

Flexbow (Fall Arrest System)

Safety system designed to prevent falls from a height during the formwork boarding process.

Flexbow

A safety system, especially useful for PERIMETERS. The system ensures completely safe conditions while installing: boards, safety handrails, gallows-type safety nets, formwork risers and all activities involved in formwork assembly where there is risk of falling from a height.

Easy to assemble and use, does not require outside installers.

Features of the system

- Allows the operator to work safely covering an area of 125 m² and moving within a radius of 6.5 m around the column.
- Inverted "L" shaped metal structure measuring 2.5 m long and 4.3 m high (3.5 m when attached to the column).
- Metal structure weighing 80 Kg, made of high quality steel (elastic limit 42 - 46 Kg/mm²; breaking strength 61 - 76 Kg/mm²).
- Retractable safety block with 2,5 m lanyard.
- Sunk-in cone-shaped steel tube measuring 85 cm long.
- To be moved by crane.
- With a wide range of accessories for use in any building site situation, ensuring safety at all times.
- A system designed for column heights up to 8 m (this requires use of the hook accessory).



Info The system and its components must be used by competent, qualified personnel.



Info The system and its accessories must be inspected by competent, qualified personnel:

- Before first use and subsequent use.
- After the system is activated by a fall.
- At regular intervals (at least once a year). The inspection records may be called for. Certain individual components may require inspection at shorter intervals.
- Never use the equipment if wear, rust or unauthorized repair attempts are detected in any part of the system.
- Do not use the system for any use other than that which it was designed for.
- Use approved harnesses only.
- Do not use or fasten any components or accessories that have not been supplied by the manufacturer.
- The user must assess the risk involved before using the system.

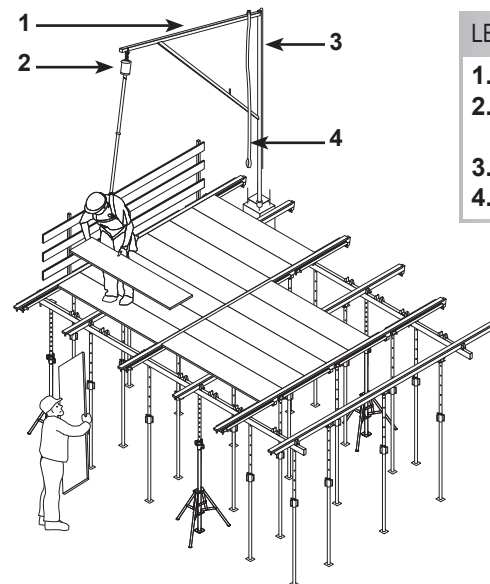


Info The illustrations in this assembly and safety manual are guidelines and, at any event, they may not reflect all the possible assembly formats.

Limitations of the system

- The structure on which the system is mounted must be capable of bearing the weights indicated.
- The maximum working radius when the worker is anchored to the system with the safety harness is 6.5 m. Do not attempt to extend this working radius with ropes or other such methods.

System components

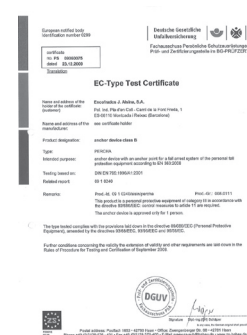


LEGEND

1. System body
2. Retractable safety block with protection cover
3. Hook
4. Sling



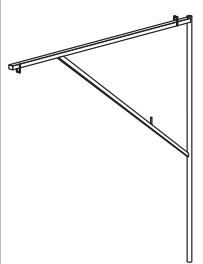
CE Mark, In 2009 the German laboratory certification DGUV-German Social Accident Insurance has awarded the certificate in accordance with DIN EN 795:1996.

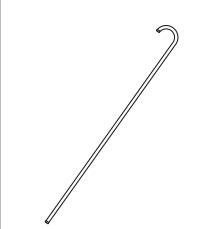


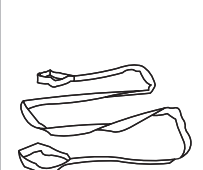
This product complies with Standard UNE-EN 795, certified by APPLUS

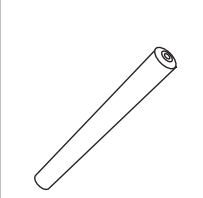
In March 2005, in the presence of APPLUS technicians, the static and dynamic tests required by the UNE-EN 795 Standard for anchoring points were carried out and the result was positive. The resulting certification is available to our customers.

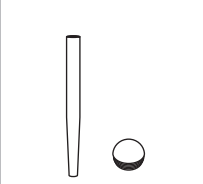
Component Description

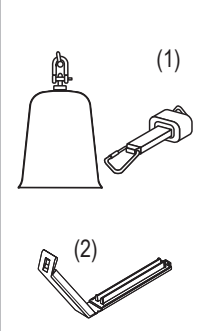
| | | | |
|--|--|----------------|-------------|
|  | Flexbow DAVIT | | |
| | Description: Inverted "L" shaped unit, anchored in the column with a working radius of 6.5 m that allows access to a surface area of 125 m². | | |
| | code | dimensions (m) | weight (kg) |
| | 84411 | | 77.28 |

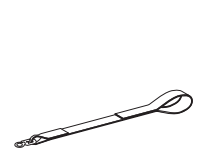
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|--|---|-----------------|-------------|
|  | HOOK S.A. | | |
| | Description: Component used to bring the Flexbow fall arrest system closer to the worker when changing the anchorage. | | |
| | code | dimensions (cm) | weight (kg) |
| | 83418 | 9 X 4 | 2 |

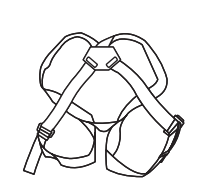
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|  | SLING | | |
| | Description: An essential component used to move the assembly with a crane, to take it to the column, or remove it once the work is complete. | | |
| | code | dimensions (m) | weight (kg) |
| | 84414 | | 0.62 |

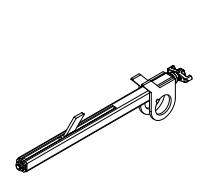
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|  | CYLINDRICAL LEVeller S.A. | | |
| | Description: Component that is introduced into the cast-in tube, in order to ensure its verticality and prevent the Housing Tube S.A. from rising under the pressure of the concrete. | | |
| | code | dimensions (m) | weight (kg) |
| | 83416 | | 3.96 |

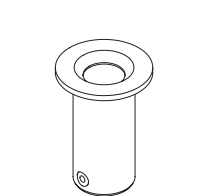
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|  | HOUSING TUBE S.A. | | |
| | Description: Component that is sunk into the concrete column and houses the Flexbow fall arrest system. | | |
| | code | dimensions (m) | weight (kg) |
| | 84410 | | 2.71 |


| | | | |
|--|--|----------------|-------------|
|  | RETRACTABLE SAFETY B/PROTECTOR S.A. | | |
| | Description: Retractable safety block which locks in case of over speed. A sling is attached to the retractable block lanyard, to allows the operator to reach the anchor point. | | |
| | code | dimensions (m) | weight (kg) |
| | 84412 (1) | | 1.599 |
| | 84420 (2) | | 0.1 |

| | | | |
|--|---|----------------|-------------|
|  | HARNESS EXTENSION W/CLASP S.A. | | |
| | Description: Sling to attach the operator to the retractable safety block having a lenght of 1,5 m max. | | |
| | code | dimensions (m) | weight (kg) |
| | 84422 | | 0.31 |

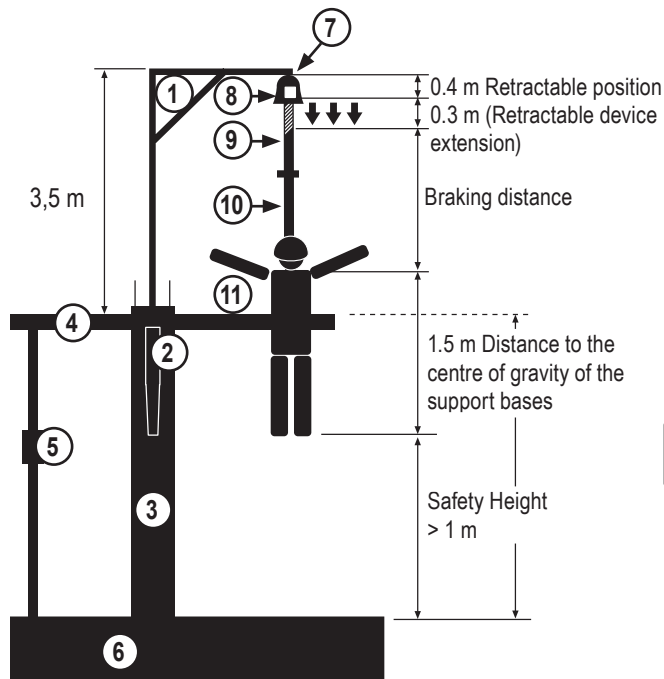
| | | | |
|--|---|----------------|-------------|
|  | HARNESS S.A. | | |
| | Description: Device anchoring the operator to the Flexbow fall arrest system. | | |
| | code | dimensions (m) | weight (kg) |
| | 84415 | | 1 |

| | | | |
|---|---|-----------------|-------------|
|  | S.A. V-METAL COLUMN GRIPPER Description: Accessory enabling the fixing of, Flexbow on a column, profile IPE, IPN or HEB. | | |
| | code | dimensions (mm) | weight (kg) |
| | 83424 | 755 | 6,27 |

| | | | |
|--|---|-----------------|-------------|
|  | S.A. V-METAL COLUMN GRIPPER SLEEVE | | |
| | Description: Accessory enabling the fixing of Flexbow on a column, profile IPE, IPN or HEB. | | |
| | code | dimensions (mm) | weight (kg) |
| | 83426 | 154 | 1,24 |

| | | | |
|--|--|----------------|-------------|
|  | TRIPOD S.A. | | |
| | Description: Element that supports and stabilizes the Flexbow. | | |
| | code | dimensions (m) | weight (kg) |
| | 84475 | | 98,16 |

Position after Fall



LEGEND

| | |
|-----------------|-----------------------|
| 1. Flexbow | 7. Anchor point |
| 2. Housing tube | 8. Protective hood |
| 3. Column | 9. Retractable device |
| 4. Formwork | 10. Harness extension |
| 5. Struts | 11. Operator |
| 6. Ground | |

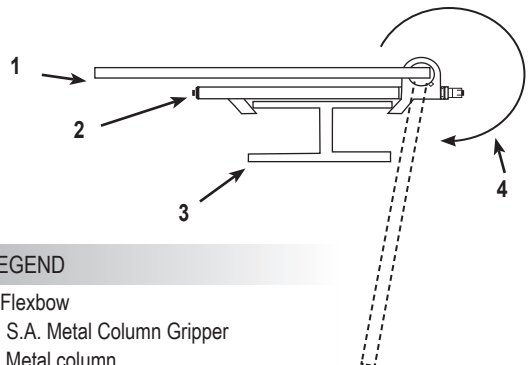
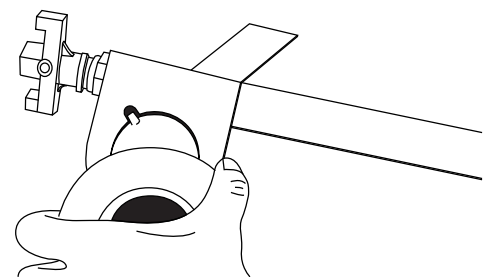
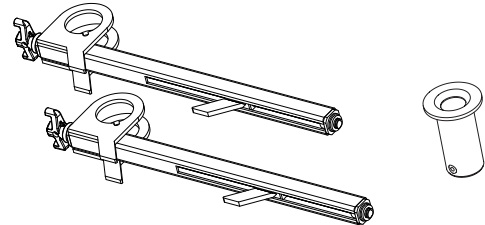
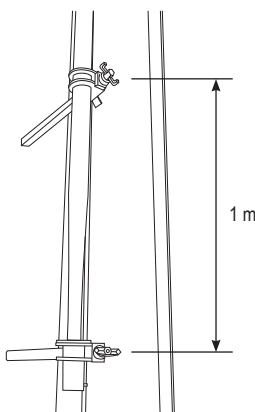


Info Rescue of operator after a fall: It is important that when operators work with the Flexbow Fall Prevention System, they are not alone. In this way, in the event of a fall, the other operator can rescue the other, hopefully within a few minutes, in order to prevent injury due to loss of blood circulation in the legs. The rescuing operator, anchored to a safety point uses a hook to carry the trapped operator to the panelling area, in order to be able to stand up.

Assembly process for the column gripper sleeve

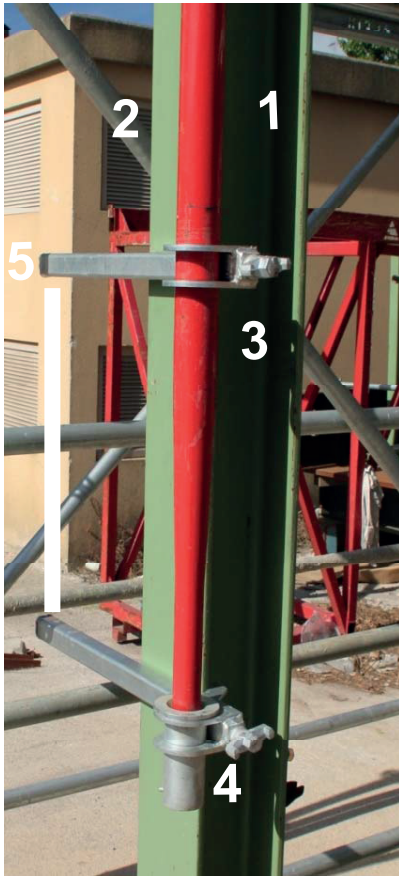
Characteristics and advantages

- Patented product made in steel, proving to be a much more lightweight accessory, easy and quick to assemble, and which only needs a hammer for attachment.
- Designed and manufactured according to standard UNE-EN 795 regarding anchoring elements (Certified by the Applus Laboratory).
- It can be attached to steel columns (Sections with IPE, IPN, HEB type profiles) with flanges from 15 to 45 cm.
- Only two sellable codes which, once assembled, are inseparable (Integrated Safety)
- Can be assembled by competent works personnel



LEGEND

| |
|------------------------------|
| 1. Flexbow |
| 2. S.A. Metal Column Gripper |
| 3. Metal column |
| 4. Rotation angle |



The perfect solution for safe work in perimeters, and for loading/ unloading trucks in design areas.

Elements:

1. Steel columns type IPE, IPN, HEB, etc., with cross section between 15 and 45 cm.
2. Flexbow body that can rotate up to 280°, making work easy and safe.
3. Steel clamp that sets the Flexbow to the steel column.
4. Steel column "glass". Ending element where the Flexbow must be casted in.

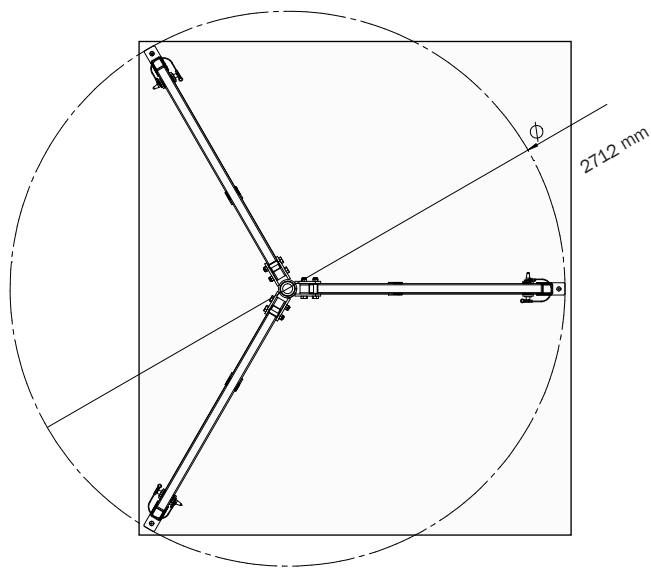
(Distance between steel clamps: 1 m)

Flexbow tripod with a counterweight solution

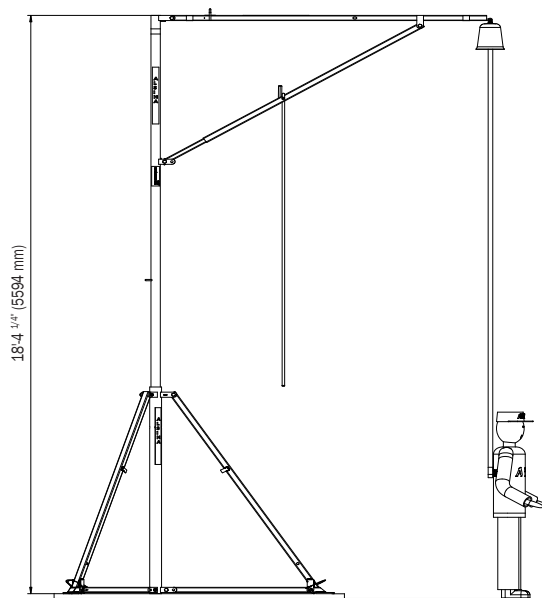
Introduction

The Flexbow TRIPOD, together with Flexbow and a concrete slab counterweight, is a solution that allows operators to work safely.

The Flexbow TRIPOD is folded up when it is delivered onsite. Once it has been placed in its work position, it is assembled according to the following diagram:



To a 250 x 250 cm concrete slab that is 20 cm thick. In this case, the anchor will involve installing 3 "HIGH STRENGTH FH FISCHER ANCHORS 18X80/25 FOR M12." This concrete slab works as a counterweight.



Final assembly