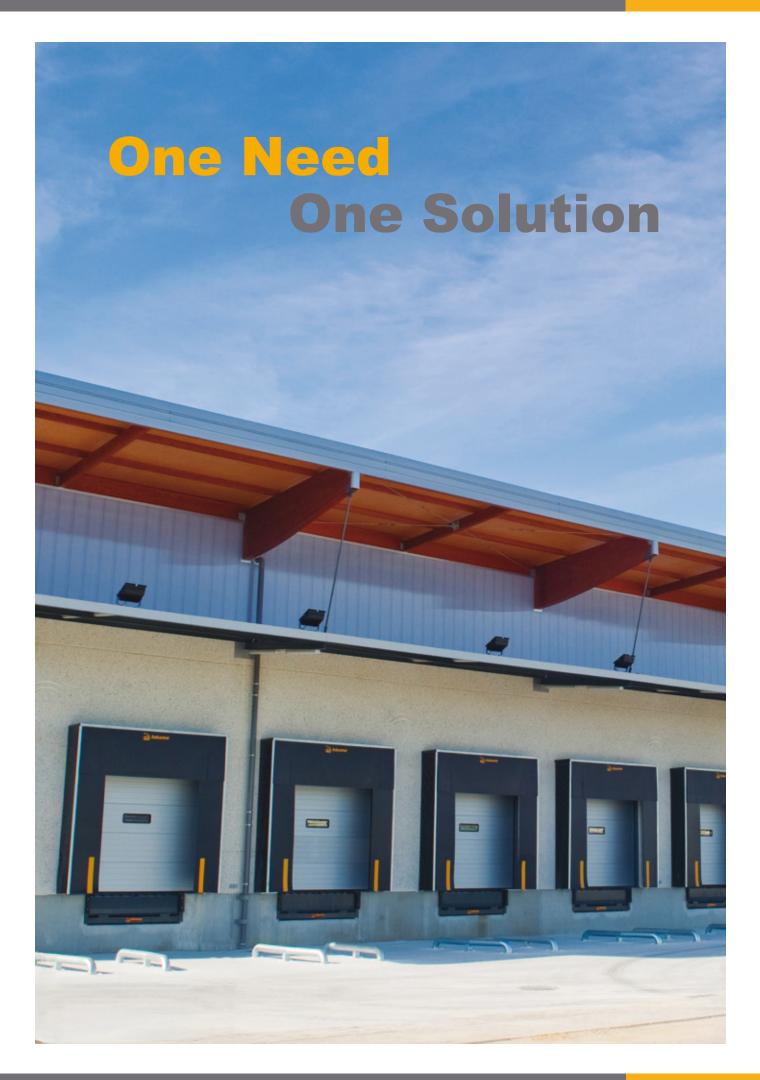




Loading Bay Catalogue





Barcelona, Spain.



Timisoara, Romania.



Welcome to Inkema.

Inkema is a specialist in providing integrated solutions for loading and unloading processes and the management of access through industrial enclosures. Our highly qualified team, with over 25 years of experience within the sector, designs, produces, installs and provides after-sales services for our entire product range: loading bays, scissor tables, yard ramps, industrial doors and dock shelters, among others.

A high quality product and quick service are the most valued characteristics by our customers, therefore our aim is to satisfy their needs by offering a customized and quick service, that offers the most suitable solution in each specific case.

Inkema products are used in all areas, in small workshops and food or automotive industry, as well as in large logistic

centres. Each customer has his own needs and each solution has its own specific characteristics. As a manufacturer with its own R+D+I Department, Inkema is able to guarantee the production of precise, robust, and safe products that comply with all the European standards, and always from the perspective of satisfying our customers' needs, with extremely reasonable prices and products of proven quality that offer users an excellent performance and durability.

A key to our success is innovation, and developing new products is one of our main concerns. For this reason we invite you to visit **www.inkema.com** and discover all the products and services we provide in order to satisfy your needs: our solution. Welcome to **Inkema**.

We provide the solution you are looking for. Even those you never imagined.

Inkema has wide experience in designing loading bays and operates in more than 42 countries. It competes efficiently in markets that are subject to significant changes and globalization processes.

Inkema loading mechanisms are as diverse as the demands of its clients. We conduct a preliminary study to find the best solution for speeding up all loading and unloading operations. In all cases, pursuant to the following guidelines:

- Safety for operators and for the machinery and facility.
- Best technology for producing the best products with the best materials.
- Optimizing energy savings in the facility.
- Protecting the facility from external elements.
- Speeding up logistics in loading and unloading goods.
- Guaranteeing the useful life of all our products.

Inkema also supplies different construction systems. After conducting a previous study, we offer the best solutions for each type of construction, installation and loading bay.

Inkema has a wide range of loading solutions to cater for diverse needs.

- Dock Levellers: Inkema electro hydraulic dock levellers are used to cover the gap and height between the loading bay and the box of the truck that needs to be loaded and unloaded.
- Loading bridges: no pit is required for installing them and they are used to speed up the loading and unloading of medium sized and small goods.
- Free standing frames and Tunnels: for facilities that require a complete loading structure, with the advantage of not requiring any civil work and projecting the bay outward, thereby leaving free space inside the building.



























The most accurate solution.

Simple, quick and functional. Without doubt, the **Inkema RH1** is the perfect solution for any loading bay. Its hydraulic tilting mechanism and folding lip enables the dock leveller to cover the gap and height between the loading bay and the truck, allowing it to rest firmly on the loading bay.

The Inkema RH1 leveller has three parts:

- A platform with an upper sheet of tear plate with thickness of 6/8 mm and a set of laminated profiles and protective side panels.
- A lip made of tear plate sheet with a thickness of 13/15 mm. The lip is folded and milled at the end, to fit onto the truck and to ease the passage of the forklifts.
- And the inferior structure formed by laminated profiles upon which the platform and hydraulic assembly are installed.

Safety is an essential requirement for any professional. For this reason, all **Inkema** levellers have diverse safety systems:

- An emergency stop activated by a section switch or zero voltage.
- An anti-fall safety valve inside the hydraulic cylinder.
- Fixed and mobile side panels that serve as a foot guard.
- A platform with an upper surface anti-fall tear plate.
- Safety signals in form of stickers on moving parts.
- Safety bar to prevent the leveller from closing during maintenance work.













Hydraulic system.

Self-cleaning reinforced hinges.

Foot guard panels and safety stickers.

Inkema control panel. 5

- A construction system with **self-cleaning** flat hinges made with ST-52 laser-cut steel for perfect alignment and resistance. In addition, it is designed to prevent the moving parts of the leveller from maladjustment due to grime.
- The **hydraulic equipment** comprises: a 1.0 CV electric motor, hydraulic pump with a flow rate of 5 l/m and a 7 litre tank with an oil level viewer, safety electro valve, elevation cylinder with a Ø50 mm rod, lip cylinder with a Ø30 mm rod and hydraulic hoses.
- 3 All the **shafts** are protected from corrosion by a passivized, zinc electrolytic coating.
- 4 Centring system between lip and bay with nylon dividers to ensure that the lip is always in the correct working position.

- 5 The whole **control panel** has been designed by **Inkema**. For this reason, it has different programmes for different manoeuvres.
- One characteristic feature of the RH1 is that when lying on the truck base, it adapts to the raising and lowering of the truck caused by loading and unloading, thanks to its lateral inclination.
- 7 The **anti-fall safety valve** in the hydraulic cylinder is designed so that it can be blocked, if the truck unexpectedly moves off, preventing the bay and any other element on its surface (operators, forklifts, etc.) from falling.
- 8 All the components and the moving parts, lip and inferior structure are painted separately with an anti-corrosive primer followed by a coat of high-quality paint, thus ensuring a double 1+1 layer which guarantees 200% protective coating.



^{*} The technical specifications of the RH1 are on 25.

^{**} All the RH1 levellers comply with EU standards. They can be consulted on page 28.

RH2 and RH3



Adaptable to any loading situation.

Inkema RH2 and **RH3** telescopic lip levellers are the best option due to their functionality and efficiency. The **RH2** has a retractable lip of 500 mm and the **RH3** has a retractable lip of 1000 mm. They are the perfect solution for reaching places that the **RH1** cannot access, and are particularly indicated for facilities in which interior and exterior heat insulation are relevant.

The RH2 and RH3 comprise:

- A platform formed by an upper sheet of tear plate with a thickness of 8/10 mm and laminated profiles.
- A compact, robust lip made of tear plate with a thickness of 13/15 mm. The lip is folded and milled at its outer end to fit perfectly onto the truck and to ease the passage of forklifts.
- An **inferior structure** formed by laminated profiles upon which the platform and hydraulic assembly are installed.

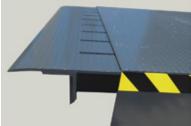
Safety is an essential requirement for any professional. For this reason, all **Inkema** levellers have different safety systems:

- An emergency stop activated by a section switch or zero voltage.
- An anti-fall safety valve inside the hydraulic cylinder.
- Fixed and mobile side panels that serve as a foot guard.
- A platform with an upper sheet of anti-fall tear plate.
- Safety signals fixed to moving parts.
- Safety bar to prevent it from closing during maintenance work.





RH2 and RH3









RH2 leveller with retractable lip of 500 mm.

RH3 leveller with retractable lip of 1,000 mm.

The RH2 and RH3 levellers have two Inkema control panel. elevation cylinders, each with Ø50 mm rods.

- 1 They have a hydraulic system that is specially designed to be coupled perfectly onto the truck's platform. Simple and effective. The retractable lip can be extracted under controlled conditions using the electric control panel and fitted onto the truck's platform in optimum conditions.
- 2 Thanks to the length of the adjustable retractable lip it is the perfect solution for ensuring optimal insulation of the facility, as it can be sealed by installing an industrial door in front of the leveller.
- 3 The hydraulic equipment comprises: a 1.5 CV electric motor, hydraulic pump with a flow rate of 5 l/m and a 7-litre tank with an oil level viewer, safety electro valve, elevation cylinder with a Ø50 mm rod, lip cylinder with a Ø25 mm rod and hydraulic hoses.
- 4 The grooved comb system at the front of the machine transmits the strees on the lip to the structure at multiple supporting points, thus reducing structural pressure and increasing the useful life of the machine.

- 5 All the components and the moving parts, lip and inferior structure are painted separately with an anti-corrosive primer followed by a coat of high-quality paint, thus ensuring a double 1+1 layer which guarantees 200% protective coating.
- 6 The lip position can be adjusted and optimized as it has a set of polyamide regulation skids. Those skids are responsible for guiding and sliding the lip.
- 7 The **lip** has a set of profiles and a grooved tear plate with a thickness of 13/15 mm, forming a robust, compact assembly. The tear plate 100 mm from the end is folded 5° for perfect adjustment of the truck and milled at its outer end, to ease the passage of fork lifts.
- 8 All the **shafts** are protected from corrosion by a passivized, zinc electrolytic coating.
- 9 The design developed by Inkema, allows the RH2 and RH3 levellers to be galvanized.



^{*} The technical specifications of the RH2 and RH3 levellers are on pages 25 and 26.

^{**} All the RH2 and RH3 levellers comply with EU standards. They can be consulted on page 28.



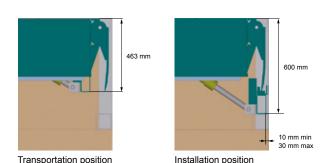
Designed for transportation.

The major or minor improvements we make, which are often proposed by our customers, allow us to constantly develop our product range. This is the case of the **Inkema RH14** leveller. The RH14 is an evolution of the RH1 with a special transportation height of 463 mm. This is precisely the right measurement for aligning 5 rows of dock levellers in a conventional truck. It is certainly an excellent solution for reducing transport costs. When installed in a pit, the front beam must be pulled out to the correct position, so that the lip rests on it and the leveller is perfectly horizontal.

In addition to its safety systems, the RH14 has the same features as the RH1 dock leveller, with respect to the platform, lip and inferior structure. One of the major differences is that practically the complete inferior structure is eliminated in the RH14 and in most models the two Ø35 mm elevation cylinders are resting on the front.

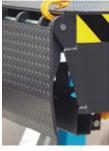
There are two ways of securing the elevation cylinders: using the standard method or with a rear support. All the above depends on the conditions of each client and the involved work.

- 1 The handling parts are designed for moving the leveller in any direction.
- 2 The hydraulic power pack is incorporated beneath the structure, as the support structure is literally non-existent.
- Support angles to keep the machine suspended while it is mounted.

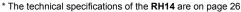








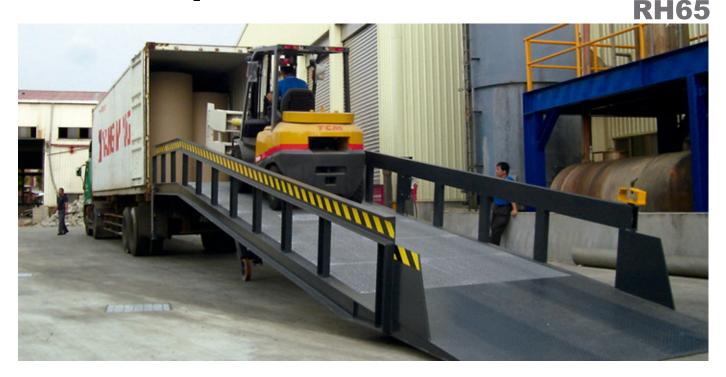




^{**} All the RH14 levellers comply with EU standards. They can be consulted on page 28.



Yard Ramp



The most versatile solution.

The **Inkema RH65** yard ramp is the most versatile leveller in the market. It is recommended for loading and unloading operations in industrial warehouses and premises with no dock facilities to allow the forklifts to reach the truck from ground level.

Depending on the needs of each customer, they can be made in different lengths and with different loading capacities.

Once the leveller has been coupled at the truck height, it is anchored by a chain system that blocks and prevents the leveller and truck from separating, thus allowing the operations to be carried out smoothly.

Its **hydraulic elevation system** can be driven in three different ways: by a manual pump, a pump activated by a low-voltage electric motor and powered by batteries or by a pump driven by an electric motor connected directly to the main by an extension cord.

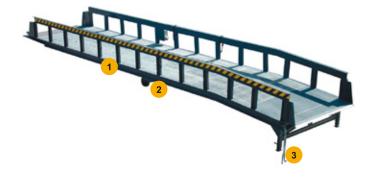
The floor has an **anti-slip coating** with tear plate at the front and end parts which permits all kinds of movements including the turning of the fork truck wheels, without suffering any damage. The rest of the intermediate section, where the forklifts wheels cannot turn, is formed by a tramex-type metal trellis supported by a metal profile structure.

- 1 The **sides of the yard ramp** are supplied with sturdy rails that are a fundamental part of the structure, in addition to serve as safety railings.
- 2 The **wheels** incorporated into the elevation system make it possible to move the leveller to the desired site.
- 3 The RH65 has several anchoring chains to attach the yard ramp to the truck bed.









^{*} All the RH65 comply with EU standards. They can be consulted on page 28.

Free Standing Frames and Dock Houses



The best solutions outside the warehouse.

Inkemas' free standing frames and tunnels are designed specifically for each customer, to speed up the installation of a loading bay, improve the internal insulation of the warehouse and increase the storage capacity of the building.

The **free standing frame** is the metal structure that substitutes the pit. It supports the loading bay. It is supplied in different versions:



Without walkway



With one walkway



With two walkways

The **tunnel** system couples the building to the vehicle. The tunnels can be isothermal or normal.

The standard tunnel roof is formed by a special anti-drip ribbed panel with a slope that prevents the accumulation of water, allowing the rainwater to be drained into the drip tray at the front.

A shelter can also be added, to improve energy savings and thermal insulation between the building and the bay. There are different types of shelter:

- Retractable
- Fix
- Foam seal
- Inflatable
- 1 The structures have legs that are adjustable every 25 mm in order to adapt to different heights.
- 2 Inkema isothermal structures and tunnels improve working conditions and the operations of handling goods by providing considerable thermal insulation and hygiene.



Sandwich panel



Prefabricated concrete



Metal enclosure



Free Standing Frames and Dock Houses

All in One



An exclusive solution by Inkema.

Inkema has designed a standard solution for structures, ramps and tunnels: the **All in One**. A customized solution for each client, for extending loading points without having to execute any additional building work. All you have to do is decide where you want to put it.

The **Inkema All in One** is composed by a free standing frame integrating the leveller. This solution is designed to make the transportation and installation process easier.

The main benefits of the All in One are:

- The free standing frame and ramp are fully integrated into one system.
- Transportation is optimized thanks to its standard size for conventional trucks.
- It can be installed quickly and smoothly due to its design, which integrates both the free standing frame and the ramp.

The operating system, characteristics and operability are fully compatible with the respective collapsible and retractable lip leveller models. For this reason the **All in One** is available with the **RH1** and **RH2** levellers.

- 1 The **All in One** can be galvanized, to increase its durability. Option available for any **Inkema** machine.
- 2 The structures have **legs** that are adjustable every 25 mm, thereby ensuring fast, safe and easy installation.
- 3 The All in One with the RH1 leveller measures 2300 mm and the All in One and RH2 leveller measures 2100 mm (in accordance to width of a conventional truck).





^{*} The technical specifications of the All in One are set out on page 26.

^{**} All the **All in One** machines comply with EU standards. They can be consulted on page 28.

Loading Bridges

Minidock



Reduce the size without giving up other features.

Practical, easy to install, safe and saving a considerable amount of space. Since its launch, the **Inkema Minidock** has been a huge success. It is a fast, easy option for installing in any loading bay thanks to its size and the fact that it requires no installation pit.

Despite its small size, it can support up to 6.000 kg dynamic load in loading and unloading operations.

The **Minidock** is supplied with a special coating for corrosive atmospheres. Inkema **Minidock** is comprised of the following elements:

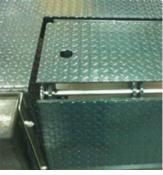
- Platform with an upper sheet of tear plate with a thickness of 6/8 mm and solid profiles.
- A lip made of tear plate with a thickness of 13/15 mm.
- A fixed part that acts as a handrail and is welded to the bay sub-frame in order to increase safety when loading and unloading goods.

Its inner mechanism allows the operator to open it with almost no effort. All that has to be done is inserting the lever into the opening of the moving part and pull it until the **Minidock** is completely vertical. Then push the lever until the lip is resting on the truck.

To remove the **Minidock** after loading/unloading, pull the lever backwards without raising it entirely and place it on the lowering stops.

- 1 Different **bumpers** are available, as an option, to be installed at the ends.
- 2 Its tear plate surface prevents from slipping.
- 3 The **lip** is folded at the end, to allow it to correctly fit on the truck and it is milled at its outer end to ease the passage of the fork trucks while loading and unloading goods.





- * The technical specifications of the Minidock are on page 26.
- ** All the **Minidock** comply with EU standards. They can be consulted on page 28.



Loading Bridges

PA1



Simply flexible.

Practical, economical and easy to handle. Three qualities that define the **Inkema PA1**. The loading bridges are designed to be installed at the end of the loading bay as a fixed structure or as movable structures which slide laterally along a rail on two wheels.

The Inkema PA1 comprises:

- A support frame: formed by a solid articulation on which the upper structure is installed.
- An **upper structure**: formed by a tear plate sheet having a compact profile structure beneath it.
- A compensation system: the compensation system is formed by a spring.
- A handling and blocking system: formed by a handle and a pedal which, in combination, allow the ramp to be fixed or handled with complete safety.

Among other advantages, it requires no installation pit. The **Inkema PA1** loading bridges have the following safety systems:

- Safety and blocking pedal.
- Safety railings at the sides.
- Upper sheet made of anti-slip tear plate.
- 1 The **PA1** with the spring system are equipped for bearing loads up to a maximum of 4 tons in their standard versions.
- 2 They have a press stroke at the end, 5° folded at 150 mm from the end, for perfect adjustment to the truck during loading and unloading.
- 3 The loading bridge lever and anti-slip safety device make them easy to handle.







^{**} All the PA1 comply with EU standards. They can be consulted on page 28.



PA51



The highest quality solutions, even in the finishing.

Made as a single-piece ramp, with a capacity for bridging important gaps, easy to manoeuvre and with anti-fall surface, weather-resistant and with mechanical anchoring to prevent overturning, the **Inkema PA51** aluminium bridge is designed to be installed at the end of the loading bay as a fixed structure or as a sliding version to move along a rail on two wheels.

The Inkema PA51 comprises:

- An upper structure: formed by a sheet of aluminium mesh, reinforced with two side ribs, designed to withstand the harshest conditions.
- A support frame: formed by a solid articulation on which the upper structure is installed.
- A compensation system: formed by the compensation arm and spiral springs, depending on the size.
- A handling and blocking system: formed by a handle and a pedal.

It has the following safety systems:

- Mechanical support to prevent overturning.
- Absence of elements that could rust, due to its anodised aluminium composition.
- Anti-slip surface.

Inkema PA51 have the following advantages:

- They can bridge important gaps.
- Easy to move.
- Anti-slip surface.
- Weather-resistant.
- 1 The compensation arm and spiral springs generate the necessary force, so the ramp can be handled manually very easily and with great comfort.
- 2 There is a **fold at the end**, to allow them to be correctly fitted on the truck. Furthermore, they have **milled ends** to ease the passage of the fork trucks while loading and unloading goods.





* The technical specifications of the PA51 are on page 27.



^{**} All the PA51 comply with EU standards. They can be consulted on page 28.

PA52

It is not that difficult to ease loading and unloading.

Inkema PA52 aluminium loading bridges have a very simple objective: to simplify unloading. Since they are installed at the end of the loading bay and can be moved along a rail, they require no installation pit. They are suitable for loads up to 4,000 kg and can be stored vertically, thus saving space.

They are made as a single piece and reinforced in the centre by a reticular structure. The upper part is smooth with transversal relief, to prevent sliding.

The end joined to the loading bay is loop shaped and acts like a hinge. In addition they have a safety latch to prevent them from accidentally falling from the rest position.

The Inkema PA52 is comprised of:

 A support frame: formed by a solid articulation on which the upper structure is installed. It has the following safety systems:

- Safety latch to prevent overturning.
- Absence of elements that could rust, due to its anodised aluminium composition.
- Anti-slip surface.

Inkema PA52 loading bridges have the following advantages:

- Anti-slip surface.
- Weather-resistant.
- Easy to move.
- 1 The **safety latch** prevents them from accidentally falling from the rest position.
- There is a fold at the end, to allow them to be correctly fitted on the truck. Furthermore, they have milled ends to ease the passage of the fork trucks while loading and unloading goods.





- * The technical specifications of the PA52 are on page 27.
- ** All the **PA52** comply with EU standards. They can be consulted on page 28.



PA53



Mobile solutions.

Everything is easier with the **Inkema PA53** aluminium loading bridges. They are portable, easy to move and to handle, have anti-fall surfaces, are lightweighted, weather-resistant and have integrated grips in addition to being low-cost. They are designed to join the end of the loading bay with the vehicle bed, thus making loading and unloading easier.

The **Inkema PA53** loading bridges are designed for loads not exceeding 1,200 kg (including transportation elements).

The Inkema PA53 is comprised of:

 An aluminium sheet: an aluminium sheet with 5 grooves and a structure at the bottom to make the unit more rigid. It has the following safety systems:

- Safety stops to prevent overturning.
- Absence of elements that could rust, due to its anodised aluminium composition.
- Anti-slip surface.

Inkema PA53 loading bridges have the following advantages:

- Easy to move.
- Anti-slip surface.
- Lightweighted.
- Weather-resistant.
- They have built-in grips.
- Low cost.
- There are different types of stops for better anchoring.
- 2 They have a press stroke at the end, to allow them to be correctly fitted on the truck. Furthermore, they have milled ends to ease the passage of the forklifts while loading and unloading goods.







^{*} The technical specifications of the PA53 are on page 28.

PA54



The simplest solutions are often the best.

Inkema PA54 aluminium loading bridges have an oscillating lip at their ends. They are easy to handle and perfect to join the end of the loading bay to the truck platform, making this operation more flexible.

They are made of aluminium sheets with a thickness of 40 mm in a honeycomb formation and with an anti-skid top surface. They can support up to 4,000 kg loads.

They are also supplied with welded ribs at the bottom for extra reinforcement.

The Inkema PA54 is comprised of:

- An aluminium structure: a grooved aluminium mesh sheet with an alveolar honeycomb structure and thickness of 40 mm and an aluminium plate at the top with anti-slip relief.
- An aluminium lip: a solid, hinged aluminium profile with a rubber profile inserted transversally at the bottom of the lip, to prevent sliding.

It has the following safety systems:

- Absence of elements that could rust, due to its anodised aluminium composition.
- Anti-slip surface.
- Rubber profile to improve the anchoring of the ramp.

Inkema PA54 have the following advantages:

- Easy to move on wheels and/or using a forklift.
- Anti-slip surfaces.
- Weather-resistant.
- 1 To make **transportation** even more easier, they have optional grips for forklifts and wheels.
- They have a press stroke at the end, to allow them to be correctly fitted on the truck. Furthermore, they have milled ends to ease the passage of the forklifts while loading and unloading goods.







^{*} The technical specifications of the PA54 are on page 28.

Special Levellers and Loading Bridges

Take advantage of our innovation. Many already do it.

The main function of the **Inkema R+D+I Department** is to investigate and create new products of highest quality to satisfy the needs of an increasingly demanding market.

Below there are some examples for special applications. And remember, if you cannot find what you are looking for in this catalogue, or if you have any questions, please do not hesitate to contact the **Inkema** customer service department.

Hydraulic loading bridge

This is a loading bridge that can be hydraulically operated with no effort. Its position can be changed from the rest position (vertical) to the working position (horizontal). Its robust, adjustable support system is adaptable to irregular terrains, making it sturdy, safe and able to be used as an extension of the loading bay. Its double hydraulic blocking system is automatically activated when staying in the rest position

RH15 leveller

This leveller is specially designed for loading/unloading animal livestock. Thanks to its length, it permits the unloading of trucks with livestock from different levels, forming a gentle and continuous slope that allows the animals to descend easily and safely.





SR leveller

This is formed by two machines in one; a levelling ramp installed on a scissor lift. This combination of systems offers maximum flexibility in loading and unloading, depending on each need, it can be used as a simple scissor lift or the scissor lift floor can be attached to the bay floor and the levelling ramp is activated to perform the functions of a tilted bridge between the loading bay and the truck.

6 metre leveller

Inkema is a specialist in satisfying all needs producing levellers of all shapes and sizes, and with different loading capacities. The 6 metre electro-hydraulic leveller is just one example of how versatile **Inkema** is.





Accessories

Details that make the difference.

Inkema is well aware that the needs of its customers are never the same. From **rubber bumpers** to modern and complex **Proximity Sensor** systems.



Polyurethane bumper

400×80×70 bumpers with considerable hardness and standard resistance



Small rubber bumper

400×80×70 bumpers with considerable hardness and standard resistance



environment.

Midium rubber bumper

250×250×100 Bumpers with considerable hardness and optimum resistance.



For this reason Inkema has a wide range of accessories and

finishings with the sole purpose of optimizing your professional

Large rubber bumper

500×250×140 bumpers with excellent hardness and resistance for continuous loading reception points.



Steel-rubber bumper

4Í Î ×G 0×90 bumpers with excellent hardness and resistance for continuous loading points.



Bevelled corner or cut shaped

Lips with bevelled corner with the end cut at 45° or lips recessed at 90° to ease the entry of the lip into the truck.



Segmented lips

The segmented lips are used to allow the lip to adapt to small and normal trucks.



Roll-off stop

The roll-off stop is perfect to improve safety when operating with the leveller.



Manual wheel chock

The **Inkema** manual wheel chock is the ideal solution to block the truck and work with complete safety.



Wheel chock with sensor

The **Inkema** manual wheel chock with sensor is perfect to block any type of truck.



Automatic wheel chock

The ideal solution to immobilize any truck and work completely safe.



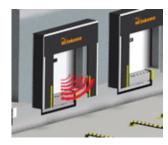
Truck guides

The guides protect the facility, as the truck is aligned to make it easier for it to enter the bay.



Dock light

The dock light is the perfect accessory to illuminate the interior of the trucks during loading and unloading operations.



Proximity sensor

The sensor detects the proximity of the truck through the automatic activation of different elements.



Traffic light

These are devices installed on the bay to regulate the loading and unloading of goods. Available in different colours and different numbers of lights.



Guide protection

The guide protectors improve safety in the loading bay and in operating industrial or high-speed doors.

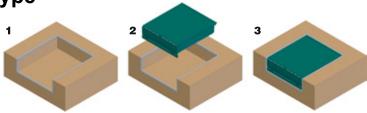
Construction Systems

A solid base for unlimited possibilities.

The **Inkema** construction system concept is easy to explain: these systems are designed to satisfy anyone's needs. For those who want to start with a pit and a sub-frame: **Embedded Pit type**. For those who prefer to install the leveller in a pit

without a sub-frame: **Self-hanging type**. For those who do not want a pit: **Box Model without letter box**. And for those who do not want a pit, but need an opening for the truck letter box: **Box Model with Precast for letter box**.

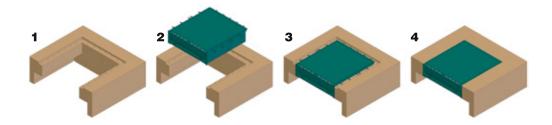




The **Embedded Pit type** levellers require a sub-frame for them to be secured to the pit. The sub-frame is installed when the pit precast is created. It has the great advantage of only being joined to the pit by welding, which makes it extremely easy to replace, move and/or change it by another machine.



Self-hanging Pit type

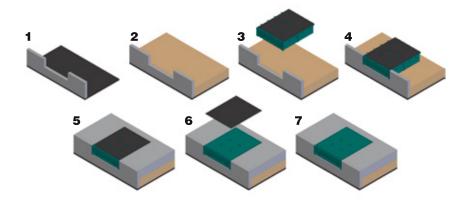


The **Self-hanging Pit type** levellers require no frame for securing them to the pit, as the machine already has one. Its main advantage is that the frame and leveller can be installed at the same time, as the frame is integrated to the leveller. Another advantage is that no bottom support is needed as all the pressure is transmitted to the superior edge of the pre-frame of the leveller, leaving a free space underneath the leveller to allow trucks with their own rear loading bridge to fit inside this space.



Construction Systems

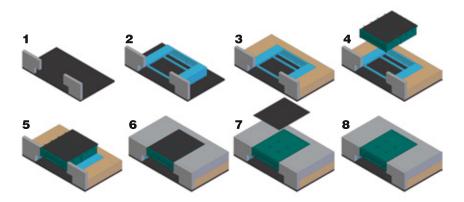
Box Model without letter box



The **Box Model without letter box** uses the leveller as a precast element. This system saves costs and time in installing the leveller, as no pit is required. The work involved in preparing the pit beforehand is not necessary, thus making civil work easier and less complicated, and maintaining the same functions and operability as the other systems, such as the **Embedded** or **Self-hanging type**.



Box Model with Precast structure for letter box



Often it is necessary to consider that trucks have their own loading bridge. For this reason **Inkema** has also designed the **Box Model** with a space for the own back bridge of a truck during the loading and unloading of the goods, using a hollow precast element structure. The **Precast** structure is installed before the floor in the industrial building is completed. A space is left underneath the structure of the **Box Model** leveller. This allows you to obtain the benefits of the **Self-hanging** model and the functionality of the **Embedded** model, as well as simplifying civil engineering work.



Finishing

Taking care of every detail.

The choice of finish is one of the most important decisions when choosing a loading bay. For this reason Inkema offers its customers different finishings.

Painted

Carbon steel coated with a polyurethane (PU) base coat. The material to be painted is washed and degreased before applying the paint. Double-coat treatment, consisting of a base coat of primer and a finishing top coat. High resistance to corrosion and environmental agents. The standard colour used by Inkema is 7016 grey, based on the RAL colour chart. Obviously, customers have the option of other colours.









Finishing

Galvanized

Carbon steel immersed in a high temperature zinc bath. The material to be treated is washed and degreased beforehand and immersed in an acid bath for thorough cleaning of impurities and to enhance the black steel reactivity, and afterwards it is immersed in a liquid zinc bath at a temperature of about 450° C, to achieve the chemical adherence of the zinc to the steel. A homogeneous coating on all material is obtained as well as an excellent resistance to corrosion and environmental agents.





Stainless steel

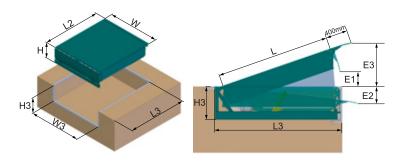
AISI-304 stainless steel. The product is entirely made of stainless steel, including the welding made with the appropriate flux material. The most resistant option for any aggressive environment. The material itself is rust-proof under normal environmental conditions and is an excellent option for food and pharmaceutical sector and for extrem weather conditions. Furthermore the product can also be made of AISI-316 stainless steel, which is of better quality and the best for the food sector.





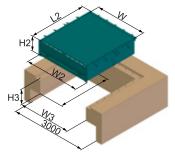


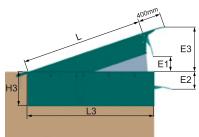
RH1 Embedded



| | LIP | L | W | Н | L2 | L3 | W3 | Н3 | E1 | E2 | E3 |
|------|-----|------|----------------------|-----|------|------|----------------------|-----|-----|-----|-----|
| 2000 | | 1900 | 1800 2000 2200 | | 2060 | 2080 | 1840 2040 2240 | | 220 | 320 | 740 |
| 2300 | 400 | 2140 | 1800 2000 2200 | 600 | 2300 | 2320 | 1840 2040 2240 | 610 | 270 | 315 | 785 |
| 2500 | 400 | 2400 | 1800 2000 2200 | 000 | 2560 | 2580 | 1840 2040 2240 | 010 | 260 | 310 | 770 |
| 3000 | | 2900 | 1800 2000 2200 | | 3060 | 3080 | 1840 2040 2240 | | 330 | 300 | 830 |

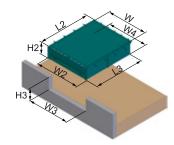
RH1 Self-hanging

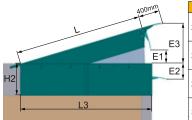




| | LIP | L | W | Н | L2 | W2 | H2 | L3 | W3 | Н3 | E1 | E2 | E3 |
|------|-----|------|------|-----|------|------|-----|------|------|-----|-----|-----|-----|
| | | | 1800 | | | 1990 | | | 1880 | | | | |
| 2000 | | 1900 | 2000 | | 2070 | 2190 | | 1990 | 2080 | | 220 | 320 | 740 |
| | | | 2200 | | | 2390 | | | 2280 | | | | |
| | | | 1800 | | | 1990 | | | 1880 | | | | |
| 2300 | | 2140 | 2000 | | 2310 | 2190 | | 2230 | 2080 | | 270 | 315 | 785 |
| | 400 | | 2200 | 600 | | 2390 | 605 | | 2280 | 610 | | | |
| | 400 | | 1800 | 000 | | 1990 | 003 | | 1880 | 010 | | | |
| 2500 | | 2400 | 2000 | | 2570 | 2190 | | 2490 | 2080 | | 260 | 310 | 770 |
| | | | 2200 | | | 2390 | | | 2280 | | | | |
| | | | 1800 | | | 1990 | | | 1880 | | | | |
| 3000 | | 2900 | 2000 | | 3070 | 2190 | | 2990 | 2080 | | 330 | 300 | 830 |
| | | | 2200 | | | 2390 | | | 2280 | | | | |

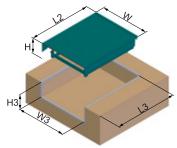
RH1 Box

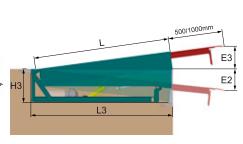




| | | LIP | L | VV | н | L2 | VV2 | H2 | L3 | VV3 | H3 | VV4 | E1 | E2 | E3 |
|--------------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|-----|-----|-----|
| | | | | 1800 | | | 1990 | | | 1880 | | 1850 | | | |
| 1 | 2000 | | 1900 | 2000 | | 2070 | 2190 | | 2000 | 2080 | | 2050 | 220 | 320 | 740 |
| | | | | 2200 | | | 2390 | | | 2280 | | 2250 | | | |
| 3 | | | | 1800 | | | 1990 | | | 1880 | | 1850 | | | |
| 1 | 2300 | | 2140 | 2000 | | 2310 | 2190 | | 2240 | 2080 | | 2050 | 270 | 315 | 785 |
| _ | | 400 | | 2200 | 600 | | 2390 | 605 | | 2280 | 620 | 2250 | | | |
| 2 [| | 400 | | 1800 | 000 | | 1990 | 003 | | 1880 | 020 | 1850 | | | |
| | 2500 | | 2400 | 2000 | | 2570 | 2190 | | 2500 | 2080 | | 2050 | 260 | 310 | 770 |
| | | | | 2200 | | | 2390 | | | 2280 | | 2250 | | | |
| | | | | 1800 | | | 1990 | | | 1880 | | 1850 | | | |
| | 3000 | | 2900 | 2000 | | 3070 | 2190 | | 3000 | 2080 | | 2050 | 330 | 300 | 830 |
| | | | | 2200 | | | 2390 | | | 2280 | | 2250 | | | |
| | | | | | | | | | | | | | | | |

RH2 and RH3 Embedded



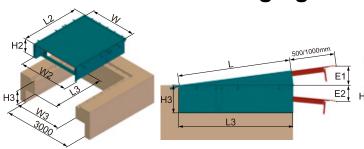


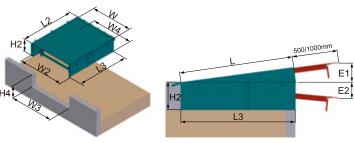
| | | | | | RH2 | | | | | | | | |
|------|-----|------|------|-----|------|------|------|-----|-----|-----|--|--|--|
| | LIP | L | W | Н | L2 | L3 | W3 | Н3 | E1 | E2 | | | |
| 2000 | | 1970 | | 600 | 2060 | 2080 | | 610 | 310 | 310 | | | |
| 2500 | 500 | 2470 | 2000 | 000 | 2560 | 2580 | 2040 | 010 | 340 | 340 | | | |
| 3000 | 300 | 2970 | 2000 | 800 | 3060 | 3080 | 2040 | 810 | 440 | 390 | | | |
| 3500 | | 3470 | | 000 | 3560 | 3580 | | 010 | 480 | 390 | | | |
| | RH3 | | | | | | | | | | | | |

| | LIP | L | W | Н | L2 | L3 | W3 | Н3 | E1 | E2 |
|------|------|------|------|-----|------|------|------|-----|-----|-----|
| 2500 | | 2470 | | 600 | 2560 | 2580 | | 610 | 410 | 395 |
| 3000 | 1000 | 2970 | 2000 | 800 | 3060 | 3080 | 2040 | 810 | 510 | 460 |
| 3500 | 1000 | 3470 | | 000 | 3560 | 3580 | | 810 | 550 | 430 |
| | | | | | | | | | | |

RH2 and RH3 Self-hanging

RH2 and RH3 Box

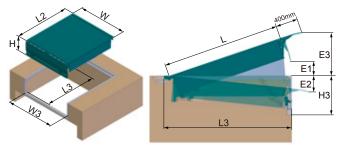




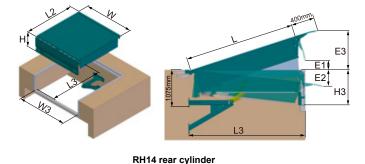
| | | | | | | RH: | 2 | | | | | | | |
|------|-----|------|------|-----|------|------|-----|------|------|-----|------|-----|-----|-----|
| | LIP | L | W | Н | L2 | W2 | H2 | L3 | W3 | НЗ | W4 | H4 | E1 | E2 |
| 2000 | | 1970 | | 600 | 2070 | | 605 | 2000 | | 610 | | 620 | 310 | 310 |
| 2500 | 500 | 2470 | 2000 | 000 | 2570 | 2190 | 000 | 2500 | 2080 | 010 | 2050 | 020 | 340 | 310 |
| 3000 | 300 | 2970 | 2000 | 800 | 3070 | 2130 | 805 | 3000 | 2000 | 810 | 2030 | 820 | 440 | 390 |
| 3500 | | 3470 | | 000 | 3570 | | 000 | 3500 | | 010 | | 020 | 480 | 380 |

| | | | | | | | KHJ | | | | | | | |
|------|------|------|------|-----|------|------|-----|------|------|-----|------|-----|-----|-----|
| | LIP | L | W | Н | L2 | W2 | H2 | L3 | W3 | H3 | W4 | H4 | E1 | E2 |
| 2500 | | 2470 | | 600 | 2570 | | 605 | 2500 | | 610 | | 620 | 410 | 360 |
| 3000 | 1000 | 2970 | 2000 | 800 | 3070 | 2190 | 805 | 3000 | 2080 | 810 | 2050 | 820 | 510 | 460 |
| 3500 | | 3470 | | 000 | 3570 | | 003 | 3500 | | 010 | | 020 | 550 | 390 |

RH14



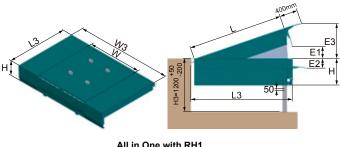
| andard | | | | | |
|----------|------|--------------|------------------|--------------|------------------|
| | | | | | |
| W3 H3 | L4* | H4** | E1 | E2 | E3 |
| 2020 610 | 2220 | 463 | 250 | 295 | 770 |
| 2030 010 | 2480 | +03 | 230 | 270 | 740 |
| _ | | 030 610 2220 | 030 610 2220 463 | 2220 463 250 | 2220 463 250 295 |



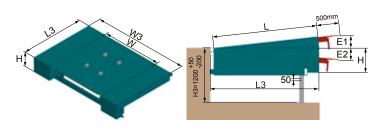
| | | | | | | | ou. o | , · | ٠. | | | | |
|--------------|------------|------|------|-----|------|------|-------|-----|------|------|-----|-----|-----|
| | LIP | L | W | Н | L2 | L3 | W3 | Н3 | L4* | H4** | E1 | E2 | E3 |
| 2000 | 400 | 1900 | 2000 | 600 | 2052 | 2000 | 2030 | 610 | 1980 | 463 | 180 | 280 | 700 |
| 3000 | 400 | 2900 | 2000 | 600 | 3052 | 3000 | 2030 | 010 | 2980 | 403 | 330 | 290 | 830 |
| *I 4: transi | oort lenat | h | | | | | | | | | | | |

**H4: transport length

All in One

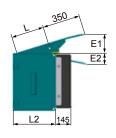


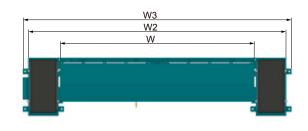
| | | | P | All in | One v | vith F | RH1 | | | | |
|------|-----|------|------|--------|-------|--------|------|-------------|-----|-----|-----|
| | LIP | L | W | Ι | L3 | W3 | Н | 3 | E1 | E2 | E3 |
| 2000 | 400 | 2140 | 2000 | 600 | 2300 | 3600 | 1200 | +50 -200 | 260 | 245 | 780 |



| | | | ΑI | l in O | ne wi | ith RH | 12 | | | |
|------|-----|------|------|--------|-------|--------|------|-------------|-----|-----|
| | LIP | L | W | Н | L3 | W3 | Н | 3 | E1 | E2 |
| 2000 | 500 | 1980 | 2000 | 600 | 2100 | 3600 | 1200 | +50 -200 | 300 | 300 |

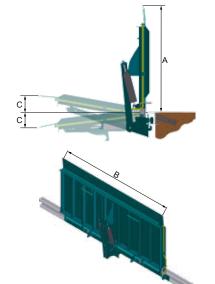
Minidock





| | LIP | L | W | Н | L2 | W2 | W3 | E1 | E2 |
|------|-----|-----|------|-----|-----|------|------|-----|-----|
| 1800 | 252 | 310 | 1800 | E2E | 400 | 2390 | 2490 | 170 | 110 |
| 2100 | 352 | 310 | 2100 | 555 | 400 | 2690 | 2790 | 170 | 110 |

PA1 Loading Bridge

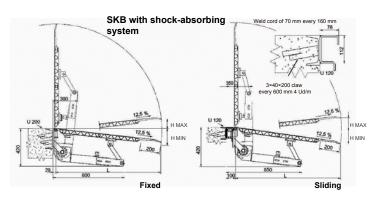


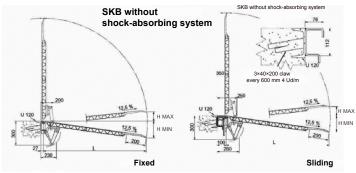
Loading bridges with spring systems

| Type | A (mm) | B (mm) | C (mm) | Capacity (kg) | Weight (kg) | Model |
|-----------|--------|--------|--------|---------------|-------------|---------------|
| 1000×1500 | 1000 | 1500 | 140 | 4000 | 155 | Sliding/fixed |
| 1000×2000 | 1000 | 2000 | 140 | 4000 | 200 | Sliding/fixed |
| 1500×1500 | 1500 | 1500 | 195 | 4000 | 265 | Sliding/fixed |
| 1500×2000 | 1500 | 2000 | 195 | 4000 | 290 | Sliding/fixed |

Detail profile fix type UPN-160 #3×40×200 4 Ud/m Concrete minimum H-250 Detail profile sliding type Ramp rail UPN-120 #3×40×200 4 Ud/m Concrete minimum H-250

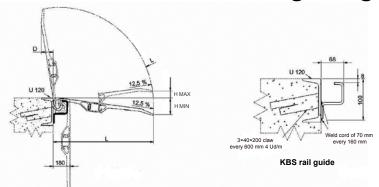
PA51 Aluminium Loading Bridges (SKB)





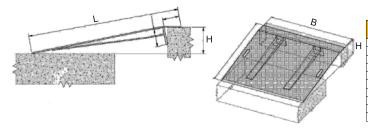
| Code | Type | VVOIKIN | g neigni | Capacity (kg) | Weight (kg) |
|-----------------|-----------|---------|----------|---------------|--------------|
| Code | Турс | MIN | MAX | Capacity (kg) | Troight (kg) |
| 10PA51056150SSS | 565×1500 | -90 | +50 | 4000 | 67 |
| 10PA51081125SSS | 815×1250 | -120 | +80 | 4000 | 64 |
| 10PA51081150SSS | 815×1500 | -120 | +80 | 4000 | 77 |
| 10PA51106150SSS | 1065×1500 | -155 | +110 | 4000 | 103 |
| 10PA51131125SSS | 1315×1250 | -185 | +140 | 2500 | 102 |
| 10PA51131150SSS | 1315×1500 | -185 | +140 | 4000 | 114 |
| 10PA51156125SSS | 1565×1250 | -215 | +175 | 1750 | 113 |
| 10PA51156150SSS | 1565×1500 | -215 | +175 | 4000 | 128 |

PA52 Aluminium Loading Bridges (KBS)



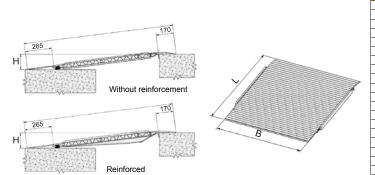
| Code | Туре | Working | height | Capacity (kg) | Weight (kg) |
|-----------------|----------|---------|--------|---------------|-------------|
| Code | | MIN | MAX | | Weight (kg) |
| 10PA52041125SSS | 410×1250 | -70 | +30 | 4000 | 19 |
| 10PA52041150SSS | 410×1500 | -70 | +30 | 4000 | 23 |
| 10PA52053125SSS | 535×1250 | -90 | +45 | 4000 | 24 |
| 10PA52053150SSS | 535×1500 | -90 | +45 | 4000 | 28 |
| 10PA52078125SSS | 785×1250 | -120 | +75 | 4000 | 31 |
| 10PA52078150SSS | 785×1500 | -120 | +75 | 4000 | 38 |
| 10PA52091125SSS | 910×1250 | -135 | +90 | 4000 | 36 |
| 10PA52091150SSS | 910×1500 | -135 | +90 | 4000 | 44 |

PA53 Aluminium Loading Bridges



| Code | Туре | Working | height | Capacity (kg) | Weight (kg) |
|-----------------|-----------|---------|--------|---------------|--------------|
| Code | | MIN | MAX | | rreight (kg) |
| 10PA53075125SS2 | 750×1250 | 0 | +100 | 600 | 20 |
| 10PA53075125SS2 | 750×1250 | +30 | +100 | 1200 | 24 |
| 10PA53100125SSS | 1000×1250 | +50 | +125 | 600 | 26 |
| 10PA53100125SS2 | 1000×1250 | +50 | +125 | 1200 | 30 |
| 10PA53120125SSS | 1200×1250 | +60 | +150 | 600 | 30 |
| 10PA53120125SS2 | 1200×1250 | +60 | +150 | 1200 | 37 |
| 10PA53150125SSS | 1500×1250 | +80 | +190 | 600 | 40 |
| 10PA53150125SS2 | 1500×1250 | +80 | +190 | 1200 | 47 |
| 10PA53180125SSS | 1800×1250 | +100 | +225 | 600 | 47 |
| 10PA53180125SS2 | 1800×1250 | +100 | +225 | 1200 | 57 |

PA54 Aluminium Loading Bridges



| Code | Туре | Working height | | Capacity (kg) | Weight (kg) | |
|-----------------|-----------|----------------|------|---------------|----------------|--|
| | | MIN | MAX | | 110.9.11 (1.9) | |
| 10PA54123125SSR | 1235×1250 | 0 | +110 | 4000 | 52 | |
| 10PA54123150SSS | 1235×1500 | 0 | +110 | 4000 | 61 | |
| 10PA54148125SSS | 1485×1250 | 0 | +140 | 3500 | 61 | |
| 10PA54148125SSR | 1485×1250 | +75 | +140 | 4000 | 65 | |
| 10PA54148150SSS | 1485×1500 | 0 | +140 | 3500 | 72 | |
| 10PA54148150SSR | 1485×1500 | +75 | +140 | 4000 | 76 | |
| 10PA54173125SSS | 1735×1250 | 0 | +170 | 3000 | 70 | |
| 10PA54173125SSR | 1735×1250 | +90 | +170 | 4000 | 75 | |
| 10PA54173150SSS | 1735×1500 | 0 | +170 | 3000 | 83 | |
| 10PA54173150SSR | 1735×1500 | +90 | +170 | 4000 | 88 | |
| 10PA54198125SSS | 1985×1250 | 0 | +200 | 2000 | 82 | |
| 10PA54198125SSR | 1985×1250 | +110 | +200 | 4000 | 91 | |
| 10PA54198150SSS | 1985×1500 | 0 | +200 | 2000 | 86 | |
| 10PA54198150SSR | 1985×1500 | +100 | +200 | 4000 | 105 | |
| 10PA54223125SSS | 2235×1250 | 0 | +235 | 1800 | 91 | |
| 10PA54223125SSR | 2235×1250 | +125 | +235 | 4000 | 101 | |
| 10PA54223150SSS | 2235×1500 | 0 | +235 | 1800 | 107 | |
| 10PA54223150SSR | 2235×1500 | +125 | +235 | 4000 | 117 | |
| 10PA54248125SSS | 2485×1250 | 0 | +265 | 1600 | 100 | |
| 10PA54248125SSR | 2485×1250 | +145 | +265 | 4000 | 116 | |
| 10PA54248150SSS | 2485×1500 | 0 | +265 | 1600 | 118 | |
| 10PA54248150SSR | 2485×1500 | +145 | +265 | 4000 | 134 | |

Safety Directives and Standards

All the levellers and loading bridges have been calculated and designed pursuant to the following European directives and standards:

Directives:

2006 / 42 / EC Machine safety.

2004 / 108 / EC Electromagnetic compatibility.

2006 / 95 / EC Low voltage.

European Standards:

EN 1398:2010 Levelling ramps.

EN ISO 12100-1:2010 Machine safety. Basic concepts. General design principles.

EN 61000-6-2:2006 Electromagnetic compatibility. Basic immunity concepts for industrial environments. Electromagnetic compatibility. Basic emissions concepts in industrial environments.

EN 60204-1:2010 Machine safety – Electrical equipment – General provisions.

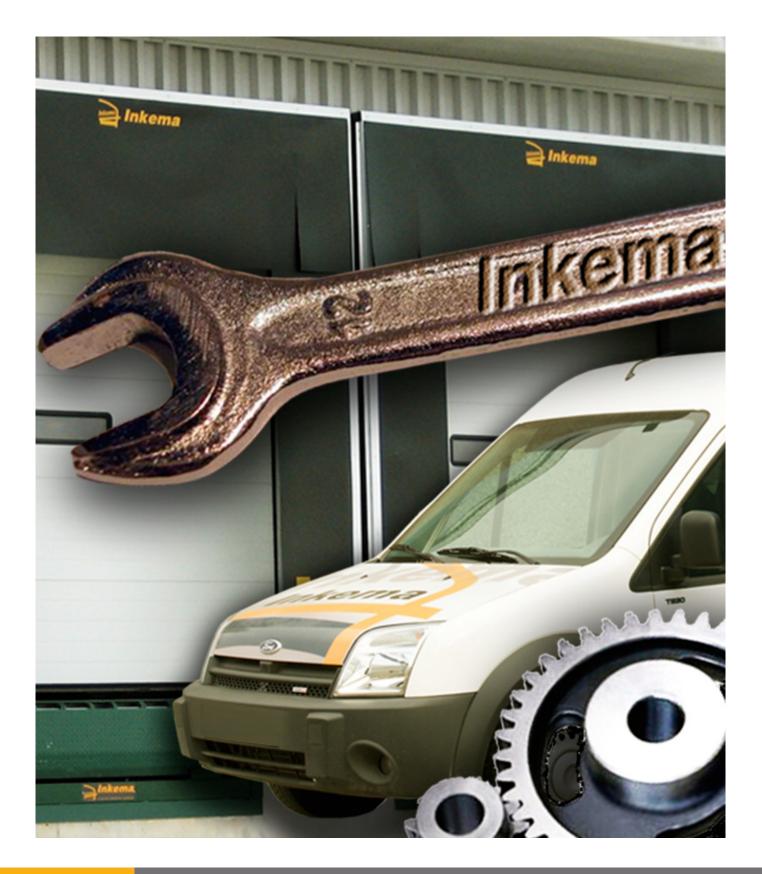


Warranty and Safety

As calm as on the first day.

Some firms manufacture their products without offering a full guarantee, in order to save costs. Unfortunately, some firms prefer to cut down on safety systems. Others prefer to make their products with poor-quality materials. **Inkema** is well aware

of this, and for this reason, we declare that our products are safe and that they are of the highest quality and completely guaranteed. In all cases with the aim to satisfy the needs of our customers and at the fairest price. But without affecting the safety and guaranteed quality of its products and systems.



Inkema Range

A wide range of products to meet all your needs.

Inkema is not just a specialist in levellers, ramps, loading bridges, free standing frames and dock houses. More than 25 years of experience in its sector have led Inkema to extend its product range, to fully satisfy all the needs of its customers, which are from more than 42 countries.

The **Inkema** range combines variety, innovation, functionality, quality, price and service. This is the result of the ceaseless efforts of its different departments. The range is comprised of: levellers, ramps, scissor tables, industrial doors, high-speed doors, dock shelters and fire doors. In addition, **Inkema** has a varied range of dimensions, finishes and accessories that can be adapted to suit the requirements of each customer.

Below there is a list of the different types in each product family of the **Inkema** range:

- Scissor tables: single scissor, double scissor, special scissor tables, etc.
- Dock shelters: retractable, fix, foam seal and inflatable.
- Industrial doors: industrial (normal and glazed) and residential doors.
- High-speed doors: folding, rolling, self-repairable and cold storage.
- Fire doors: vertical, sliding, rolling and pedestrian doors.

Scissor Hables







Dock Ghelters







Inkema Range

Industrial 8 oors







High-speed 8 oors







Fire 8 oors











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• The information included in this catalogue is of informative nature and in no case should be construed as a contractual commitment.