

A



Lanex

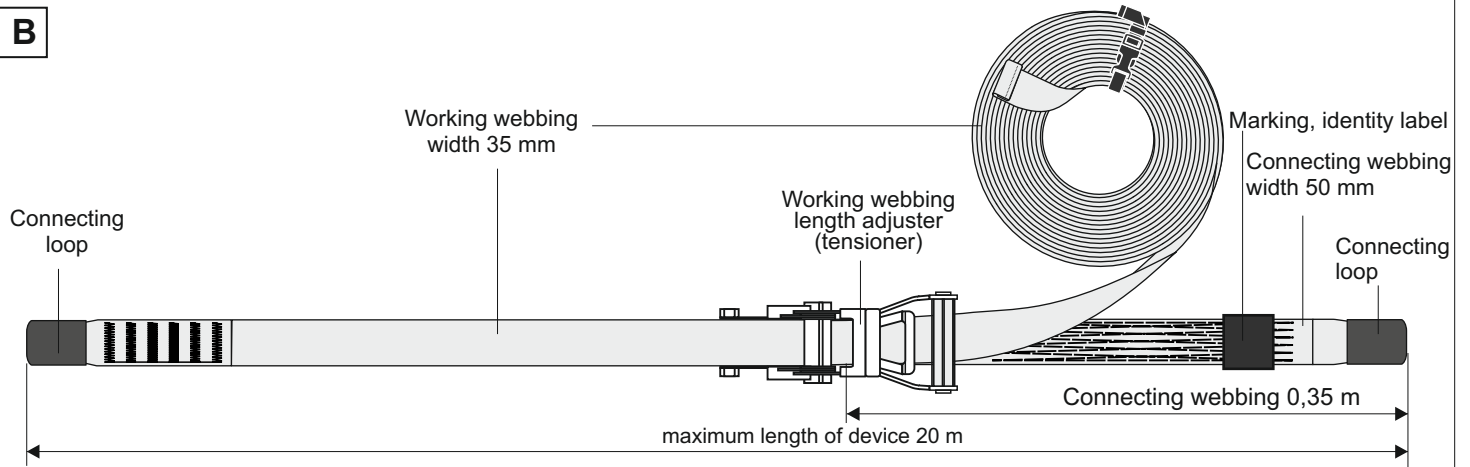
| Model | RL [m] |
|------------|--------|
| XPAHLAE310 | 10 m |
| XPAHLAE320 | 20 m |

ADJUSTABLE HORIZONTAL
LIFELINE

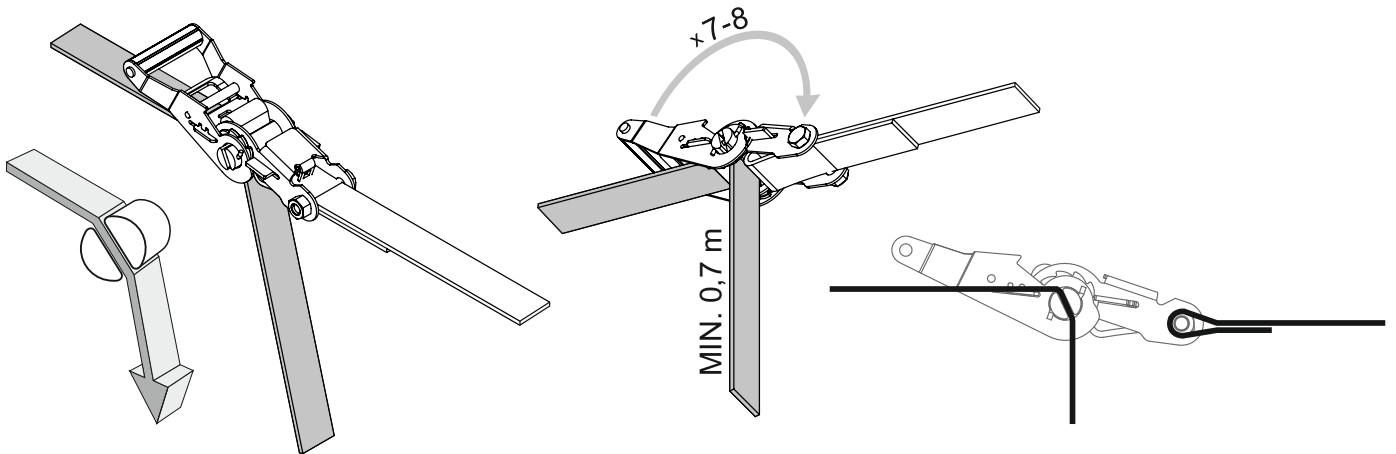
HSL 320

CE 0082 EN 795:2012 TYPE B
CEN/TS 16415:2013/B

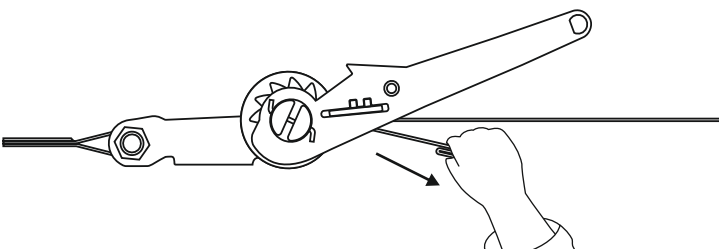
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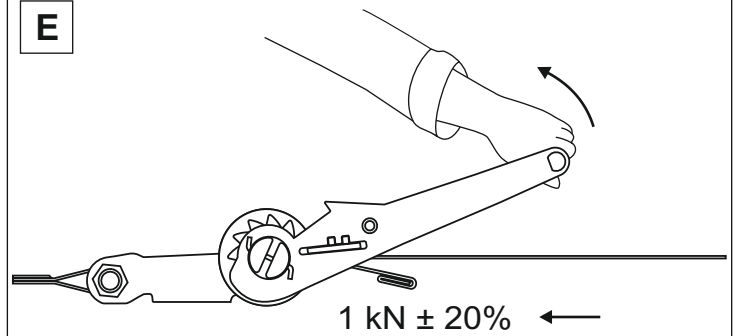
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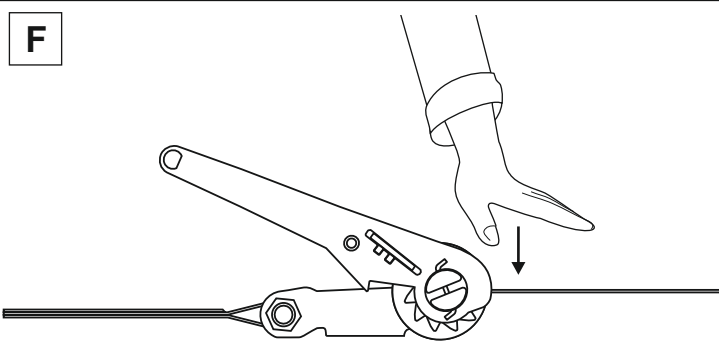
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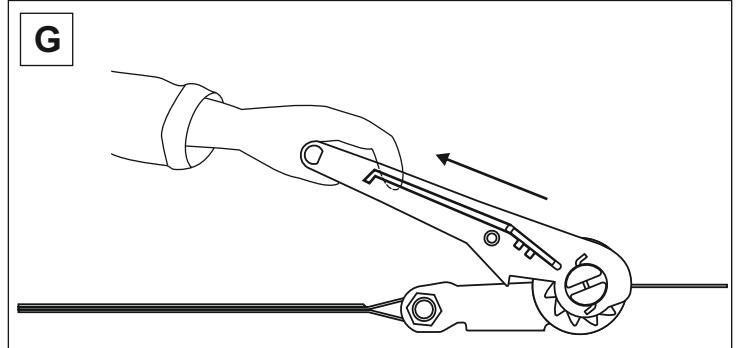
E

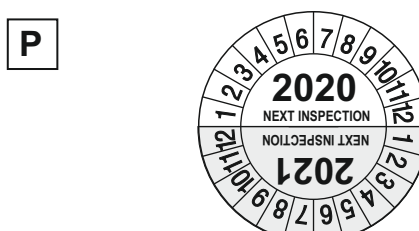
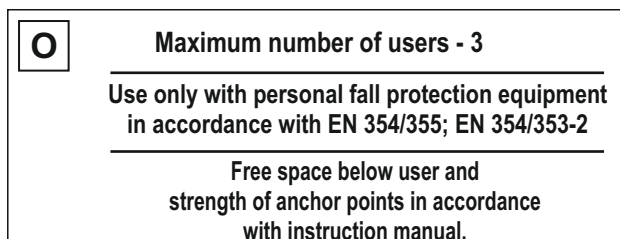
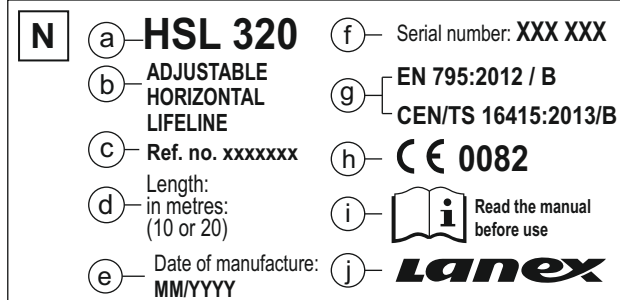
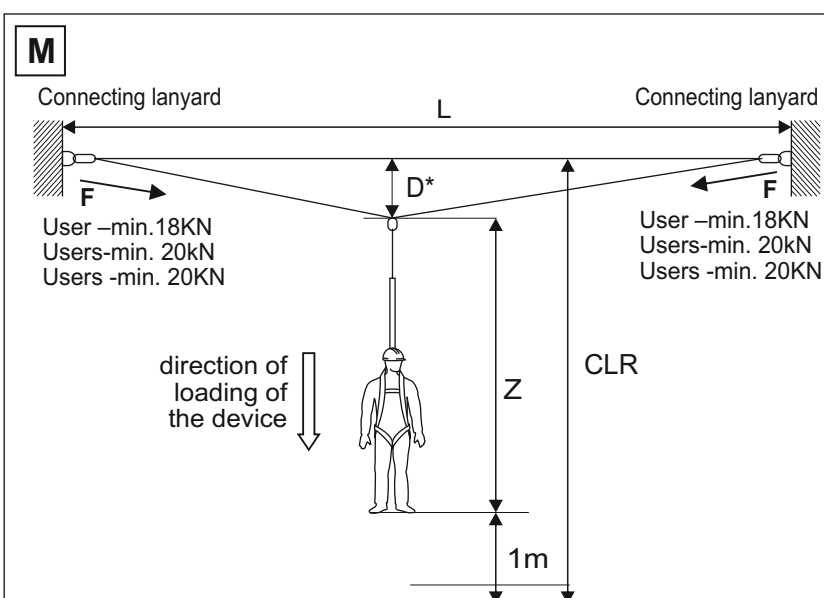
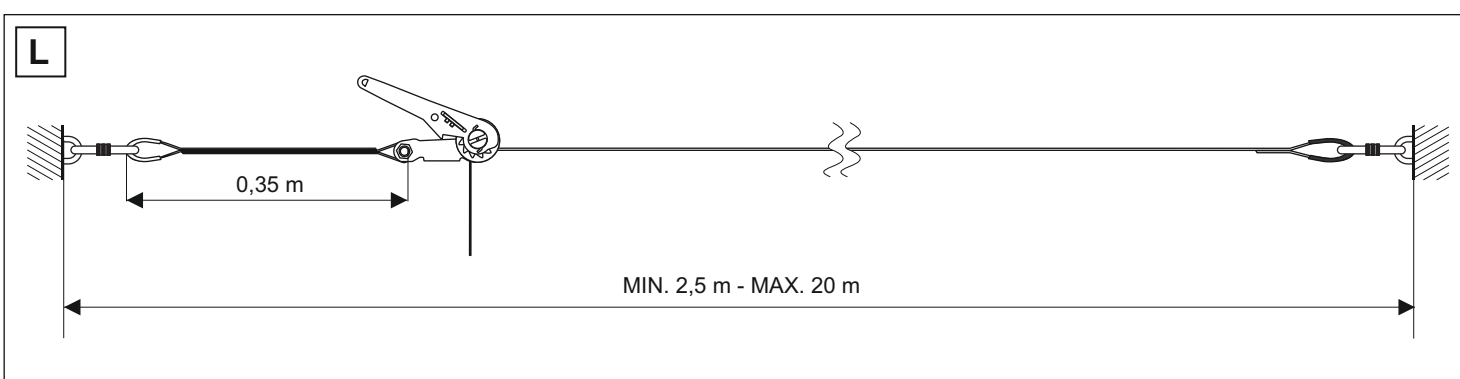
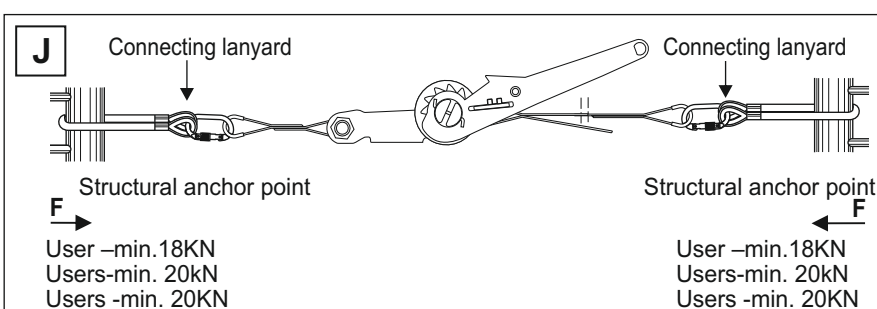
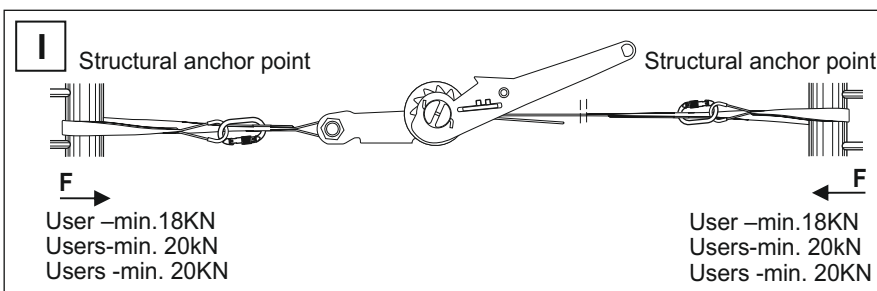
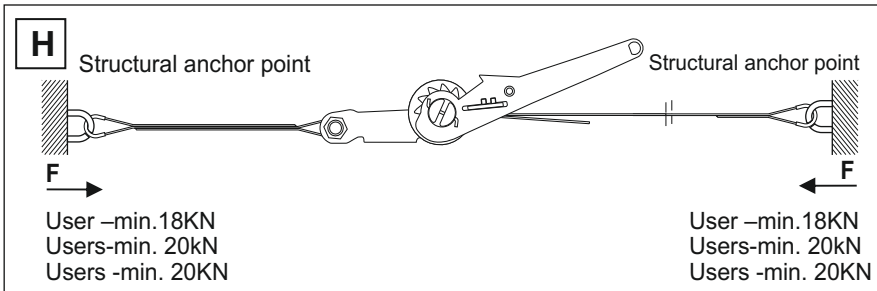


F



G





L[m] - total length of relaxed webbing HSL 320
D[m]* - webbing HSL 320 deflection during falling
Z[m] - maximum elongation of energy absorbing and connecting component + user height = 5.5m
CLR[m] - required distance = D+Z+1m

*) NOTE!
Value of parameter "D" [table of deflections] is applicable only to lifeline HSL 320 and does not apply to any similar products delivered by other manufacturers.

Instruction manual

Horizontal lifeline HSL 320 is a component of fall protection equipment. It should be used for works requiring frequent mobility in the horizontal. Horizontal lifeline HSL 320 complies with EN 795 Type B (portable anchor points for fall protection equipment). Horizontal lifeline HSL 320 provides protection for one, two or three persons.

CONSTRUCTION

Work rope length adjuster (tensioner) is made of galvanized steel [B]. Working webbing made of polyester, of 10 m or 20 m, 35 m in width. [B] Connecting webbing, made of polyester, of 50 mm in width and 0.70 m in length [B]



INSTALLATION OF HORIZONTAL LIFELINE ON STRUCTURAL ANCHOR POINTSNOTE!

- Horizontal lifeline AE321 can be equipped only with certified snap hooks complaint with EN 362.
- Shape of anchoring elements on a structure in attachment points should prevent self-acting disconnection of horizontal lifeline AE321 – [H], [I], [J].
- Structural anchor points must be located on the same level if possible. Deflection by 15° is allowed. Strength values for attachment points and and deflection values for the system are given in Table 1.
- Pay special attention to range of user operation by considering the line deflection or sliding down the line and the related risk of a fall from edge [K].
- Maximum load transferred when operating between the line and the structure are given in table of deflections (below) and in figure [M].
- If horizontal lifeline is a part of a system arresting a user's fall, it must be equipped with an element reducing braking force acting on user to maximum of 6 kN.

ADJUSTING LENGTH OF HORIZONTAL LIFELINE HSL 320

Install working webbing correctly in length adjusting and tensioning device [C]. Manually tension working webbing [D]. Tension working webbing with use of tensioner lever to remove webbing slack (0.5kN-1.5kN) [E]. To prevent accidental loosening of working webbing it is necessary to check the webbing for correct tensioning before use [F].

TABLE 1. REQUIRED STRENGTHS OF ATTACHMENT POINTS (F). SYSTEM DEFLECTION (D)

|  |  | | | | | | | | | | | |
|--|--|--------|----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
| | 5 m - 7,5 m | | > 7,5 m - 10 m | | > 10 m - 12,5 m | | > 12,5 m - 15 m | | > 15 m - 17,5 m | | > 17,5 m - 20 m | |
| | D [m] | F [kN] | D [m] | F [kN] | D [m] | F [kN] | D [m] | F [kN] | D [m] | F [kN] | D [m] | F [kN] |
| 1 | 1,00 | 18,00 | 1,30 | 18,00 | 1,60 | 18,00 | 1,90 | 18,00 | 2,20 | 18,00 | 2,40 | 18,00 |
| 2 - 3 | 1,20 | 20,00 | 1,60 | 20,00 | 2,00 | 20,00 | 2,30 | 20,00 | 2,70 | 20,00 | 3,00 | 20,00 |

REMOVAL OF HORIZONTAL LIFELINE HSL 320

To remove horizontal lifeline HSL 320 pull inner flexible connector on tensioner holder and pull the lever aside, while releasing tension of webbing [G]. Remove the device.

MAIN PRINCIPLES OF USE OF ADJUSTABLE HORIZONTAL LIFELINE HSL 320

Horizontal lifeline can be used only by personnel trained in works at a height beforehand. Before each use visually check tensioner mechanism, snap hooks, webbings, seams for any mechanical, chemical or thermal damages. The assessment must be carried out by a person who will use horizontal lifeline HSL320. After any defect is found or condition of horizontal lifeline raises any doubts – DO NOT USE IT. When using horizontal lifeline HSL 320 it is necessary to keep adequate distance (CLR - Fig.) between working webbing level and ground level. This distance depends on length of the retracted webbing and is shown in figure [M]. The device holds label [O] to mark date of the next inspection, i.e. date of first use plus 12 months. Do not use the device if inspection is not valid.

Working webbing HSL 320 must be tensioned (without slack) between two structural points using manual force (0.5kN-1.5kN). If the calculated value CLR in a specific point is greater than free space under the user:

- use accordingly shorter energy absorbing and connecting component;
- use fixed fall arrest system with rigid line.

Before each use of personal fall protection equipment, the component of which is device HSL320, please check whether all system parts are properly interconnected and cooperate with other components without any interference, and compliant with valid standards:

EN 361 - Full body harness;

EN 354 - Lanyards;

EN 355 - Energy absorbers; EN 362 - Connectors (Snap hooks)

EN 795 - Anchor devices

Horizontal lifeline can be used only with devices by the manufacturer of horizontal lifeline AE321:

- retractable type fall arresters (EN 360),
- energy absorbers with lanyards (EN 355),
- guided type fall arresters including a flexible anchor line (EN 353-2).
- To connect components of the system use connectors compliant with EN 362 only
- Horizontal lifeline HSL 320 can be used in explosion hazard zones 1, 2, 20, 21 & 22.
- When using horizontal lifeline AE321 protect it from contact with oils, acids, solvents, alkali, open fire, molten metal, sparks (welding, metal cutting) and sharp edges.
- It is forbidden to make any modifications of horizontal lifeline AE321.

DEVICE MARKING (IDENTITY LABEL)

Meaning of marking symbols [N], [O] (a) - device model (type); (b) - name of device; (c) - reference no.; (d) - XX - length in metres: (10, 20 or 30); (e) - month and year of product manufacture; (f) - product serial number; (g) - number and year of European standard; (h) - CE mark and number of notified body; (i) – not: read manual; (j) – marking of manufacturer or distributor responsible for controlling manufacturing of the equipment. Date of next inspection [P].

PERIODIC INSPECTIONS

The device should be subject to periodic inspection after at least each 12 months of usage, starting from date of the first use. Periodic inspection can be carried out only by a competent person with adequate knowledge and trained in periodic inspection of personal fall protection equipment. Conditions of the device use may influence the frequency of periodic inspections which may be carried out more frequently than after 12 months of usage. All periodic inspections must be recorded in the identity card for the device.

MAXIMUM TIME OF USAGE

The device can be used for 10 years from the manufacturing date.

NOTE: Maximum time of usage depends on intensity and environment of use. If the device is used in heavy conditions, being exposed to frequent contact with watersharp edges, extreme of temperatures or exposed to corrosive substances, it may be necessary to withdraw the device after only one use.

WITHDRAWAL FROM USE

The device must be withdrawn from use immediately and destroyed if it has been used to arrest a fall, failed a periodic inspection or there are any doubts concerning its function.

ESSENTIAL PRINCIPLES FOR USE OF PERSONAL FALL PROTECTION EQUIPMENT

- Personal fall protection equipment should be used only by personnel trained in this respect.
- Personal fall protection equipment must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
- Draw a rescue plan to be implemented during operation whenever necessary.
- being suspended in personal fall protection equipment (e.g. after arresting a fall) please note symptoms of suspension trauma.
- to avoid negative effects of suspension make sure a corresponding rescue action plan is prepared. It is recommended to use support tapes.
- It is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- Any repair shall only be carried out by manufacturer of the equipment or his certified representative.
- Personal fall protection equipment shall not be used for any purpose other than intended.
- before each use make sure that all parts of the fall arresting system cooperate correctly. Periodically examine connections and fitting of components of the equipment to prevent any accidental loosening or disconnection.
- It is forbidden to use a combination of equipment where function of any one item is affected by, or interferes with the function of any other.
- before each use of personal fall protection equipment carry out a detailed inspection to ensure that the device is operable and operates correctly.
- In particular, before use inspect all accessible elements of the equipment for any damages, excessive wear, corrosion, abrasion, cutting or improper function. On individual devices pay particular

attention to:

- in full body harness, sit harnesses and work positioning devices: buckles, regulating elements, attachment points (buckles), webbing, seams, belt loops;
- in energy absorbers: attachment loops, webbing, seams, housing, connectors;
- in lanyards and textile guides: rope, loops, thimbles, connectors, regulating parts, splices;
- in lanyards and steel guides: rope, wires, clamps, loops, thimbles, connectors, regulating parts;
- in retractable type fall arresters: lanyard or webbing, retractor and locking mechanism for proper operation, housing, energy absorber, connectors;
- in guided type fall arresters: body, proper guiding, locking mechanism for proper operation, rollers, bolts and rivets, connectors, energy absorber; in metal parts (connectors, hooks, attachment points): load-bearing body, rivets, main pawl, function of locking gear.
- at least once a year, after every 12 months of use, personal protective equipment must be withdrawn from use to carry out periodic detailed inspection. Periodic inspection may be carried out by a properly qualified and skilled person. Also periodic inspection may be carried by manufacturer of the equipment or his authorized representative.
- in some cases, if the fall protection equipment has a complex design (e.g. fall arresters), periodic inspections may be carried out by the equipment manufacturer, or his authorized representative only. After the periodic inspection, date of the next inspection should be arranged.
- Regular periodic inspections are essential in respect of the equipment condition and safety of users which is dependant on the equipment functionality and durability.
- During periodic inspection it is necessary to check the legibility of all the equipment markings (identity label of the device.) Do not use the equipment if marking is illegible.
- it is essential for the user's safety that the product is re-sold outside the original country of destination the reseller must provide instructions for use, for maintenance, for periodic inspection and for repair in language of the country where the product is to be used.
- personal fall protection equipment must be withdrawn from use and discarded immediately (or other procedures based on instruction manual should be applied) if it has been used to arrest a fall.
- full body harness compliant with EN 361 is the only device supporting user's body in fall arrest systems.
- fall arrest system can be connected to attachment points (buckles, loops) on full body harness marked with capital letter "A"
- Anchor point (device) of the fall protection equipment should have a stable structure and position so as to prevent a possibility of the load fall and minimize a free fall distance. Anchor point of the equipment should be located above the user's work station. The shape and construction of the anchor device/point shall not allow for a self-acting disconnection of the equipment. Minimal strength of the equipment anchor point should be 12kN. It is recommended to use certified and marked anchor points of the equipment compliant with EN 795.
- It is obligatory to verify the free space required under the user at workplace before each occasion of using the fall protection system, so that, in case of a fall, there is no collision with the ground or other obstacle in the fall path. The required free space should be determined on basis of the data given in the instruction manual of the equipment to be used.

- when using the equipment, pay special attention to risks affecting operation of the equipment and the user's safety, and in particular to kinks and rope movement on sharp edges, oscillatory falls, electrical conductivity, any damages such as cuts, abrasions, corrosion, influence of extreme temperatures, negative influence of environmental factors, chemical substances.
- Personal protective equipment must be transported in a package (e.g.: bag made of moisture-proof textile or foil bag or cases made of steel or plastic) to protect it against damage or moisture.
- Personal fall protection equipment should be cleaned without causing adverse effect on the materials used in the production of the equipment. For textile materials (webbings, ropes) use agents suitable for delicate fabrics. Rinse thoroughly. Clean energy absorbers using damp cloth only. Do not immerse energy absorber in water. Wash textile products with water only. When the equipment becomes wet, either from being in use or after cleaning, allow it to dry naturally, and keep it away from sources of heat. In metallic products lubricate slightly some mechanical parts (springs, hinges, pawls, etc.) regularly to ensure their better operation.
- Personal protective equipment should be stored loosely packed in well-ventilated rooms, protected from direct light, UV degradation, dust, sharp edges, extreme temperatures and aggressive chemical substances.
- all parts of a fall protection equipment must conform to instruction manuals for the equipment and standards in force:
 - EN 353-1, EN 353-2, EN 354, EN 355, EN 360 - Fall arrest systems;
 - EN 362 - Connectors
 - EN341, EN1496, EN1497, EN1498 - Rescue equipment
 - EN 361 - Full body harness;
 - EN 813 - Sit harness;
 - EN 358 - Work positioning systems;
 - EN 795 - Anchor devices.

It is the responsibility of the user organisation to provide the Identity Card and to fill in the required details. The Identity Card should be filled in before the first usage of the equipment. All information on fall protection equipment (name, serial no., purchase date and date of first use, name of user, information on repairs and inspections and withdrawal from use) must be provided in the identity card of the device. The Identity Card should be filled in by a person responsible for fall protection equipment in an organisation. It is forbidden to use personal fall protection equipment if the Identity Card is not filled in.

IDENTITY CARD

| | | | |
|-------------------------|--|---------------------|--|
| NAME OF DEVICE MODEL | | REFERENCE NO. | |
| DEVICE NUMBER | | DATE OF MANUFACTURE | |
| USER NAME | | | |
| | | | |
| DATE OF PURCHASE | | DATE OF FIRST USE | |

| TECHNICAL INSPECTIONS | | | | | |
|-----------------------|-----------------------|-------------------------------------|--|-------------------------|--------------------------------------|
| | DATE OF INSPECTION | REASONS FOR INSPECTION OR REPAIR | NOTICED DAMAGES, COMPLETED REPAIRS, OTHER REMARKS | DATE OF NEXT INSPECTION | SIGNATURE OF AUTHORIZED PERSON |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |