

RH1

Catalogue

One need
One solution





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**.

Dock levellers

RH1



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.



Dock levellers

RH1



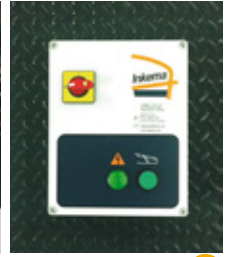
Hydraulic system.



Self-cleaning reinforced hinges.



Foot guard panels and safety stickers.



Inkema control panel. 5

- 1 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.
- 2 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 passivated, 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.
- 6 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.



* All the **RH1** levellers comply with EU standards.

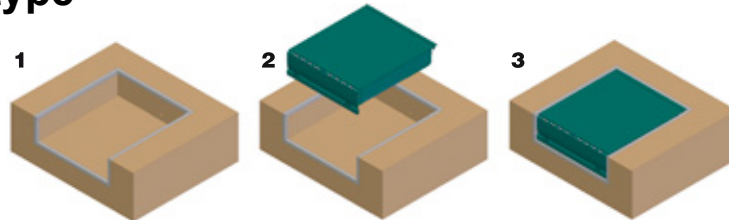
Construction systems

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**.

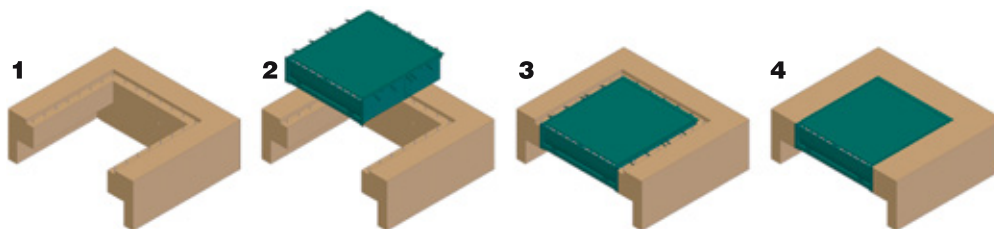
Embedded Pit type



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

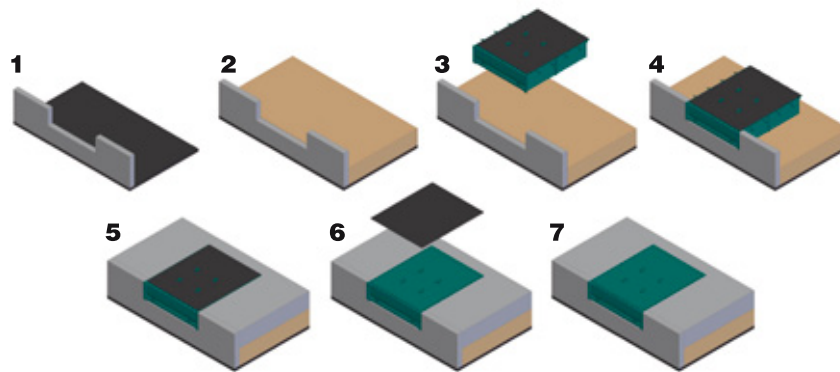


The **Self-hanging Pit type** levellers require no frame for securing them to the pit, as the machine already has one. Its main advantage is that the frame and leveller can be installed at the same time, as the frame is integrated to the leveller. Another advantage is that no bottom support is needed 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

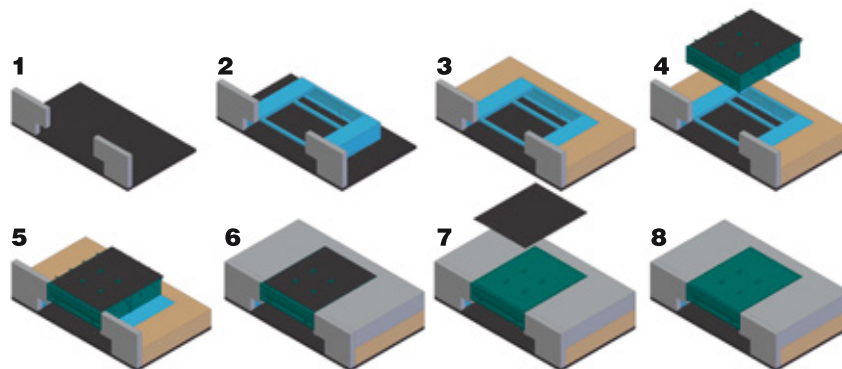
Box Model without letter box



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.



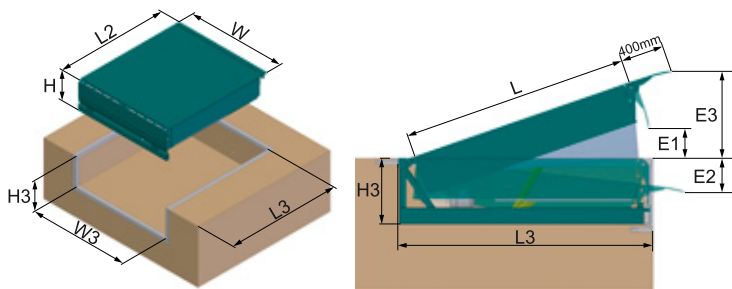
Stainless steel

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.



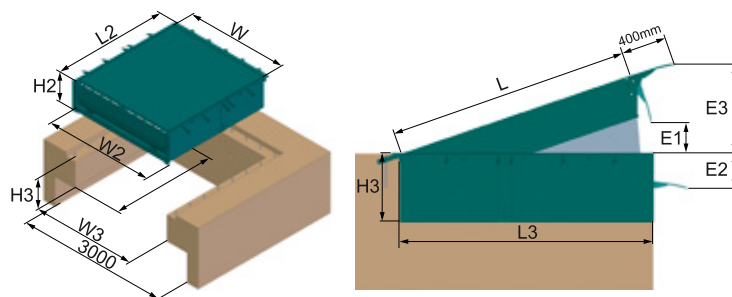
Technical specifications

RH1 Embedded



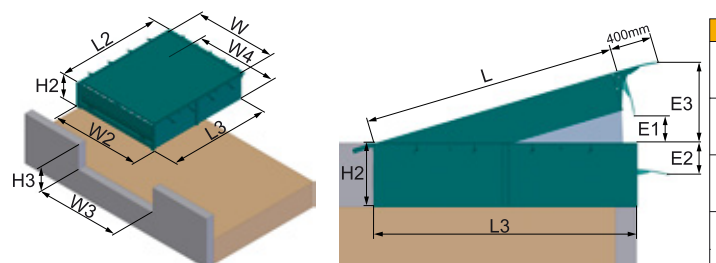
| | LIP | L | W | H | L2 | L3 | W3 | H3 | E1 | E2 | E3 |
|------|-----|------|----------------------|---|------|------|----------------------|----|-----|-----|-----|
| 2000 | | 1900 | 1800 2000 2200 | | 2060 | 2080 | 1840 2040 2240 | | 220 | 320 | 740 |
| 2300 | | 2140 | 1800 2000 2200 | | 2300 | 2320 | 1840 2040 2240 | | 270 | 315 | 785 |
| 2500 | | 2400 | 1800 2000 2200 | | 2560 | 2580 | 1840 2040 2240 | | 260 | 310 | 770 |
| 3000 | | 2900 | 1800 2000 2200 | | 3060 | 3080 | 1840 2040 2240 | | 330 | 300 | 830 |

RH1 Self-hanging



| | LIP | L | W | H | L2 | W2 | H2 | L3 | W3 | H3 | E1 | E2 | E3 |
|------|-----|------|----------------------|---|------|----------------------|----|------|----------------------|----|-----|-----|-----|
| 2000 | | 1900 | 1800 2000 2200 | | 2070 | 1990 2190 2390 | | 1990 | 1880 2080 2280 | | 220 | 320 | 740 |
| 2300 | | 2140 | 1800 2000 2200 | | 2310 | 1990 2190 2390 | | 2230 | 1880 2080 2280 | | 270 | 315 | 785 |
| 2500 | | 2400 | 1800 2000 2200 | | 2570 | 1990 2190 2390 | | 2490 | 1880 2080 2280 | | 260 | 310 | 770 |
| 3000 | | 2900 | 1800 2000 2200 | | 3070 | 1990 2190 2390 | | 2990 | 1880 2080 2280 | | 330 | 300 | 830 |

RH1 Box



| | LIP | L | W | H | L2 | W2 | H2 | L3 | W3 | H3 | W4 | E1 | E2 | E3 |
|------|-----|------|----------------------|---|------|----------------------|----|------|----------------------|----|----------------------|-----|-----|-----|
| 2000 | | 1900 | 1800 2000 2200 | | 2070 | 1990 2190 2390 | | 2000 | 1880 2080 2280 | | 1850 2050 2250 | 220 | 320 | 740 |
| 2300 | | 2140 | 1800 2000 2200 | | 2310 | 1990 2190 2390 | | 2240 | 1880 2080 2280 | | 1850 2050 2250 | 270 | 315 | 785 |
| 2500 | | 2400 | 1800 2000 2200 | | 2570 | 1990 2190 2390 | | 2500 | 1880 2080 2280 | | 1850 2050 2250 | 260 | 310 | 770 |
| 3000 | | 2900 | 1800 2000 2200 | | 3070 | 1990 2190 2390 | | 3000 | 1880 2080 2280 | | 1850 2050 2250 | 330 | 300 | 830 |

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
2004 / 108 / EC
2006 / 95 / EC

Machine safety.
 Electromagnetic compatibility.
 Low voltage.

European Standards:

EN 1398:2010
EN ISO 12100-1:2010
EN 61000-6-2:2006
EN 61000-6-4:2011
EN 60204-1:2010

Levelling ramps.
 Machine safety. Basic concepts. General design principles.
 Electromagnetic compatibility. Basic immunity concepts for industrial environments.
 Electromagnetic compatibility. Basic emissions concepts in industrial environments.
 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 **dock levellers**. 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. 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**:

- **Loading bays:** swing lip levellers, telescopic lip levellers, yard ramp...
- **Loading bridges:** loading bridges iron, aluminum, galvanized...
- **Free standing frames and dock houses:** free standing frames with or without walkway, tunnels isothermal or normal...
- **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.

Loading bays



Loading bridges



Inkema Range

Free standing frames and dock houses



Scissor tables



Dock shelters



Inkema Range

Industrial doors



High-speed doors



Fire doors





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- Inkema Sistemas S.L. reserves the right to change the described specifications without notice, in order to make improvements to its products.
- The information included in this catalogue is of informative nature and in no case should be construed as a contractual commitment.