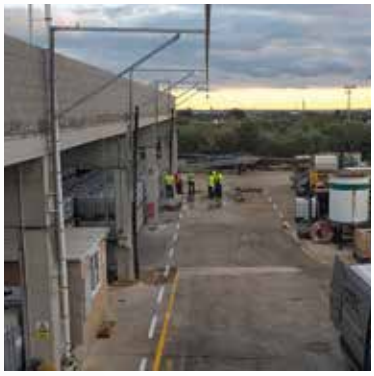
ALSIPERCHA

FALL PROTECTION SYSTEM









Alsina


ALSINA

Alsina

Encofrados Alsina is a company specialized in the manufacture of formwork equipments and focused on keeping the leadership position as the most innovative formwork company developing products and solutions for the safety of workers in construction. We have designed and patented the revolutionary Alsipercha overhead fall protection system.

Alsina works with the ISO 9001:2015 Certification at its centers engaged in the sale and rental of equipment for concrete formwork. The scope of this certification includes the design, manufacturing, marketing (sales and rental) and maintenance of our concrete formwork equipment. It also includes the provision of formwork equipment and scaffolding assembly services and the implementation of collective protection at work sites.

ISO 9001
BUREAU VERITAS
Certification
Encofrados J.Alsina, S.A.

REFERENCE IN HOUSING

One of the biggest keys to the company expansion in the recent years is the export of new building systems that have proven effective for over 40 years in Spain. Mecanoconcept: a mechanized slab formwork system that effectively enables saving time in construction process. Nowadays Alsina is working to introduce the Mecanoconcept system worldwide.

CIVIL ENGINEERING

The Alsina Group has a active presence in Civil Works and transportation projects. The construction of roads, bridges, underpasses, overpasses, tunnels in a mine, etc. Also in Industrial Engineering (energy processing plants, processing plants, etc.) and Maritime Engineering (construction of ports, dikes, dams, etc.).

HYDRAULIC PROJECTS

Alsina is the leading company in supplying formwork systems for the implementation of water projects. More than 500-implemented projects in the recent years support our ability to do this type of project: desalination, water treatment plants, reservoirs, etc. We also offer engineering and calculation processes in order to optimize our range of formwork systems.

"We provide solutions for concrete structures."

Together, we move forward.

ALSIPERCHA

Alsipercha is a fall protection system, that provides an effective overhead protection for those who are exposed to falls when working at heights.

This revolutionary system, includes a built-in energy-absorber device (diagonal) that reduces the impact forces transmitted to the user and to the structure, in case of fall.

Thanks to an advanced and robust design, the product also admit a máximum number of 2 users connected simultaneaously, being one of the most versatile and effective overhead fallprotection system of the market.

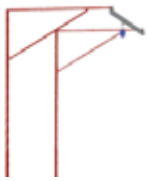
Available in two different formats, the Alsipercha (steel-79kgs, doesn't suffer permanent deformation, and installation by crane/lifting equipments) and the Alupercha (aluminum-19kgs, and manual installation with no need of crane/lifting equipments), can be combined with a wide range of accessories and supports.

In compliance with standards: EN-795 (CE certified), OSHA/ANSI (USA) and CSA (CANADA).

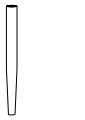
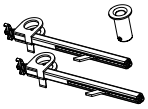
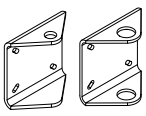
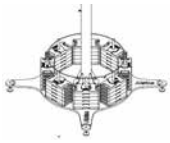
ACCESSORIES AND POSSIBLE COMBINATIONS

ALSIPERCHA

ALUPERCHA



ALSIPERCHA ALUPERCHA RAIL

	HOUSING TUBE	●	●	●
	COLUMN CLAMPS	●	●	●
	TRIPOD	●	●	●
	MF COUNTERWEIGHT	●	●	●
	POST FOR REDUCED SPACES	●	●	●
	WALL BRACKET	●	●	●
	MBU - MOBILE BASE UNIT	●	●	●

ALSIPERCHA
+ HOUSING TUBE

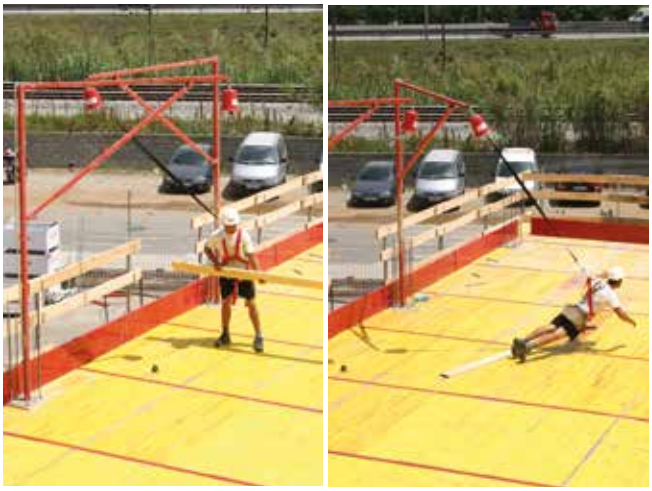
Overhead fall protection system for the stage of the formwork decking process, or instalation of: guardrails, gallows-type safety nets, formwork risers, and in general, all formwork assembly activities that entail the risk of falling from heights, can be carried out in an entirely safe manner.

- Provides a fall factor “0”
- Structure made of high-quality elastic steel, providing a 360º free rotation, maximizing the freedom of the worker.
- To be inserted into a housing tube pre-installed on the concrete structure (column / wall).
- Built-in energy absorber that reduces the impact forces transmitted to the user and the structure, in case of fall.
- Provides a safe area up to 125m2 (aprox), and a working radius of 6,5 m.
- Combined with the use of a SRL.
- Steel structure of 80kgs, made of high-quality and elastic steel (elastic limits 42 - 46 Kg/mm^2, breaking limit 61 - 76 Kg/mm^2)
- Designed to be moved and handled by crane.
- Wide range of accesories, for multiple applications on jobsites.
- Up to 2 users connected simultaneously.

STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D
CSA Z259.16

HANDLING BY CRANE | **x2 USERS**



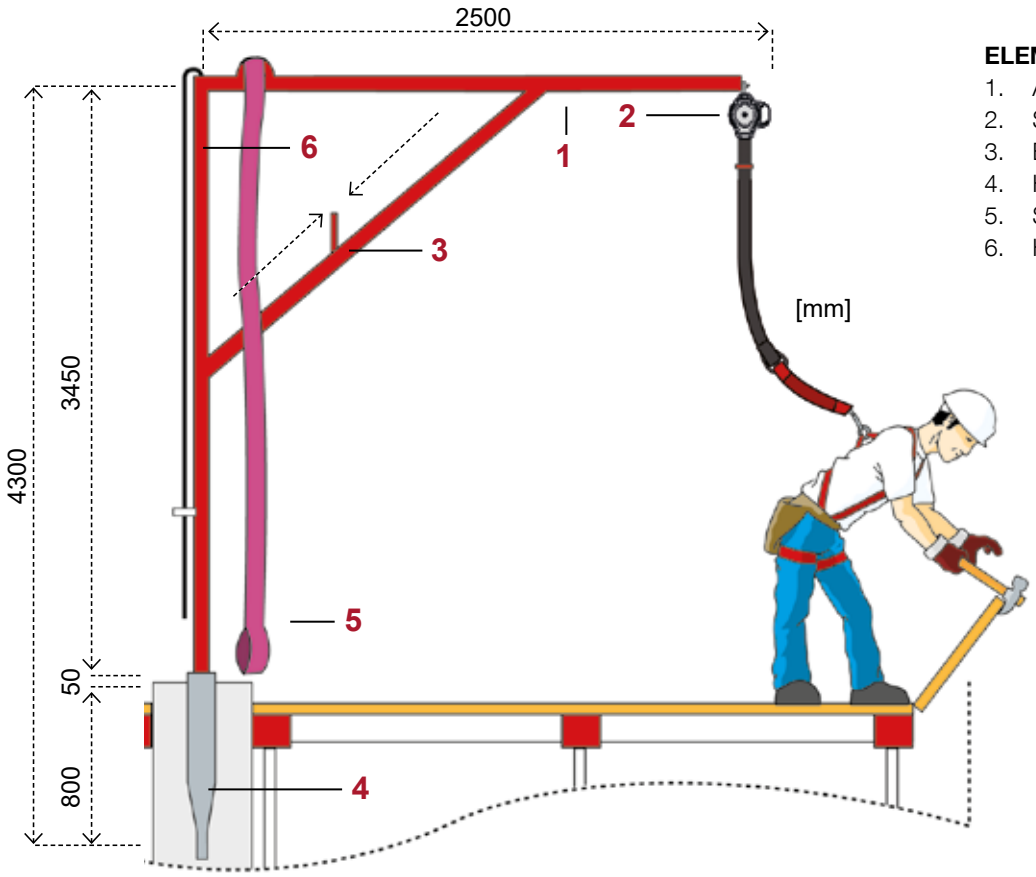
PREVENTIVE – FALL FACTOR "0"
The SRL connected to the upper tube of the Alsipercha, stops the descent of the worker in case of fall.

EASY AND QUICK ASSEMBLY
The assembly of the Alsipercha is easy and intuitive. After a few steps, the system is ready to use.

PRODUCTIVIVTY
The confidence of the user that feels that is fully protected against falls when using the Alsipercha, contributes to increase the productivity. In case of fall, the user can recover the original position and continue working in just a few minutes.

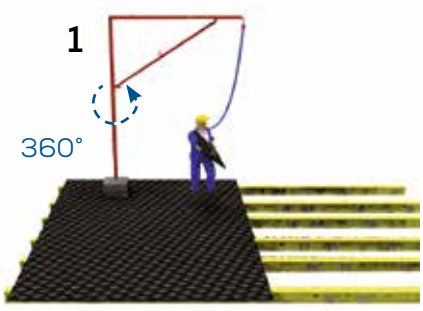
PERIMETERS AND HIGH FLOORS
Highly efficiency protecting workers against fall from heights at the most critical situations in jobsites: perimeters and high floors. Perfect to protect workers during the installation of guardrails, wooden panels or edge protection systems.

ALSIPERCHA
+ HOUSING TUBE

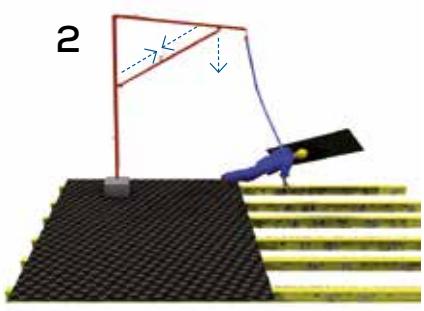


ELEMENTS

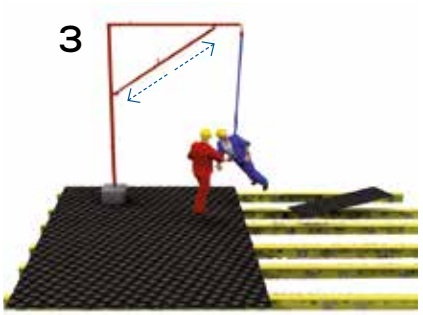
1. Alsipercha System
2. SRL
3. Energy-Absorber device
4. Housing tube
5. Sling
6. Hook



USING THE ALSIPERCHA
After connecting to the SRL and to the Alsipercha, the user can begin working and performing the panneling stage, allowing a 360° safe area and a 6,5m of safe working radius.



FALL OF THE USER
In case of fall, the SRL stops the fall and the Alsipercha energy-absorber absorbs the impact forces generated.

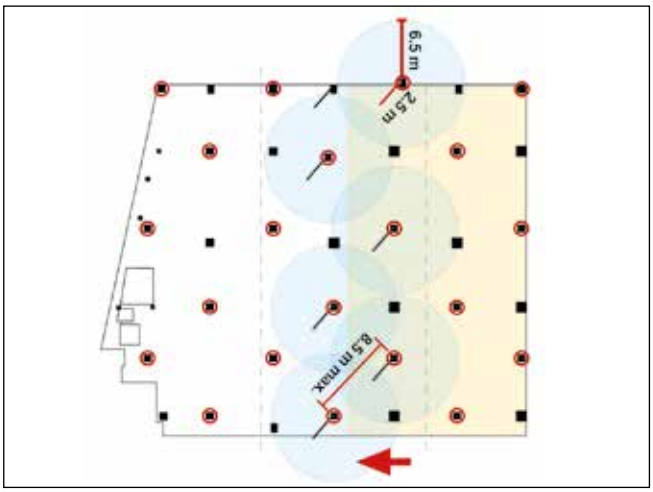


RECOVER PROCESS OF THE USER AFTER FALL
The user can recover his original position and continue working, just with a simple movement and the help of another person.

STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D
CSA Z259.16

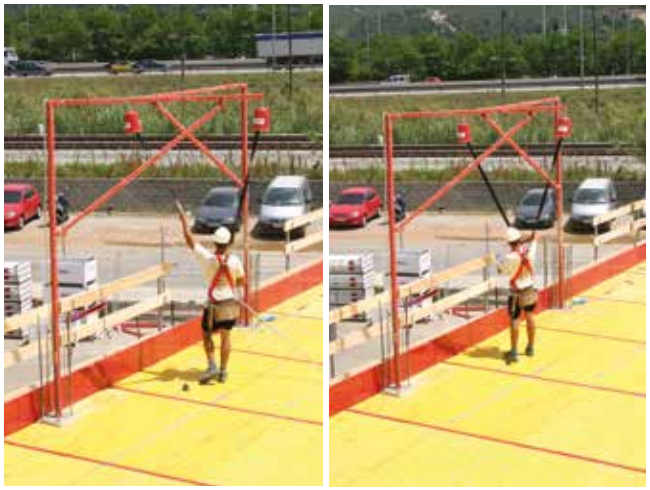
HANDLING BY CRANE | **x2 USERS**



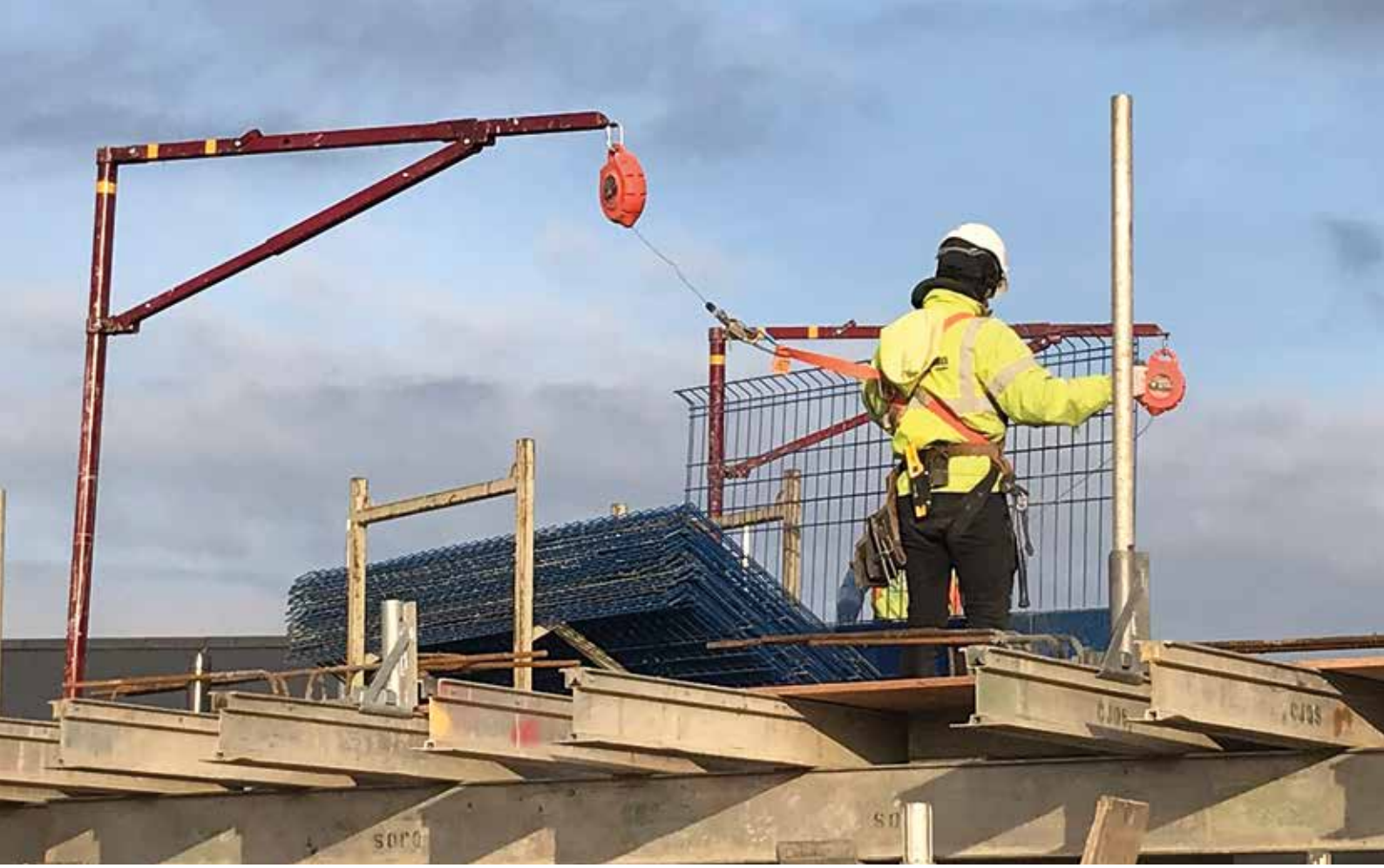
1. PLAN THE POSITION OF THE ALSIPERCHAS
It is highly recommended to plan the area before starting the job, in order to facilitate the use of the Alsipercha.

2. HOUSING TUBE INSERTION
Position, level and cast the housing tube in the concrete columns. Allow for sufficient curing of concrete to enable safe operation of the system. The leveller accessory will be used to ensure the vertical position of the housing tube.

3. USE OF THE SYSTEM
After the user is safely connected to the SRL and to the Alsipercha, the user will start to use the system. Allows a 360º safe working area with 6,5m radius from the central post (125m^2 aprox).



4. SAFE OVERLAP PROCESS
The user must never unhook himself from one Alsipercha before hooking up to the next Alsipercha. In case that the second Alsipercha is out of reach, an Alsipercha Hook is available to assist with transition.



ALUPERCHA
+ HOUSING TUBE

Overhead fall protection system designed to be installed by hand, that protects workers against fall from heights, specially effective for perimeters and during the decking of horizontal formwork.

Thanks to the lightweight design (just 19kgs), the Alupercha can be installed easily and fast without the need of crane, reducing costs and time. Additionally, the system can also be installed by the use of a crane if that is prefered, by using the crane connector.

Efficient overhead fall protection system for the stage of the formwork decking process, or instalation of: guardrails, gallows-type safety nets, formwork risers, and in general, all formwork assembly activities that entail the risk of falling from heights, can be carried out in an entirely safe manner.

With an easy and simple assembly process, it can be installed by a competent person.

Fully compatible with all the Alsipercha accessory range.

- Lightweight structure weighing just 19 Kg, made of high-quality elastic aluminium.
- To be manoeuvred and installed by a single person with no lifting equipments, or the need of crane.
- A built-in energy absorber device reduces the forces transmitted to the structure and to the user.
- Inverted “L” shaped and 100% aluminium structure measuring 2.0 m long and 3.10 m high (2.25 m when attached to the column).
- Allows the user to work safely covering an area of aprox 125 m2 and moving within a radius of 6.0 m around the column, with the PPE length up to 4m, and aprox 230 m2 when combined with PPE length up to 6,5 m (refer to the “working procedure with extended PPE” section in the UI).
- Alupercha housing steel tube measuring 85 cm long.
- A system designed for columns spaced up to 8,0 m.
- Up to 2 users connected at the same time.

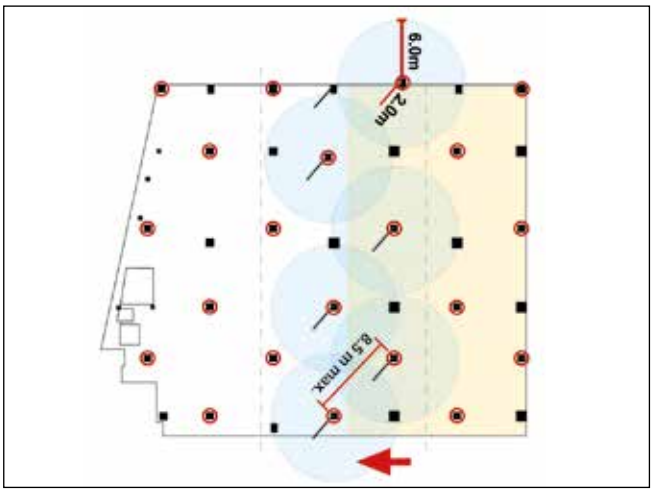
STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D

HANDLING BY HAND*

x2 USERS

* Also with crane.



1: PLAN THE POSITION OF THE ALUPERCHAS

In order to facilitate the use of the Alupercha it is highly recommended to plan the area before starting the job.

2: HOUSING TUBE INSERTION

Position, level and cast the housing tube in the concrete columns. Allow for sufficient curing of concrete to enable safe operation of the system. The leveller accessory will be used to ensure the vertical position of the housing tube.

3: INSTALLATION AND USE OF THE SYSTEM

The user will insert the Alupercha into the housing tube and proceed with the system assembly. After the user is safely connected to the SRL and to the Alupercha, will start to use the system. Allows a 360° safe working area with 6,0m radius from the central post.

4: SAFE OVERLAP PROCESS

The user must never unhook himself from one Alupercha before hooking up to the next Alupercha. In case that the second Alupercha is out of reach, an Alupercha Hook is available to assist with transition.

ALSIPERCHA / ALUPERCHA
+ COLUMN CLAMPS

Alsipercha / Alupercha combined with the Column Clamps, is a perfect solution to have a safe and effective overhead anchor point connected to most common steel columns type IPE, IPN, HEB (clamps opening widths from 120 to 450 mm).

Mainly used within industrial environments, loading or unloading trucks, maintenance over machines or buildings, with difficult access.

The advanced design includes an adjustable mechanism, covering the most common steel column widths on the market (open distances from 120 to 450 mm).

The column clamp accesory consists of a pair of adjustable clamps distanced by 1m, and a bottom sleeve where will later be inserted the Alsipercha / Alupercha. The installation process is quick and simple, in just a few steps and by the use of coventional tools.

Up to 2 users connected at the same time.

STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D
CSA Z259.16

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS

STEP 1: By activating the adjustable mechanism, open the jaws and increase the gap of the jaws enough to place the clamp over the steel column. Adjust the 2 column clamps to fasten them to the steel column, procuring to have a distance between them of 1m.

STEP 2: Insert the column clamp sleeve into the lower column clamp, introducing the lug, through the grooves designed to avoid an accidental separation.

STEP 3: Before installing the Alsipercha / Alupercha, adjust the colum clamps, applying a maximum force of up to 50 Nxm.

STEP 4: By the use of a proper lifting equipment, insert the Alsipercha / Alupercha through the central hole of both column clamps up to it rest at the bottom column clamp sleeve. The system is ready to use.

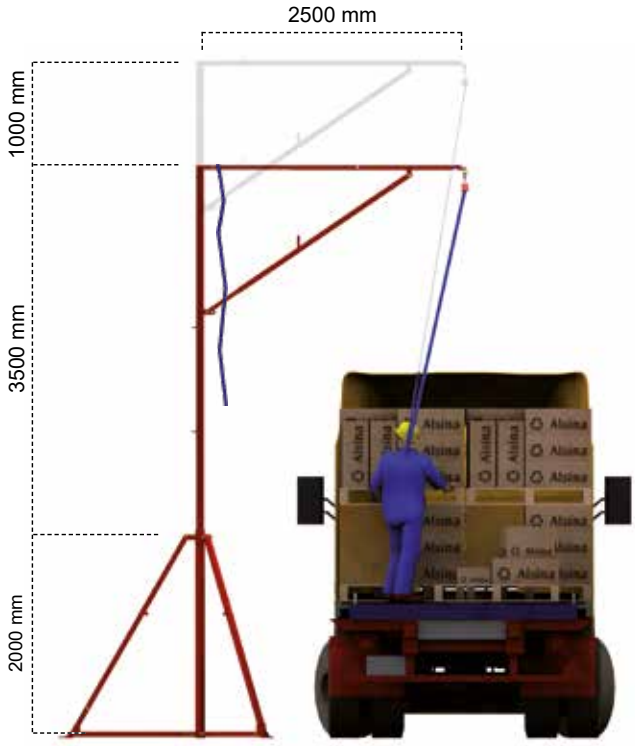
ALSIPERCHA / ALUPERCHA
+ TRIPOD

The TRIPOD is an accessory used to take full advantage of the Alsipercha / Alupercha benefits, providing an effective overhead anchor point up to 6,5m height.

With an easy, simple and fast installation process, the Tripod combined with the Alsipercha / Alupercha will provide full fall protection to users at a 2 possible height configurations: 5,5m with a 2m Tripod and 6,5m with a 3m Tripod.

The Tripod provides a wide range of potential uses, being specially effective for loading-unloading vehicles, a critical stage where there is a high risk of users falling from height.

Allow the use of up to 2 users connected at the same time.



STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D
CSA Z259.16

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS

STEP 1: Unfold and connect the 3 Tripod legs, by the use of the built-in connector.

STEP 2: Drill and connect the anchor, tighten the nuts to ensure the firmness of the Tripod.

STEP 3: By the use of a proper lifting equipment, insert the Alsipercha / Alupercha through the central hole of the Tripod.

STEP 4: The user is ready to connect to the SRL, and start using the system.

ALSIPERCHA / ALUPERCHA
COUNTERWEIGHT MF

The Alsipercha Counterweight MF accesory consists of a modulable structure that guarantees an effective use of the Alsipercha / Alupercha when working at height over vehicles, by using the vehicle weight as counterweight.

A perfect solution, when the characteristics of the ground to be used to install a fall protection system are unknown, the Counterweight MF does not require to be anchored.

The advanced design, includes 3 built-in adjustable supports to correct possible unevenness on the surface.

The installation is fast, simple and intuitive, and provides an anchor point of up to 6,5m height.

Allow the use of up to 2 users connected at the same time.

The Counterwight MF combined with the Alsipercha / Alupercha, provides one of the most versatile and effective overhead fall protection solutions for those that need to work over the trucks or high vehicles.

STANDARDS COMPLIANCE
EN:795:2012 – Type E
ANSI/ASSE Z359.18-2017 Type D

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS

STEP 1: After the Counterweight MF structure is assembled, the truck wheel bases will be positioned over the 4,97m main beam.

STEP 2: Possible unevenness on the surface can be corrected by the use of the 3 built-in adjustable supports.

STEP 3: By the use of a proper lifting equipment, insert the Alsipercha / Alupercha through the central hole of the MF Axle support (main Counterweight post).

STEP 4: The user is ready to connect to the SRL, and start using the system.

ALSIPERCHA / ALUPERCHA
+ POST FOR REDUCED SPACES

The POST for reduced spaces allows the use of the Alsipercha / Alupercha, even in places with high limitations on the available space.

Thanks to the strong construction of the post, and reduced dimensions of the base (350 mm), the POST is the perfect complement to use the Alsipercha / Alupercha mainly within industrial environments.

The POST for reduced spaces can be installed in just a few steps, with an easy and simple process, providing an effective overhead anchor point of 6,5 m height.

The advanced design includes a 3 possitions component, to correct slight unevenness detected on the ground where is intended to be installed, to ensure a straight and correct possition of the Alsipercha / Alupercha.

It is the perfect solution to provide an effective and reliable overhead fall protection system when there are important restrictions in the available space.

Allow the use of up to 2 users connected at the same time.

STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS

STEP 1: Drill all the necessary holes, by using the provided template for anchor holes.

STEP 2: Select the correct possition, to ensure the straightness position, and correct the possible uneveness of the ground where it is intended to be used.

STEP 3: By the use of a proper lifting equipment, insert the Alsipercha / Alupercha through the central hole of the POST.

STEP 4: The user is ready to connect to the SRL, and start using the system.

ALSIPERCHA / ALUPERCHA
+ WALL BRACKET

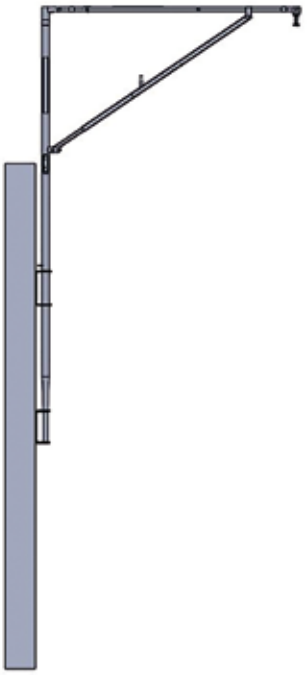
Thanks to the Wall Bracket accessory, the Alsipercha / Alupercha can also be installed to reinforced concrete walls or columns, increasing the range of multiple applications significantly. The installation of the wall brackets can be performed in just a few steps, thanks to the intuitive holes and simplicity of the installation process.

The wall bracket accessory consists of a pair of brackets, procuring to have a distance between them of 1m, that will later lodge the Alsipercha / Alupercha.

Provides an effective and reliable fall protection system, to protect workers exposed to the hazard of falls from height during the performance of their work.

Loading - unloading vehicles, preparing tanker trucks, cleaning or maintenances over machines, are some of the main activities that can be done in a safe manner with this combination.

Allow the use of up to 2 users connected at the same time.

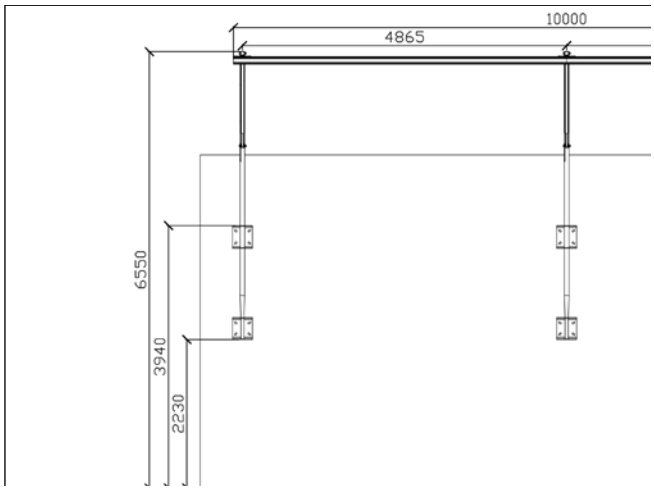


STANDARDS COMPLIANCE

EN:795:2012 – Type B
ANSI/ASSE Z359.18-2017 Type D

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS



STEP 1: Drill the necessary holes, setting in advance the height to which it will be intended to use the Alsipercha / Alupercha.

STEP 2: Fasten and tighten all the wall brackets anchors after the installation of the upper and lower wall brackets at the desired height on the concrete wall/column.

STEP 3: Insert the Alsipercha / Alupercha through the central hole of the upper wall bracket, and then through the central hole of the lower wall bracket, up to the bottom inner part where will rest the Alsipercha / Alupercha.

STEP 4: El usuario ya estará en disposición de conectarse al dispositivo retráctil conectado al Alsipercha, y comenzar a desempeñar sus labores con total protección.

ALSIPERCHA / ALUPERCHA
+ MBU (MOBILE BASE UNIT)

The engineered MOBILE BASE UNIT designed and tested in compliance to EN:795:2012 and ANSI/ASSE Z359.18-2017, protect workers from the risk of falling from heights, providing portability and high versatility of location with no need to anchor the system.

The system has been designed to provide overhead fall protection to users when there is no possibility to install permanent fall protection systems, or there is the need to provide fall protection in different places and areas frequently.

It consists of a main anchor point (Alsipercha or Alupercha body), fastened to a MOBILE BASE UNIT (MBU), that provides the stability of the whole system thanks to a set of counterweights (1000-1200 kg).

- Portable system that protect users from falls during work at heights. (Fall factor 0).
- Easy, intuitive installation, it can be installed and relocated in barely a few minutes.
- Built-in energy-absorbing device that reduces the impact forces transferred to the user and to the structure in the event of a fall.
- 25 Kg counterweights for easier assembly/disassembly and relocation.
- Built-in leveling legs to correct gradients of up to 10°.
- User with harness is connected to the Alsipercha / Alupercha by a SRL.
- Protect workers at heights during maintenance work in industrial environments, loading and unloading trucks, maintenance on trains, etc.
- Up to 2 users connected at the same time.

STANDARDS COMPLIANCE

EN:795:2012 – Type E
ANSI/ASSE Z359.18-2017 Type D

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS

STEP 1: Position the MBU base in the chosen location, adjusting the feet by using the built-in leveler to ensure a correct position.

STEP 2: By the use of a proper lifting equipment, proceed to install the post over the base, ensuring to match the holes of the base that is later going to be used to fasten the screws. Screw in the MBU rods through which the 25kg counterweights will later be inserted, and install the safety lock that will prevent the manipulation of the weights.

STEP 3: Connect the SRL to the Alsipercha / Alupercha, and proceed to insert it through the center of the post, and ensure a correct vertical position. The user is ready to connect to the SRL, and start using the system.

STEP 4: Advanced design that enables an easy and simple relocation process, by using standard lifting equipment (1.500 kgs).

ALSIPERCHA / ALUPERCHA
+ RAIL

The Alsipercha / Alupercha RAIL is the combination of the full range of Alsipercha / Alupercha accesories available, with a rigid lifeline that eliminates the possible pendulum effect in case of the fall of a user when working at heights.

Perfect for the use within industrial environments, where the work over tanker trucks continues to be a critical issue, the combination with RAIL provides an effective and reliable fall protection solution at 6.5m height, admitting up to 2 users simultaneously per spans of 6m..

The SRL connected to a trolley slides through the RAIL following the user at all times and standing permanently above the user's head, reducing the potential pendulum effect in case of fall.

Allows extensions in 6m spans, and offers the possibility of assembly in a FIXED or FOLDABLE format, for those who need to move the whole system without interfering with other elements (overhead cranes, rail catenaries).

With a simple and easy installation process, it can be assembled and installed in just a few hours.

Thanks to the wide variety of multiple combinations, its innovative design, maximum versatility and multiple advantages, the Alsipercha / Alupercha RAIL is considered a reference for those seeking to obtain the maximum level of protection for workers exposed to the risk of fall from heights.

AVAILABLE COMBINATIONS	**Alsipercha Alupercha**	+ Column clamps	**+ Rail**
		+ Tripod	
		+ Counterweight MF	
		+ Post for reduced spaces	
		+ Wall Bracket	
		+ MBU (Mobile Base Unit)	

STANDARDS COMPLIANCE

EN:795:2012 – Type D
ANSI/ASSE Z359.18-2017 Type D

HANDLING BY
FORKLIFT / CRANE / MANUAL

x2
USERS

STEP 1: Choose the desired Alsipercha / Alupercha support.

STEP 2: By the use of a proper lifting equipment, insert the Alsipercha into the accesory selected and installed in Step 1.

STEP 3: By the use of a proper lifting equipment, connect the Alsipercha RAIL connector chosen (FIX/FOLDABLE) and the RAIL batches together with SRL Trolley and SRL.

STEP 4: The user is ready to connect to the SRL, and start using the system.

ACCESSORIES AND POSSIBLE COMBINATIONS

Alsipercha + Housing tube

Alupercha + Housing tube

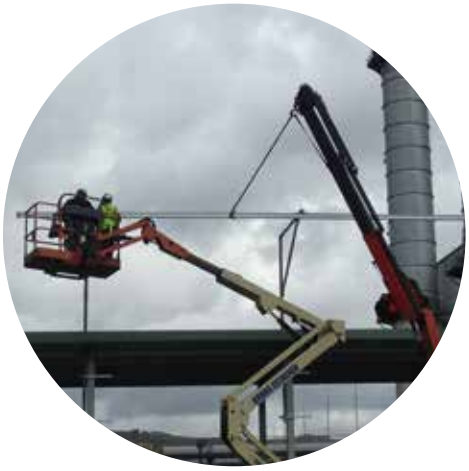
Alsipercha / Alupercha + Column clamps

Alsipercha / Alupercha + Tripod

Alsipercha / Alupercha + Counterweight MF

Alsipercha / Alupercha + Post for reduced spaces

Alsipercha / Alupercha + Wall bracket



Alsipercha / Alupercha + Column clamps + Rail

Alsipercha / Alupercha + Tripod + Rail

Alsipercha / Alupercha + Post for reduced spaces + Rail

Alsipercha / Alupercha + Wall bracket + Rail

Alsipercha / Alupercha + MBU

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