

HORIZONTAL LIFELINE SYSTEM **MONOLINE**

OPERATION MANUAL

1. General information.

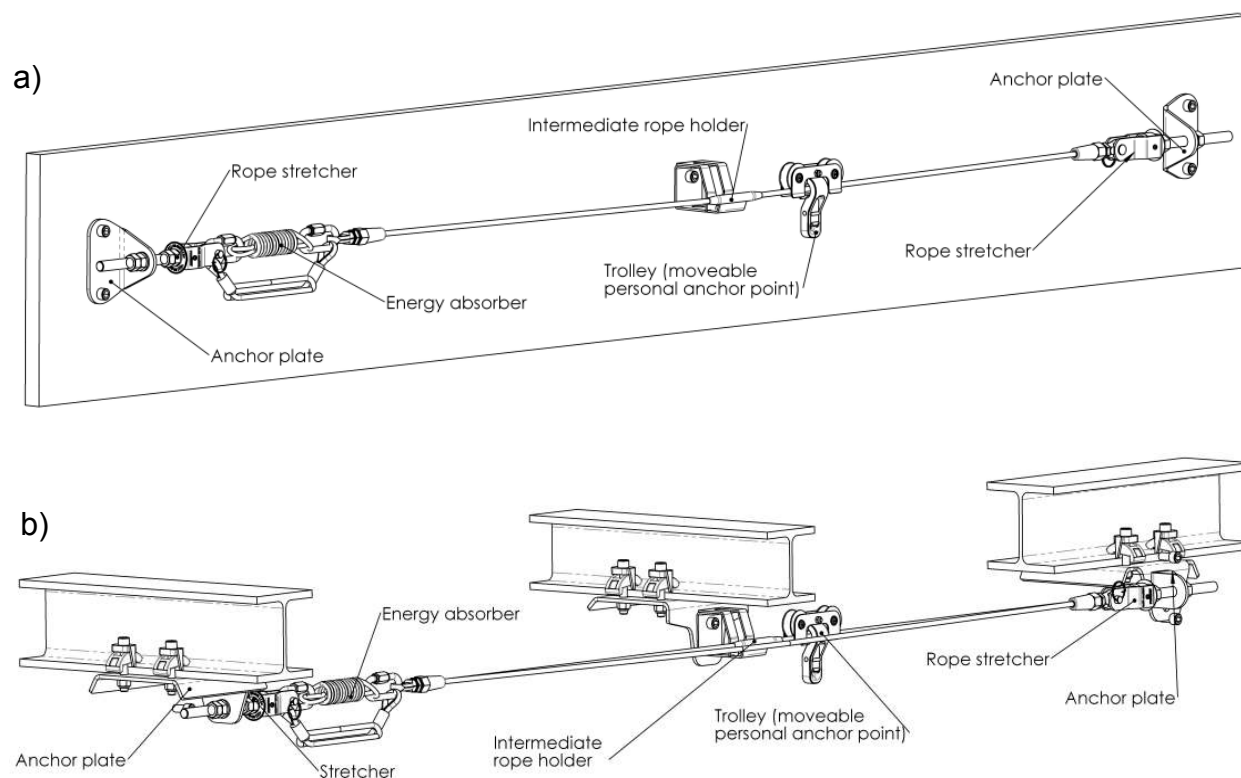


Fig. 1-1. The MONOLINE system; a) – "on wall" installation; b) – "on beams" installation.

The MONOLINE horizontal anchorage system (Fig. 1-1) is C-class anchorage device according to the EN 795 standard. The system enables anchoring personal protective equipment against falls from a height to a reliable structure and allows movement of an user along the line.

The system is conform to the EN 795:2012 standard and the CEN/TS 16415:2013 Technical Sheet.

The system consist of a horizontal line made of a stainless steel wire rope (dia. 8 mm) equipped with a shock absorbing and tensioning devices on both ends. The line is attached to a fixed

structure by means of anchorage plates. The system's cable may be attached to a structure with the aid of intermediate structural holders.

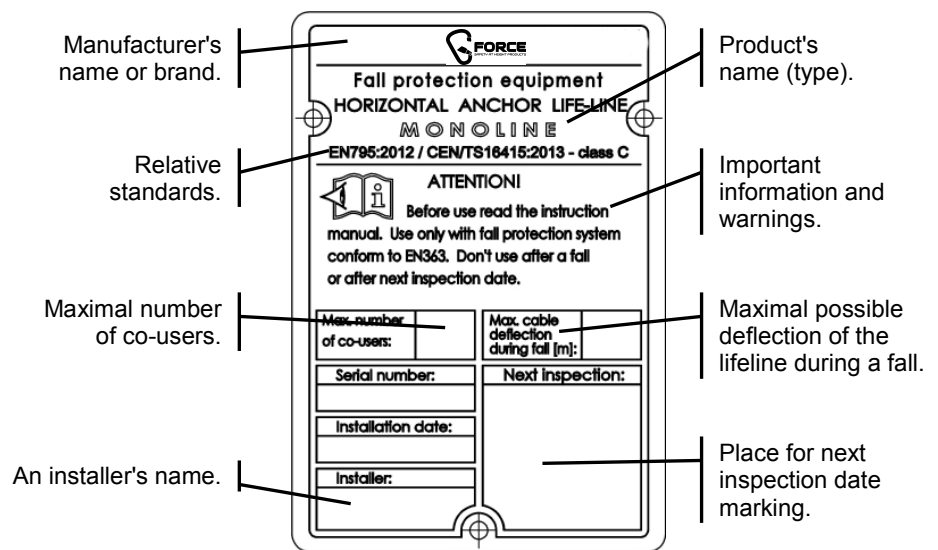
The MONOLINE system is equipped with a trolley (ref. HL610) which serves as a moveable anchor point for personal equipment. The HL610 can be attached to (detached from) the cable in any point along the system.

The MONOLINE may be used simultaneously by a number of users, according to information pointed on the Information Board (Fig. 1-2). Each of the particular user should be equipped with separate HL610 trolley.

The horizontal anchorage system has an informative label (board) which contains basic information on the system application, like: maximal number of simultaneous users and maximal cable deflection which may appear

during possible fall. The board contains as well as its unique serial number, mounting date (month and year), and the date of the next scheduled technical inspection.

Fig. 1-2. MONOLINE system's Information Board.



2. General safety rules concerning the system usage.

Each user of the horizontal anchorage system should read this manual carefully. Any other usage of this system contrary to the contents of this document poses a serious threat to life. This manual should always be available for reference. The system may be used only by individuals properly trained in using the equipment for protection against falls from a height.

The system cannot be used by individuals whose health may compromise safety, both during normal usage and in potential rescue actions. In addition, a rescue operation plan should be prepared for future implementation.

The horizontal anchorage lifeline may be used only for protection against falls from a height and in compliance with the guidelines included herein. Particularly, the system must not be applied in suspended operations or in any other conditions where the anchorage wire load may exceed a load of 20 kg.

This manual includes a Control Card, which is an integral part, and is intended for recording periodic inspections and repairs. The Card in question should be kept with this manual and presented on request to the producer or a person authorized by the producer. Updating the records in the Card lies with the institution which uses the system. This institution should also require that proper records be made in the Card by individuals servicing or repairing the system.

All proper instructions for equipment used along with the anchorage system should be observed.

The accompanying equipment has been specified below. In addition, all general regulations and rules concerning occupational health and safety should be followed, in particular those related to works carried out from a height.

A system that was activated to secure an individual against a fall should be withdrawn from service should be submitted under detailed inspection and repaired if necessary. Any further usage is possible after written confirmation by the producer or an authorised service centre.

Damaged or incomplete anchoring system can not be used. In case of doubt concerning the condition of or the scope of use, please contact the manufacturer or authorized service.

A clear space under the workplace must be checked at the point of possible fall. This is in order to avoid impact against potential objects or surfaces before the protective equipment arrests the fall.

During the use of the system, special attention should be paid to dangerous aspects that affect the operation of the protection equipment or user's safety, and particularly to: ropes kinks, sliding of the ropes against sharp edges, pendulum falls, electricity, extremely high or low temperatures, equipment damages, negative impact of climate factors, chemicals or impurities.

Any dangerous should be taken which may arise by the use of a combination of items of

equipment in which the safe function of any one item is affected by or interferes with the safe function of another. For instance, when work access systems and fall arrest systems are used simultaneously.

The original components of the system must not be modified, repaired, or replaced with parts made by other manufacturers.

If the system is re-sold to outside the original country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the system is to be used.

Before each use of the system, one should check if the date of the next scheduled technical inspection has not passed, since the system must not be used after the lapse of this specific date.

Before and after each application, one has to visually inspect the completeness and proper technical condition of the system and the tension of the wire. Should any defects or incompleteness be revealed, the system must not be used.

3. Operation

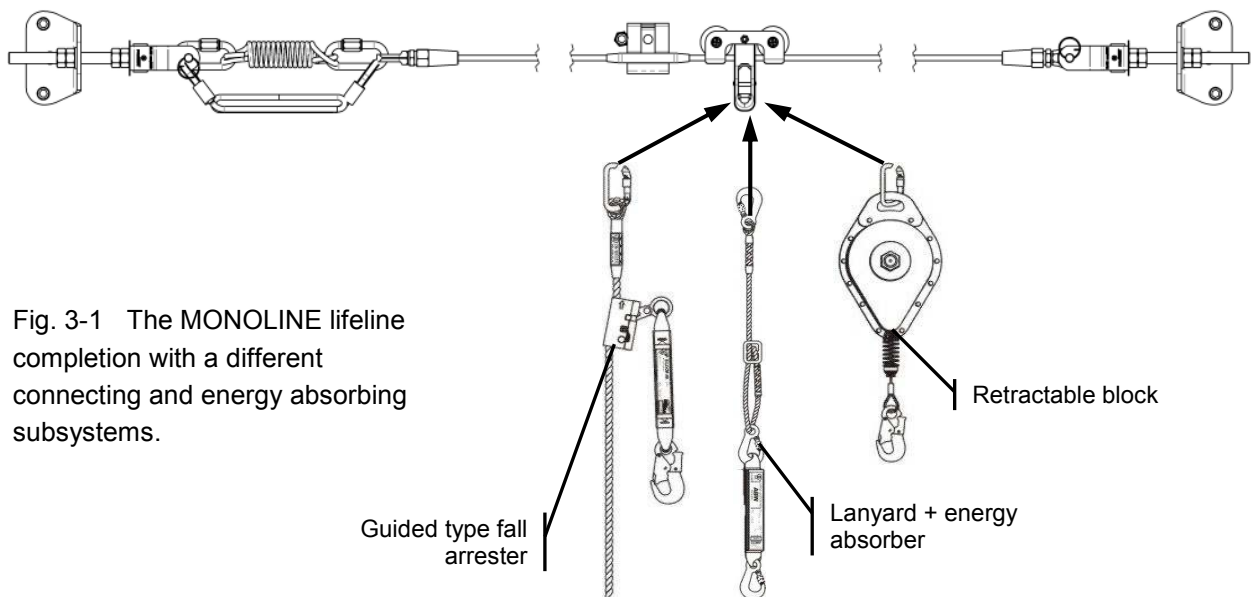


Fig. 3-1 The MONOLINE lifeline completion with a different connecting and energy absorbing subsystems.

The complete system for protection against falls from a height includes the MONOLINE horizontal anchorage system and the attached personal protection equipment compliant with the EN 363 standard. The connection of the personal protective equipment to the MONOLINE slider must be made by means of the AZ011 snap hook.

The allowed number of simultaneous users shouldn't exceed the one pointed on the information board of particular system.

The following components should be used along with the system:

- a safety harness compliant with the EN 361 standard,
- one of the following category of a connecting/shock-absorbing subsystem:

- a set (consist of safety lanyard and shock-absorber) compliant with the EN 354/355 standard,
- a rope grab compliant with the PN-EN 353-2 standard,
- a retractable type fall arrester conform to EN 360. **NOTE: Only G-Force retractable blocks can be used with the MONOLINE horizontal lifeline, because their proper functioning have been tested in cooperation with the lifeline with positive result,**
- connectors (snap hooks or carabineers) compliant with the EN362 standard.

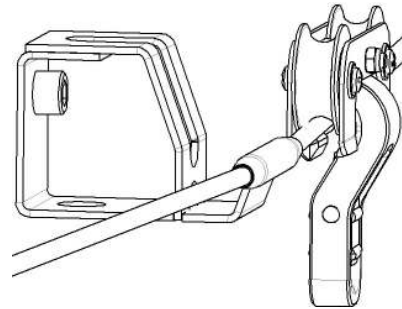
Before commencing any work at a height, the user should put on the safety harness according to the proper manual. Next, attach the harness' anchorage point to the horizontal anchorage system by means of a connecting/shock-absorbing subsystem specified above (Fig.3-1).

The end of the connecting / shock-absorbing subsystem attached to the MONOLINE's trolley should be terminated or equipped with the AZ011 carabineer hook. The actual manner of the personal protection equipment usage, should meet the requirements included in its operation manual.

The MONOLINE slider may be shifted freely along the wire, thus making a guided type

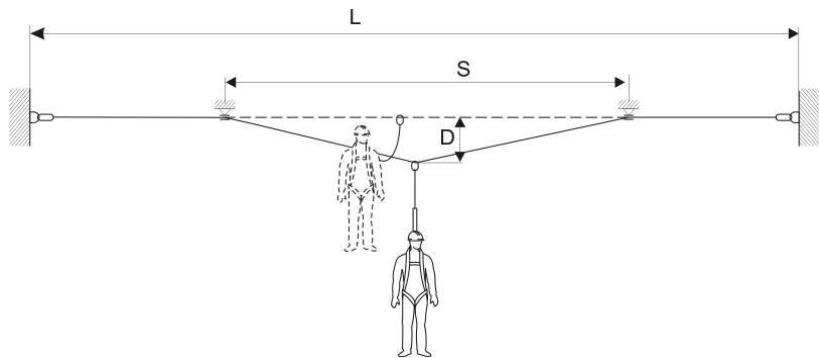
anchorage point for a personal protection system. The user may move the trolley through the intermediate anchorage points without detaching it off the line as shown in Fig. 3-2. Once the work is finished, the slider should be taken off the wire and stored in dry and safe conditions.

Fig. 3-2. The way of passing the trolley through the intermediate anchorage point



4. Determination of a free space under user.

Fig. 4-1 Deflection of the horizontal anchorage lifeline during fall: L – total length of the system, S – distance between intermediate supports, D – deflection of the cable.



Proper completion and configuration of the protection system also includes ensuring a sufficient distance under the work location, so that the route of any potential fall should be free of any obstacles that could cause injury. The vertical clearance under the user should at least be equal to the sum of the deflection (D) of the anchorage system (see Fig. 4-1), the maximal user's displacement during fall due to the user's initial position, length and elongation of the

connecting / shock-absorbing components (according to its operating manual) and an additional extra distance of approximately 1 m. Forecasted values of the horizontal anchorage line deflection D of a particular system, for maximal number of simultaneous users assumed for this system, is pointed on it's Information Board and in technical documentation.

5. System inspection and maintenance

The MONOLINE system should undergo visual inspection by its immediate user before and during each application. Special attention should be paid to potentially missing parts (nuts or safety pins), loosened components attaching the system to the fixed structure (both end and intermediate ones), excessive wire rope sag, signs of corrosion, etc. Should any of the above symptoms appear or in the case of any doubts as to the system's technical condition, its use should be discontinued, and the user should

contact the producer or an authorised service centre.

Periodic inspections of the system should be carried out at least once a year by the producer or an authorised service centre. The inspections in question, as well as all information regarding repairs, should be recorded in the Control Card provided by the producer. A next inspection date should be placed on the Informative Board.

CONTROL CARD OF A HORIZONTAL ANCHORAGE SYSTEM

It is the responsibility of the user organisation to provide the Control Card and to fill in the details required.

The Control Card should be filled in only by a competent person responsible for protective equipment.

The Control Card should be filled in before the first use of the equipment.

Any information about the equipment like: periodic inspections, repairs, reasons of equipment withdrawn from use shall be noted.

The Control Card should be kept during whole period of equipment utilization. Don't use the equipment without the Control Card filled in.

Name / Category of equipment:	
Producer:	
Serial number:	
Installation date:	
Total length [m]:	
Maximal number of simultaneous users:	
The predicted value of system deflection during potential fall [m]:	
Localization:	
User name:	

Periodic examination and repair history					
	Date	Type of examination or repair	Defect noted and repair carried out	Next inspection date	Name and signature of competent person
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					