

ATEXWORX

USER INSTRUCTION MANUAL ANTISTATIC FULL BODY HARNESS

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODEL: AFH300703

C € 0598

EN 361:2002, EN 80079-36:2016, EN 80079-37:2016, EN 1149-1:2006, EN 1149-5:2008





Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

Note: The user is advised to keep this user instructions document for the life of the product.

1. **IMPORTANT:** This manual must be read and understood in its entirety and used as part of fall protection training program as required by safety policy or any state regularity agency.

These instructions are intended to meet the manufacturer instructions as required by EN 361:2002, EN 80079-36:2016, EN 80079-37:2016, EN 1149-1:2006 & EN 1149-5:2008. The user must fully understand the proper equipment use and limitations.

2. **DESCRIPTION:** Full body harnesses are Personal Protective Equipment (PPE) against falls from a height according to the European PPE Regulation (EU) 2016/425 and are in conformity to the Norm EN 361:2002.

The full body harness is a basic component of the fall arrest system in conformity to the Norm EN 363:2008.

The Kapture Element Atexworx Antistatic Full Body Harness AFH300703 is classified as a PPE (Personal Protective Equipment) by the European PPE Regulation (EU) 2016/425 and conforms to the European Norm EN 361:2002 (full body harnesses), also Atex 2014/34/EU, EN ISO 80079-36:2016 and EN ISO 80079-37:2016.

Harness webbing is also tested for surface resistance as per EN 1149-1:2006.

EN 361:2002 Test	Result/Comment
Clause 4.1 Design and Ergonomics	Achieves required performance requirement
Clause 4.2 Material & Construction	Achieves required performance requirement
Clause 4.3 Static strength	Achieves required performance requirement
Clause 4.4 Dynamic Performance	Achieves required performance requirement

NOTE: The webbing material of this product is tested and found satisfactory in accordance with EN 1149-1:2006 and assessed in accordance with EN 1149-5:2008.

APPLICATION: The use of the full body harness with a fall arrest subsystem must be compatible with the operating
instructions for each component of the system and the Norms: EN 353-1, EN 353-2, EN 355, EN 360 and EN 362.

This harness is designed for use by personnel requiring additional protection of the equipment during use in potentially explosive atmospheres, like oil & gas industry, petrochemical industry, mining and chemical environments.

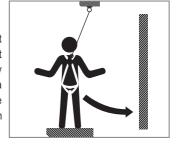


4. FREE FALL: Personal fall arrest systems used with this equipment must be rigged to limit the free fall to 4.0 M per EN 361:2002. Restraint systems must be rigged as per EN 354:2010 so that no vertical free fall is possible. Personnel riding systems must be rigged so that no vertical free fall is possible. Climbing systems must be rigged so that free fall is limited to 2L+1 or less. Rescue systems must be rigged so that no vertical free fall is possible. See subsystem manufacturer's instructions for more information.

Α	Connecting Subsystem (Energy Absorbing Lanyard Shown)	(A)	
В	Working Level		1
С	Lower Level or Obstruction	è	
D	Free Fall 4 mts max as per EN 361:2002		
Е	Deceleration Distance		
F	Total Fall Distance Free Fall (D) + Deceleration (E)	©,	II

Figure (as above) illustrates fall clearance requirements. There must be sufficient clearance below the user to allow the system to arrest a fall before the user strikes the ground or other obstruction. Clearance required is dependent on the following factors:

- Elevation of Anchorage
- Connecting Subsystem Length
- Deceleration Distance
- Free Fall Distance
- Worker Height
- Movement of Harness Attachment Element
- 5. SWING FALLS: Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as close to the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a self retracting lifeline or other variable length connecting subsystem is used.



- **6. EXTENDED SUSPENSION:** A full body harness is not intended for use in extended suspension applications. If the user is going to be suspended for an extended length of time it is recommended that some form of seat support be used. KStrong recommends an Easy seat. Contact KStrong for more information on this item.
- 7. ENVIRONMENTAL HAZARDS: Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges.



8. COMPATIBILITY OF COMPONENTS:

Unless otherwise noted, KStrong equipment is designed for use with KStrong approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect safety and reliability of the complete system.

9. COMPATIBILITY OF CONNECTORS:

Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Connectors (Hooks, Karabiners, and D-rings) must be capable of supporting at least 23 kN. Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see **Figure 3**). Connectors must be compatible in size, shape, and strength. double locking snap hooks and karabiners are required by EN 362:2004.

















Figure 3.

10. MAKING CONNECTIONS:

Use only double locking snap hooks and karabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

- KStrong connectors (snap hooks and karabiners) are designed to be used only as specified in each product's
 user's instructions. See Figure 3 for illustration of the inappropriate connections stated below. KStrong snap
 hooks and karabiners should not be connected:
 - In a manner that would result in a load on the gate.
 - In a false engagement, where features that protrude from the snap hook or karabiner catch on the anchor and without visual confirmation seems to be fully engaged to the anchor point.
 - To a D-ring to which another connector is attached.
 - To any object which is shaped or dimensioned such that the snap hook or karabiner will not close and lock, or that roll-out could occur.
 - Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).
 - To each other.

NOTE: Large throat opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook. (Refer 7 & 8)



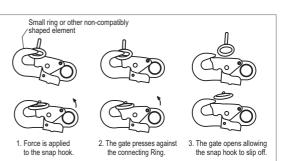
11. OTHER RESTRICTIONS:

- Do not make connections where the hook locking mechanism can come into contact with a structural member or other equipment and potentially release the hook.
- Do not connect a snap hook into a loop or thimble of a wire rope or attach in any way to a slack wire rope.
- The snap hook must be free to align with the applied load as intended (regardless of the size or shape of the mating connector)
- A karabiner may be used to connect to a single or pair of soft loops on a body support such as a body belt or full body harness, provided the karabiner can fully close and lock. This type of connection is not allowed for snap hooks.
- A karabiner may be connected to a loop or ring connector that is already occupied by a choker style connector. This type of connection is not allowed for snap hooks.

12. CONNECTING SUB-SYSTEMS:

Connecting subsystems (self-retracting lifeline, lanyard, Rope Grab and lifeline, cable sleeve) must be suitable for your application. See subsystem manufacturer's instructions for more information. Some harness models have textile loops connection points. Use a snap hook or double locking karabiner to connect to a textile loop. Ensure the karabiner cannot cross-gate load (load against the gate rather than along the backbone of the karabiner). Some lanyards are designed to choke onto a textile loop to provide a compatible connection. Lanyards may be sewn directly to the web loop forming a permanent connection. Do not make multiple connections onto one textile loop, unless choking two lanyards onto a properly sized web loop and is permitted by manufacturing.

If the connecting element to which a snap hook (shown) or karabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or karabiner. This force may cause the gate (of either a self-locking or a non-loking snap hook) to open, allowing the snap hook or karabiner to disengage from the connecting point.



13. RESCUE PLAN: Rescue operation must be performed by the trained and competent personal. The rescue operation must be performed under the supervision of the rescue expert team or personal. It is advised that while working on site work in pairs. Before going for the work the user must have the rescue plan according to the work.

14. IF EQUIPMENT IS SUBJECTED TO A FALL:

Remove the equipment from service immediately if it has been subjected to the forces of a fall arrest. Contact your distributor or KStrong about policies regarding replacement of KStrong components involved in a fall.



- 15. SPECIFIC INSTRUCTIONS: KStrong harness is designed to arrest the victim of fall and hold the user till the rescue process has been performed, till then the harness needs to be attached to the anchorage through a proper attachment system. So this is important that the whole system must have all the essential components before going for the use. The whole fall arrest system must be used by the trained/competent person. It is advisable to make a checklist of the essential components according to one's use before going for work.
- 16. USE OF FALL ARREST SYSTEM: The fall arrest system MUST ONLY be connected to the back attaching element on the harness provided for the purpose ("D" ring or webbing attachment extension) or to the chest anchorage points (webbing link or "D" link). The chest anchorage points must imperatively be used together. During use, check regularly the adjustment and/or attachment points.
- 17. ANCHORAGE STRENGTH: The anchorage strength required is dependent on the application type. The following are the requirements of EN 795:2012 for these application types:
 - Fall Arrest: Anchorages selected for fall arrest systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least 18 kN if made from textile & 12 kN if made from metal.
 - Work Positioning: The structure to which the work positioning system is attached must sustain static loads
 applied in the directions permitted by the work positioning system of at least 15 kN, or twice the potential
 impact load, whichever is greater. When more than one work positioning system is attached to an anchorage,
 the strengths stated above must be multiplied by the number of work positioning systems attached to the
 anchorage.
 - Restraint: Anchorages selected for restraint and travel restraint systems shall have a strength capable of
 sustaining static loads applied in the directions permitted by the system of at least 18 kN for anchorages. It is
 advisable that one anchorage system shall be limited to one person connection only.
 - Rescue: Anchorages selected for restraint and travel restraint systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least 18 kN for anchorages.
- **18. FITTING & SIZING:** Follow step 1 to step 6 to wear the Kapture Element Atexworx Antistatic Full Body Harness AFH300703. Only use a harness of suitable size. A harness donned either too loose or too tight straps will restrict movement and will not provide the optimum level of protection.

Size: The full body harness is of S-M/L-XL/XXL+ size.

Donning the Full Body Harness:



Hold the Harness by the Dorsal D-ring as shown in Step 1.



Insert your arms into the shoulder straps as shown in Step 2.



Close the buckle on the chest strap as shown in Step 3.





Pull the leg straps one by one around your thighs outwards to your front as shown in Step 4.



Close the buckles of the leg straps one by one as shown in Step 5.



Tighten the leg straps by pulling the free ends of the straps until the harness fits perfectly to the body as shown in Step 6.



Use the back D-ring or the front as anchor point for fall arrest systems. To locate the anchor points on the harness, check for the "A" marking near them.

19. MATERIAL: The full body harness is manufactured from 44 mm Antistatic Polyester webbing.

20. LIMITATIONS FOR USE:

- Personal protective equipment should be a personal issue item
- The anchor point where the fall arrest system is going to be fixed should always be placed above the position
 of the user, should have a minimum static strength of 12 kN (if made from textile then 18 kN & 12 kN if made
 from metal) and should be in conformity to EN 795 requirements.
- Personal protective 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.
- Personal protective equipment shall only be used by a person trained and competent in its safe use.
- The harness with front anchor point can be used in specific situations along with a fall arrester that needs a front attachment point.

21. ATTENTION:

- Afull body harness is the only acceptable body holding device that can be used in a fall arrest system.
- The fall protection system must only be connected to the harness anchor points identified with the capital letter "A". Identification "A/2" indicates the need to join the two points showing the same identification together. It is forbidden to connect the system to a single anchor point identified as "A/2".
- For harnesses equipped with belt, the work positioning device must only be connected to the lateral D rings on the belt.
- Connection to the anchor point and other equipment must be done through connectors in conformity to EN 362.



- For use with fall arresters in conformity to EN 353-1, EN 353-2 it is recommended to connect the equipment to
 the front anchor point on the harness. For use with energy absorbers EN 355 or Fall Arrest Block EN 360 it is
 recommended to connect the equipment to the back anchor point on the harness.
- Before each use of personal protective equipment it is obligatory to carry out a pre-use check of the
 equipment, to ensure that it is in a serviceable condition and operates correctly before it is used.
- During pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, and degradation due to UV, cuts or misuse, especially take into account webbings, seams, anchor D-rings, buckles and adjusting elements.

22. INFORMATION & ADVICE:

- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- It is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- Personal protective equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended.
- Before use ensure about the compatibility of items of equipment when assembled into a system. Ensure that
 all items are compatible and appropriate for the proposed application. It is forbidden to use combinations of
 items of equipment in which the safe function of any one item is affected by or interferes with the safe function
 of another. Periodically check the connection and adjustment of the components to avoid accidental
 disconnection and loosening.
- Personal protective equipment must be withdrawn from use immediately when any doubt arise about its
 condition for safe use and not used again until confirmed in writing by a competent person that it is acceptable
 to do so.
- Personal protective equipment must be withdrawn from use immediately when it has been used to arrest a
 fall.
- It is essential for safety to verify the free space required beneath the user at the workplace before each
 occasion of use, so that, in the case of a fall; there will be no collision with the ground or other obstacle in the
 fall path. The required value of the free space should be taken from instruction manual of used equipment.
- There are many hazards that may affect the performance of the equipment and corresponding safety precautions that have to be observed during equipment utilization, especially:
 - Trailing or looping of lanyards or lifelines over sharp edges,
 - Any defects like cutting, abrasion, corrosion
 - Climatic exposure,
 - Pendulum falls,
 - Extreme temperatures
 - Chemical reagents,
 - Electrical conductivity
- It is essential for the safety of the user that if the product is re-sold 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 product is to be used.



23. TRANSPORT: The Personal Protective Equipment must be transported in a package that protects it against moisture or mechanical, chemical and thermal attacks.

24. INSTRUCTIONS FOR MAINTENANCE:

Cleaning: The personal protective equipment must be cleaned without causing adverse effect on the materials used in the manufacture of the equipment. For textile (webbing and ropes) and plastic parts wipe with cotton cloth or a soft brush. Do not use any abrasive material. For intensive cleaning wash the harness at a temperature not more than 40°c using a neutral detergent. Metallic parts incorporated in the harness should be wiped with a wet cloth. When the equipment becomes wet, either from being in use or when due to cleaning, it shall be allowed to dry naturally, and shall be kept away from direct heat.

Storage: Personal protective equipment should be stored loosely packed, in a dry and well-ventilated place, protected from direct light, UV degradation, dust, sharp edges, extreme temperature and aggressive

Repair

: Any repair shall only be carried out by equipment manufacturer or his authorized representative following manufacturer's procedures.

25. INSTRUCTIONS FOR PERIODIC EXAMINATIONS:

- It is necessary to carry out regular periodic examinations. The safety of the users depends upon the continued efficiency and durability of the equipment.
- The personal protective equipment shall be examined at least every 12 months. The periodic examination can only be carried out by the manufacturer or his authorized representative.
- The comments should be included in the check card of the equipment. After the periodic examination, the next due date for periodic examination will be determined.
- During periodic inspection it is necessary to check the legibility of the equipment marking.
- To check metals for sharp edge, burs, corrosion, bent profile distortion and opening & closing or such mechanisms for which that is intended for.
- To check webbings/ropes for breakage, untwisting, frayed, burn, paint, excessive dust or soiling, cut, exposure to chemical or any such elements which can harm the webbing/ropes or can result in compromised performance of the entire system or the device in which it is used.
- Shall be discarded as per procedures given under point instructions for disposal.
- The required annual examinations will validate the correct functioning of the equipment. It is compulsory that the equipment is examined by the manufacturer or his authorized representative at least once a year.
- In case that it have been used to arrest a fall, the equipment must be withdrawn from use.
- 26. HOW TO DISPOSE A HARNESS: When the harness becomes unfit or in case of any wear and tear, dispose the harness immediately.

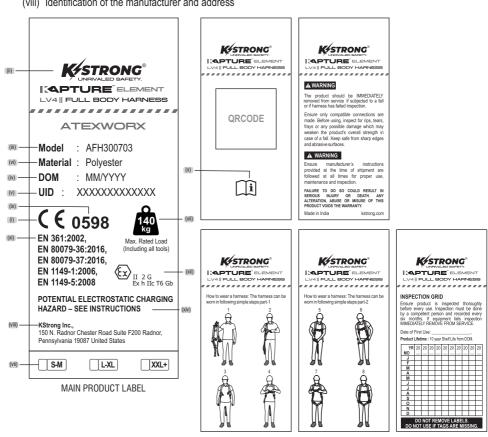
Follow the steps for Disposal:

- Segregate the equipment in three different crates for placing components in them respectively as-Textile, Metal and Plastic.
- Hold the Harness from Dorsal D-ring.
- Inspect the wear & tear present on the Harness.
- Now, using a sharp pair of scissors first cut the Textile and dismantle the harness.
- Now remove the metal & plastic components separately from the harness.
- Put the Textile, Plastic & Metal components in their respective plastic crates.



- 27. MARKING: The Kapture Element Atexworx Antistatic Full Body Harness AFH300703 is marked with the following information:
 - The CE mark showing that the product meets (i) the requirements of the European PPE Regulation (EU) 2016/425
 - (ii) Trademark of the manufacturer
 - (iii) Type or product code
 - (iv) Month and Year of Manufacture
 - UID for traceability
 - (vi) Material
 - (vii) Size
 - (viii) Identification of the manufacturer and address

- (ix) Number of the ongoing assessment body
- (x) Pictogram that indicates to read the instructions
- (xi) Number of the standard and type of harness
- (xii) Max. Rated Load
- (xiii) Atex Marking
- (xiv) Warning





LIFESPAN: The estimated product Lifespan is 10 years from the date of manufacture. The following factors can reduce the Lifespan of the product: intense use, contact with chemical substances, specially aggressive environments, extreme temperature exposure, UV exposure, abrasions, cuts, violent impacts, bad use or maintenance.

DISCLAIMER: Prior to use, the end user must read and understand the manufacturer's instructions supplied with this product at the time of shipment and seek training from their employer's trained personnel on the proper usage of the product. Manufacturer is not liable or responsible for any loss, damage or injury caused or incurred by any person on grounds of improper usage or installation of this product.

EQUIPMENT RECORD								
Product								
Model & type/Identification		Trade Name		Identification number				
Manufacturer		Address		Tel, email into use				
Year of manufacture		Purchase Date		Date first put into use				
Other relevant information (eg. document number)								
PERIODIC EXAMINATION AND REPAIR HISTORY								
Date	Reason for entry (periodic examination or repair)	Defects noted, repairs carried out and other relevant information	Name and signature of competent person		Periodic examination next due date			

Certification Body:

SATRA Technology Europe Ltd, Bracetown Business Park, Clonee, Dublin D15 YN2P Ireland (Notified Body 2777)

Ongoing Assessment Body:

SGS Fimko Oy, Takomotie 8, FI-00380 Helsinki, Finland (Notified Body 0598)

For EU Declaration, please visit https://kstrong.com/asia/eu-declaration-form/



KStrong Inc. 150 N. Radnor Chester Road Suite F200

Radnor, Pennsylvania 19087 United States Contact number : 1-833-KSTRONG

www.kstrong.com

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